Marine (1898) Department.

G.O., No. 993 Marine

DATED 29th Nov 98

[Despatch Abstract.]

Explosives

Directing that a representative Committee be formed with the Chairman, Harbour Master Board, as President to consider the whole question of the Entry into the Harbour of ——, Suggesting Ordering for the consideration of the Committee — Memorandum, that the Secy of State be made acquainted, in the meanwhile, with the steps taken in the matter

Forwarding copy of Res: directing the formation of a representative Committee to consider the whole question of the Entry into the Harbour of Explosives, stating that the report of the Committee with the Res: thereon will be duly communicated to the Home Govt, before final rules are promulgated.

2/1/99

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.
-	6332	Mar.	9-12-98				

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.
-	790	Mar.	13-9-98				

GOVERNMENT OF FORT ST. GEORGE.

MARINE (1898) *DEPARTMENT.*

(Copy.)

Letter to the Right Honourable the Secretary of State for India.

Dated 29th November,

No. 10 of 1898.

FORWARDING copy of Proceedings directing the formation of a representative Committee to consider the whole question of the entry into the Madras Harbour of explosives and stating that the report of the Committee with the Proceedings thereon will be duly communicated to the Home Government before final rules are promulgated.

No. 10, Marine, 29th November 1898.

MARINE DEPARTMENT.

Letter—to

The Right Honourable the SECRETARY of STATE for INDIA.

My Lord,

We have the honour to acknowledge the receipt of your Lordship's Despatch No. 7, Financial (Stores), dated 28th July 1898, with which are forwarded copies of communications on the subject of certain new rules governing the discharge of explosives at the port of Madras. Your Lordship requests to be informed as to the actual regulations on the subject now in force at Madras in respect to Government explosives for Calcutta or for other ports, when conveyed in duly approved magazines, and as to the steps it is proposed to take to obviate inconvenience and possible danger to the service.

2. In reply we have the honour to forward, for your Lordship's information, the accompanying copy of our Proceedings, No. 993, Marine, dated 29th November 1898, from paragraphs 7 and 10 of which it will be observed that the rules to which exception is now taken by the agents in England of the British India Steam Navigation Company have been in force, with slight modifications, since 1894. The change in rules was, it will be seen from paragraph 10 of our Proceedings, duly communicated to the local agents of the British India Steam Navigation Company, but was not, it is regretted, communicated at the time for the information of the Home Government.

3. It will be further observed from our present Proceedings that there is cause to believe that the effect of the existing rules on the import trade of explosives has never been clearly apprehended by the local mercantile community. We have accordingly resolved that the whole matter shall be fully discussed and considered by a representative Committee to be formed at Madras. The report of this Committee, with our Proceedings thereon, will be duly communicated to your Lordship before final rules are promulgated.

We have the honour to be,
My Lord,
Your Lordship's most obedient, humble servants,

(Signed) A. E. HAVELOCK.
(„) A. T. ARUNDEL.
(„) H. M. WINTERBOTHAM.

Fort St. George,
29th November 1898.

Government {1898} of Madras.

MARINE.

Recd. } 1898. Enclosures

Regd. } Spare copies

G.O., No. 993, 29th November 1898.

NOVEMBER.

Explosives

Directing that a representative Committee be formed, with the Chairman, Harbour Trust Board, as President, to consider the whole question of the entry into the Madras Harbour of —, suggesting points for the consideration of the Committee, and ordering that the Secretary of State be made acquainted, in the meanwhile, with the steps taken in the matter.

No. 962.

GOVERNMENT OF MADRAS.

MARINE DEPARTMENT.

Read—the following papers:—

Despatch from the Right Honourable the Secretary of State for India, to His Excellency the Honourable the Governor in Council, Fort St. George, dated India Office, London, 28th July 1898, Financial (Stores), No. 7.

With reference to Lord Cross' Despatch No. 8, Financial (Stores), dated 14th July 1892, on the subject of the regulations for the transport and importation of explosives at Madras, I enclose, for your Excellency's consideration, a copy of communications received from Messrs. Gray, Dawes, & Co., the Agents of the British India Steam Navigation Company, and of a Memorandum by the Director-General of Stores, on the subject of certain new rules governing the discharge of explosives at Madras.

2. From these papers it appears that the regulations referred to in your Marine Letter, No. 5, dated 23rd April 1892, paragraph 3, have been superseded, and that vessels conveying Government explosives for Calcutta will now have to discharge them outside the port of Madras before being allowed to enter.

3. The difficulties arising from any such regulations were fully explained in Financial (Stores) Despatch to your Government, No. 2, dated 18th February 1892; and, in view of the grave importance of the question, I request that I may be informed what are the actual regulations on the subject now in force at Madras in respect to Government explosives for Calcutta or other ports, when conveyed in duly approved magazines, and what steps you propose to take to obviate inconvenience and possible danger to the service.

—

Enclosures.

From Messrs. GRAY, DAWES, & CO., Agents, British India Steam Lines, to the Under Secretary of State for India, dated 23, Great Winchester Street, London, E.C., 2nd June 1898.

We have by this mail advice that the Madras Harbour Trust will not permit vessels, having on board any explosives for a further port, to come inside the harbour to discharge her general cargo at Madras until she has first discharged outside the explosives which she may have on board.

This would necessarily cause considerable delay, and it may be serious risks, and, as your department are by far the largest shippers by the Company of goods of this character, we lay the matter before you to show what the difficulties are in the carriage of cargo of this description, and to express our regret we will be unable to take further consignments meantime.

—

From E. GRANT BURLS, Esq., Director-General of Stores, to Messrs. GRAY, DAWES, & Co., dated India Office, 7th June 1898, No. S. 6022.

With reference to your letter of the 2nd June 1898, I have to inform you that in April 1892, when a similar complaint had been made by the British India Steam Navigation Company, the Secretary of State was informed by the Government of Madras that provision had been made for vessels entering the Madras Harbour with explosives on board for other ports, provided such explosives were stored in a magazine which met with the approval of the Deputy Conservator or other officer deputed by him to inspect it, and it was understood that all difficulty of the kind to which you refer was thus avoided.

If you have advice of any fresh regulations I shall be obliged by your furnishing me with full particulars thereof, and intimation as to any case in which difficulty has occurred on this account. Inquiry can then be made of the Government of Madras as to the regulations.

From Messrs. GRAY, DAWES, & CO., Agents, British India Steam Lines, to the Director-General of Stores, India Office, dated 23, Great Winchester Street, London, E.C., 15th June 1898.

We have the honour to acknowledge receipt of your communication, S. 6022, of 7th instant, relative to the recent regulations enacted by the Madras Harbour Board in connection with steamers with explosives on board.

For your information we give you extracts from the Company's Madras Agents' letters on the subject:—

Letter of 6th May.

"We regret to bring to your notice that the 'City of Dublin,' which arrived to-day, was not permitted to come inside the harbour to discharge her general cargo until she had at first discharged outside the 135 packages explosives which she had on board for this port.

"Under the present rule explosives for any other port besides Madras must be landed outside before the vessel can enter."

Letter of 26th May.

"We enclose herein a draft notification relating to the transport and importation of explosives."

"The proposed rules are virtually in force now, as the Chairman of the Harbour Trust has decided to act on them in anticipation of them being passed into law."

—

From E. GRANT BURLS, Esq., Director-General of Stores, to Messrs. GRAY, DAWES, & Co., dated India Office, 16th June 1898, No. 6022.

With reference to your letter of 15th June 1898, I shall be obliged by your forwarding me a copy of the "draft notification relating to the transport and importation of explosives" referred to in the British India Steam Navigation Company's Madras Agent, letter of the 26th May, as it is essential that in writing to the Government of India on the subject, I should be fully informed as to any steps that have been taken.

—

From Messrs. GRAY, DAWES, & CO., Agents, British India Steam Lines, to the Director-General of Stores, India Office, dated 23, Great Winchester Street, London, 17th June 1898.

We have the honour to acknowledge your S. 6022 of 16th instant requesting us to forward you a copy of the draft notification relating to the transport and importation of explosives referred to in the Company's Madras Agents' letters.

We now enclose a print of the proposed rules, which we would like returned.

—

Draft Notification.

In exercise of the power conferred by section 5 of the Indian Explosives Act IV, of 1884, the Governor of Madras in Council is pleased, with the previous sanction of the Governor-General in Council, to make the following alterations in the rules to regulate the transport and importation of explosives in the port of Madras, which were promulgated for guidance, in the *Fort St. George Gazette* of the 26th June 1894 and 10th September 1895.

For rule (*c*) substitute the following:—

Rule (*c*).—Every vessel entering the port of Madras having on board explosives of classes 2, 3, 4, or 5, or Division I. of class 7 (as defined under the rules made by the Governor-General in Council under section 5 of the Indian Explosives Act, 1884), or having on board explosives of "class 6, Ammunition class" charged with or containing explosives of classes 2, 3, 4, or 5 in excess of 100 lb. in weight, or having on board, to be discharged, explosives of class 1—Gunpowder class—in excess of 560 lb. in weight, shall, on arrival at the port, proceed to a distance of not less than one mile north of the north arm and half a mile off shore outside the harbour and shall not be permitted to enter the harbour until all such explosives have been discharged; after which, provided the requirements of rule (*e*) as regards the security of explosives remaining on board have been met, the vessel may be permitted to enter the harbour and to discharge or ship therein explosives of class 1—gunpowder class—not exceeding 560 lb. in weight, or other explosives not being of classes 2, 3, 4, or 5, or ammunition containing, or charged with, explosives of classes 2, 3, 4, and 5, or fireworks composition, class 7, division I. Whilst any explosives shall remain on board, such vessel shall have a red flag kept flying at the foremast head between sunrise and sunset and one red light at the ensign staff or peak, in addition to the usual anchor light, between sunset and sunrise, and the master or chief officer shall remain on board of her until the explosives intended for the port of Madras shall have been discharged.

For rule (*f*) substitute the following :—

Rule (*f*).—Barges, lighters and boats in the port of Madras having on board any explosives shall be kept scrupulously clean and free from loose explosives and shall not, when at anchor, lie closer than one cable's length or 200 yards from any of the shipping in the port or from any public landing-place, and all cases of explosives in any such barges, lighters or boats shall be securely covered with tarpaulins. Whilst any such explosives shall remain on board, there shall be kept a red flag flying on every such barge, lighter or boat between sunrise and sunset and a red light in an elevated position shall be shown from any such barge, lighter or boat between sunset and sunrise. No fires, smoking or matches, shall be allowed on board any such barge, lighter or boat, nor any light of any kind except the red light mentioned above and except in the case of properly decked barges on the deck of which may be allowed one lantern of good pattern. Kerosine or other explosive oil is not to be used for the above-mentioned lights. The tindal and at least half of the crew of every such barge, lighter or boat, shall remain on board thereof untill all the explosives are discharged therefrom.

For rule (*g*) substitute the following :—

Rule (*g*).—All barges, lighters and boats having any explosives on board to be landed outside of the harbour, shall remain off shore untill orders are received from the officer directing the landing to approach the beach. Not more than two such barges, lighters or boats shall be permitted to unload at a time, and such unloading shall take place either at the bay in the revetment at Cassimode, or at the north end of the revetment according to the state of wind and current.

For rule (*h*) substitute the following :—

Rule (*h*).—With the sanction of the Chairman of the Harbour Trust Board, which will be accorded only on production of the required special permit from the Collector of Sea Customs, explosives not prohibited under rule (*c*) if properly packed as required by rule 2 of the rules issued by the Governor-General in Council under section 5 of the Indian Explosives Act, 1884, may be shipped on board, or landed from a vessel lying at the ordinary moorings within the harbour. Shipment of any such explosives shall be effected under the precautions and conditions mentioned and contained in these rules, and such explosives must be taken on board the vessel for which they are intended immediately after the boat by which such explosives are taken off to such vessel has come alongside the same, and no cargo boat or other vessel having fire on board shall be allowed to lie nearer than one cable's length or 200 yards of such vessel during the time that any explosives are being shipped on board the same.

For rule (*k*) substitute the following :—

Rule (*k*).—No magazine on board any vessel containing explosives other than safety fuzes, cartridges and caps shall be opened while such ship is inside the Madras harbour without the permission of the Chairman of the Harbour Trust Board or other person he may depute to act for him, except in cases of emergency, and in case, in the opinion of the Chairman of the Harbour Trust Board, the emergency was not such as to justify the master of such vessel in opening or allowing to be opened such magazine, he shall be deemed to have contravened this rule.

From E. GRANT BURLS, Esq., Director-General of Stores, to Messrs. GRAY, DAWES, & Co., dated India Office, 25th June 1898, No. S. 6637.

With reference to your letter of the 17th June 1898, I shall be glad if a representative of your firm can call and see me on Tuesday about 3 P.M., as the draft notification forwarded by you does not appear to me to confirm the contention in your letter of the 15th June that "explosives for any other port besides Madras must be landed outside before the vessel can enter."

From Messrs. GRAY, DAWES, & Co., Agents, British India Steam Lines, to the Director-General of Stores, India Office, dated 23, Great Winchester Street, London, E.C., 24th June 1898.

Referring to our letter of 17th instant, our Madras Agents have now sent us by this mail extract of proceedings of the trustees of the Harbour Trust Board regarding the landing of explosives at their port held at the offices of the Board on the 27th May last, as follows :—

"Draft notification embodying the alterations in the rules for landing and shipping explosives, prepared under instructions from Government in Memo No. 99 E., dated 16th February, having been printed and circulated with letter from the Inspector-General of Ordnance, No. 2519 A., dated 19th May 1898, requesting that Government gunpowder might be exempted was discussed, and it was resolved that the draft notification is approved, and the Inspector-General of Ordnance will be informed that the Board does not consider that any exception should be made in favour of Government powder."

From Messrs. GRAY, DAWES, & Co., Agents, British India Steam Lines, to the Director-General of Stores, India Office, dated 23, Great Winchester Street, London, E.C., 28th June 1898.

Referring to your letter No. S. 6637, of 25th instant, and to our representative's interview with you this afternoon, we now append, for your information, as desired, copy of the letter from the Madras Harbour Trust to the Company's Madras Agents, dated 3rd ultimo.

From C. PINSENT, Esq., Secretary, Harbour Trust Board, to Messrs. BINNY & Co., dated Madras Harbour Trust, Secretary's Office, 3rd May 1898.

I have the honour to acknowledge the receipt of your letter, dated this day, and to inform you in reply that the five packages, "smokeless powder" (nitro compound), must be landed outside the harbour, and the steamer must discharge all such explosives on board, whether for this port or for Calcutta, &c., before entering the harbour.

You will also have to arrange for the storage of such packages, as they will not be received into the merchants' magazine.

Memorandum by Director-General of Stores.

In Financial (Stores) despatch to the Government of Madras, No. 2, dated 18th February 1892, attention was drawn to a complaint received from Messrs. Gellatly & Co., the brokers of the British India Steam Navigation Company, as to certain new regulations stated by them to have been enforced at Madras, which seriously affected vessels carrying explosives to ports beyond.

In reply, the Government of Madras stated in Marine letter, No. 5, dated 23rd April 1892, that provision had been made for vessels entering the harbour with explosives on board for other ports, provided such explosives were stored in a magazine which met the approval of the Deputy Conservator or other officer deputed by him to inspect it, and a hope was expressed that these rules would obviate any future difficulty of the nature referred to in the above quoted despatch. These rules appear to have worked satisfactorily for the past five or six years, as no complaint in regard to their operation has, during that period, been received in this office. Messrs. Gray, Dawes, & Co., on behalf of the British India Steam Navigation Company, have invited attention to a draft notification of certain proposed alterations of the existing rules which they state are now being enforced.

The new rules are not very clear and seem to be capable of more than one interpretation, but under them the Harbour Trust Board has ruled that a steamer must discharge all explosives, such as smokeless powder, whether for Madras or for ports beyond (Calcutta, &c.,), before entering the Madras Harbour, and has refused any exemption in favour of Government powder.

As Government explosives for Calcutta are almost invariably shipped by steamers of the British India Line which always call at Madras, the adoption of the new rules, if confirmed, will make it a matter of extreme difficulty and expense to get such stores to Calcutta at all. Moreover, landing and reshipping explosives outside a port like Madras is attended with serious risk of loss or damage.

The Peninsular and Oriental Steam Navigation Company are precluded by the terms of the postal contract from carrying dangerous cargo, and it is very rarely that a steamer other than those of the British India Company can be found to carry ammunition, gun cotton, &c., to Calcutta.

It need hardly be pointed out that any serious difficulty in supplying Calcutta with explosives might in certain contingencies become disastrous.

From J. N. ATKINSON, Esq., I.C.S., Chairman, Harbour Trust Board, Madras, to the Secretary to Government, Marine Department, dated 3rd September 1898, No. 2102.

Referring to G.O., No. 623, Marine, dated 18th July, directing publication in the *Fort St. George Gazette* of a notification intimating that proposed alterations in rule (C) of the Explosive rules will be taken into consideration on or after the first day of September 1898, I have the honour to report that a letter was received by me from Calcutta last Wednesday 31st August, having been sent by special delegate from Messrs. Gillanders Arbuthnot & Co., and fifteen other firms interested in the importation of explosives at Calcutta.

2. This letter is submitted herewith in original for the information of Government together with copy of a resolution passed upon it at the meeting of the Harbour Board last evening, also copy of my reply to Mr. Farquhar, the representative of the Calcutta firms.

3. Should Government approve of the proposed alteration, I request that the suggested amendment of the paragraph in rule (*c*) referring to gunpowder may be worded as follows:—

"or having on board, for discharge at Madras, explosives of class I—gunpowder class—in excess of 560 pounds in weight."

This, it is understood, will overcome the difficulty so far as Calcutta is concerned with the British India Company, who at present decline to carry explosives beyond Colombo, and will make it clear that gunpowder intended for Calcutta may remain on board inside the harbour under the provisions of rule (*e*) as provided for in rule (*c*) itself.

Enclosures.

From the Agents in Calcutta for the Manufacturers, and Importers of Explosives, to the Chairman, Harbour Trust Board, Madras, dated Calcutta, 24th August 1898.

This letter will be handed to you by Mr. A. Farquhar, who has been specially deputed by the undersigned, Agents in Calcutta for the Manufacturers, and Importers of Explosives, to interview you on the subject of the rules which have recently been issued by the Trustees of the Harbour regarding explosives brought out by sea to Madras.

We understand that explosives forming part of the Calcutta consigned cargo of steamers from Europe are to be unloaded into lighters before entering the harbour and taken up after leaving, and we desire to bring to your notice the immense risk which would attend the carrying out of this order, for if the cases were safely loaded into boats, they are almost sure to get damaged either by rain or sea-water (especially in the south-western monsoons) during the period the vessel was in the harbour, which we believe extends from 12 to 36 hours.

The rule if enforced will prove a great hardship to importers of explosives in Calcutta and will for some time dislocate the trade in these goods, already the effects are being felt and it is feared contracts which have been made cannot be fulfilled to time; we learn that large consignments of explosives are awaiting shipment in London owing to the British India and other lines declining to accept the cargo, as the new rules would cause inconvenience and delay at your port.

You are of course aware that the greatest precautions are taken with goods of the class named; vessels are compelled to build special magazines, so that the explosives are kept separate from the general cargo; the packing is also subjected to the most stringent rules under the English Explosives Act, so that the danger is reduced to a minimum and it is not, as far as we are aware, considered necessary by the authorities of any other port to make any such restrictions as the new rules impose at Madras: vessels carrying cargo of the description named are permitted to call, *en route*, at the several ports, such as Naples, or Malta, Aden, Colombo, and Tuticorin, and no exceptional rules are enforced during their passage through the Suez Canal.

As it is most difficult to find a steamer leaving London which does not make Madras a port of call, and as the question of obtaining stocks of explosives for the approaching season is of the utmost urgency, we decided to send a representative to place the matter before you, and we trust you will be good enough (in consultation with the Trustees of the Harbour) to give the question your very earliest attention; if it is considered undesirable to rescind the order, we beg that it may be held in abeyance for a period of say, six months, during which time shippers may possibly be able to make other arrangements. As matters now stand, we fear the greatest inconvenience and loss will be entailed on importers in the near future, and we hope that the conclusion arrived at by the Trustees will enable you to authorise our representative to telegraph to England on an early date to the effect that the rules have been rescinded or at least held in abeyance for a time.

Mr. Farquhar can explain any further details touching the question.

Extract of Proceedings of the Trustees of the Harbour of Madras, at a meeting held at the offices of the Board, on Friday, the 2nd day of September 1898.

* * * * *

5. Read letter from various firms in Calcutta interested in the importation of explosives at that port regarding the new rules now under consideration of Government.

Read minutes by Trustees.

Resolved that the firms concerned be informed that the proposed alteration in rule (*c*) places no limit on the quantity of gunpowder for Calcutta that may be brought into the harbour at Madras under rule (*e*).

As it would appear that the proposed alteration in rule (*c*) is not quite clear, and has been misunderstood, the Board recommend the following alteration: *for* "to be discharged" *read* "for discharge at Madras."

* * * * *

(True Extract.)

(Signed) C. PINSENT,
Secretary, Harbour Trust Board.

From J. N. ATKINSON, Esq., I.C.S., Chairman, Harbour Trust Board, Madras, to ARCHIBALD, FARQUHAR, Esq., dated 3rd September 1898, No. 2091.

I have the honour to acknowledge the receipt of letter, dated 24th August, from Messrs. Gillanders Arbuthnot & Co., and fifteen other firms interested in the importation of explosives at Calcutta, handed to me by you on Wednesday 31st August, protesting against the alteration in the rules for the landing and shipping of explosives at this port lately submitted to Government by the Harbour Trustees.

2. The rule you alluded to is presumably rule (*c*), to which has recently been added a clause excluding gunpowder from the harbour when more than 560 lb. is intended for discharge at Madras, and a proviso has been added that nothing in that rule shall apply to small arm safety cartridges when properly packed in tin cases and hermetically sealed.

3. This representation was considered by the Harbour Trust Board at its meeting last evening, and I hand you herewith copy of resolution then passed, from which you will observe that in the opinion of the Trustees the proposed alteration in rule (*c*) places no limit on the quantity of gunpowder for Calcutta which may be brought into the harbour; but as it would appear that the proposed alteration is not quite clear and has been misunderstood, the words "for discharge at Madras" have been substituted for "to be discharged."

4. This alteration removes, it is understood, the difficulty with the British India Company.

Telegram from the Secretary to Government, Marine Department, to the Chairman, Harbour Trust Board, Madras, dated Ootacamund, 7th September 1898, No. 471 E.

Your letter No. 2102 dated 3rd September 1898. Subject—Explosives. Is it certain that the objection to Madras rules refers to gunpowder only? Merchants would seem to require admission to harbour of all dangerous explosives intended for Calcutta.

Telegram from the Chairman, Harbour Trust Board, dated 7th September 1898.

From J. N. ATKINSON, Esq., I.C.S., Chairman, Harbour Trust Board, Madras, to the Secretary to Government, Marine Department, dated 8th September 1898, No. 2216.

I have the honour to acknowledge the receipt of your telegram, dated 7th September, regarding the proposed alterations in the explosive rules at this port and the protest received from Calcutta forwarded to you under cover of my letter, No. 2102, dated 3rd idem, and I submit herewith copy of my telegram sent in reply yesterday afternoon.

2. Mr. Farquhar, the delegate of the Calcutta firms, gave me to understand that the slight alteration proposed by the Harbour Board in rule (*c*) at its meeting of the 2nd September would meet the particular objection that had been raised by the Calcutta firms, and he immediately returned to Calcutta. In my letter No. 2091, dated 3rd September, I had explained the purport of the rules to him, but he did not acknowledge receipt of this letter, therefore I am without positive assurance that no further objection will be raised. On the other hand, Mr. Farquhar had stated in

conversation that the explosive rules are altogether antiquated, impose unnecessary restrictions on certain classes of explosives, such as Schultz's powder, and differ materially from corresponding rules in European countries. The rules hitherto have been very liberally interpreted, and it is, I think, the rather closer adherence of late to both their letter and spirit that has attracted the attention of firms interested to these rules, of the existence of which formerly they were almost unaware.

3. I am of opinion that further objections may come from Calcutta regarding rules other than (*c*), as the alteration suggested in Harbour Trust Board's resolution of 2nd September may merely tide over a temporary difficulty. I also think that the Madras Trades Association is likely to move in the matter, because the alteration in rule (*c*) proposed by the Harbour Board at its meeting of the 2nd September, while allowing Calcutta gunpowder into the harbour when enclosed in a properly-constructed magazine, absolutely and very distinctly excludes all intended for discharge at Madras in excess of 560 lb.; and this is said by the representative of the Trades Association who sits on the Harbour Trust Board to be tantamount to total exclusion, since gunpowder is always imported in larger consignments.

As already stated, I am inclined to think that the explosive rules have never seriously been studied by the firms interested whether in Madras or Calcutta: and I would respectfully suggest that it might be advisable to have the rules thoroughly revised by a representative committee.

4. The explosive rules, with appendix, have not yet been published complete with all alterations inserted up to date. I have therefore had them put in type at the Government Press, and submit herewith a proof * copy for ready reference.

* Printed as appendix I to these proceedings.

Enclosure.

Telegram from J. N. ATKINSON, Esq., I.C.S., Chairman, Harbour Trust Board, Madras, to the Secretary to Government, Marine Department, dated 7th September 1898.

Your telegram explosive rules. The alteration proposed by Harbour Board to which Calcutta firms objected only affected gunpowder. Procedure regarding other explosives remains unchanged, but am not confident further objections will not be raised. Perhaps advisable consult Calcutta firms prior to notification. Letter follows.

From J. N. ATKINSON, Esq., I.C.S., Chairman, Harbour Trust Board, Madras, to the Secretary to Government, Marine Department, dated 27th September 1898, No. 2437.

Referring to your telegram, dated 7th September, and my reply of same date confirmed by my letter of the 8th idem, No. 2216, I have the honour to submit, for the information of Government, copy of a letter received to-day from Mr. Farquhar, dated Calcutta, 22nd September, wherein he states, as representative of the Calcutta firms interested in the importation of explosives at that port, that the proposed amendment of rule (*c*)—*vide* paragraph 3 of my letter, No. 2102, dated 3rd September—has been the means of inducing the British India Company to again accept freight of sporting explosives for Calcutta.

Enclosure.

From J. FARQUHAR, Esq., to the Chairman, Harbour Trust Board, Madras, dated Calcutta, 22nd September 1898.

I have the honour to acknowledge receipt of your letter, dated 3rd instant, enclosing copy of resolution passed by the Harbour Trustees at their Board's meeting held on 2nd instant.

I am pleased to be able to state that the decision arrived at has been the means of inducing the British India Steam Navigation Company to again accept freight of sporting explosives for Calcutta.

Our best thanks are due for the early consideration given to the memorial which I had the honour of handing you.

From the Colonial Secretary, Colombo, to the Secretary to Government, Marine Department, dated 27th September 1898.

In reply to your telegram and letter, dated 13th September 1898, enquiring what precautions are taken against vessels entering Colombo Harbour with explosives on board, I am directed to forward to you the enclosed copies of reports thereon by the Principal Collector of Customs and the Master Attendant, Colombo, and of the rules and regulations quoted therein.

Enclosures.

Copies of reports referred to.

The Regulations as to shipping, transhipping, and discharging explosives are those dated January 12th, 1888, and published in Government Gazette, No. 4840 of 20th January 1888.

No precautions are taken with regard to vessels entering the port with explosives on board by the Customs Department.

The Master Attendant will be in a position to report on the regulations above quoted.

(Signed) W. H. JACKSON,
Acting Principal Collector of Customs.

There are no restrictions placed on vessels entering Colombo Harbour with explosives on board, provided the Captain assures the pilot that Port Rule No. 22 has been complied with, viz., that the explosives are securely stored in a properly-constructed magazine.

Colombo,
16th September 1898.

(Signed) J. G. O. REYNOLDS,
Acting Master Attendant.

I have little to add to my report on the telegram on the same subject. In addition to the regulations of 1888, there is a port rule prohibiting the entry into the harbour of any vessel containing more than 5 cwt. of explosives unless secured in a properly constructed magazine. This provision the Acting Master Attendant informs me the pilots see duly enforced. As a matter of fact all vessels carrying large quantities of explosives are, I believe, specially fitted for the work. Section 26, sub-section (8), of Ordinance No. 18 of 1894 further forbids the unloading of explosives other than gunpowder from any ship except to a person duly licensed.

The landing of gunpowder is not restricted to any quantity in Colombo Harbour and as many as 800 kegs (28 lb. each) have been landed at one time, nor are any vessels with other explosives in properly constructed magazines prevented from entering the harbour.

So far we have never had an explosion in Colombo Harbour, and the restrictions in force appear to secure the public safety.

23rd September 1898.

(Signed) W. H. JACKSON,
Acting Principal Collector of Customs.

Extract from the "Ceylon Government Gazette," No. 4840 of January 20, 1888.

It is hereby notified that His Excellency the Governor in Executive Council has sanctioned the following regulations for shipping, transhipping, or discharging Gunpowder and other Explosives within the Port of Colombo, and they are published for general information:—

1. No vessel having more than one hundredweight of gunpowder or other explosive to discharge or receive shall commence to discharge or receive until all boats, excepting the boat intended to receive it or to convey it, shall have been removed from alongside to a distance of at least fifty feet from the discharging or receiving vessel; and no boat excepting the boat aforesaid shall come within fifty feet of any vessel while discharging or receiving any explosive as aforesaid.

2. Any boat engaged in the landing, shipping, or transhipping of any explosive as aforesaid of more than one hundredweight shall, as long as the explosive remains in the boat, keep it covered with double tarpaulins, and shall display at the bow and at the stern a red flag two feet square on a staff not less than six feet above the boat; and no light or fire shall on any account be permitted within the boat.

3. Any boat engaged in landing, shipping, or transhipping any explosive as aforesaid of more than one hundredweight shall, if she have taken on board any explosive which cannot be landed, shipped, or transhipped, at once be removed to a place of safety appointed by the Master Attendant, and remain there till the time for landing, shipping, or transhipping arrives.

4. Permission to land any explosive shall not be granted until a proper escort is ready for its conveyance to a magazine, and it shall be conveyed only in such carts as the Inspector-General of Police or those acting under his orders may approve.

5. Quantities of any explosive as aforesaid in excess of one hundredweight shall be landed and shipped only at the Prince of Wales' jetty (or at such other jetty as may be appointed by the Principal Collector of Customs) between the hours of 6 and 8 A.M. and 4 and 5 P.M., when all other boats shall have been removed from the jetty; and no carts or persons shall be allowed on the jetty during the landing or loading of the explosive except those actually engaged in the work.

6. No boats shall be engaged in the landing, shipping, or transhipping of any explosive as aforesaid of more than one hundredweight until three hours' notice shall have been given to the Inspector of Harbour Police, and an officer of the Police Force shall have been appointed by him to occupy the boat and see the regulations carried out.

7. The Police Officer superintending the landing shall refuse to receive gunpowder or other explosive so packed that it would not be received at the Government Powder Magazine.

8. No cargo of any description shall be conveyed in the same boat with powder or other explosive of over one hundredweight.

9. Dynamite and gunpowder shall not be conveyed together in the same boat.

By His Excellency's command,

Colonial Secretary's Office, Colombo,
January 12, 1888.

G. T. M. O'BRIEN,
Acting Colonial Secretary.

Extract from the Rules relating to the Port of Colombo.

22. *Vessels with more than 5 cwt. of explosives on board not to enter harbour.*—All vessels, except vessels belonging to Her Majesty or any Foreign Power, arriving within the limits of the port, and having on board more than 5 cwt. of gunpowder or any other explosive substance, shall not enter the harbour until the same shall have been discharged from the vessel, unless such gunpowder or other explosive substance is stored securely in a ship's magazine properly constructed.

Order—No. 993, Marine, dated 29th November 1898.

The correspondence read above relates to the question of the admission into the Madras Harbour of certain classes of explosives which are now excluded.

2. The Government of India has divided explosives into the following seven classes:—

Class 1. Gunpowder.	Class 5. Fulminate.
,, 2. Nitrate mixture.	,, 6. Ammunition.
,, 3. Nitro compound.	,, 7. Firework.
,, 4. Chlorate mixture.	

3. Under Rule (*c*) on page 7 of G.O., No. 106, Marine, dated 1st April 1892, it was prescribed that explosives falling under division 2 of classes 6 and 7, *i.e.*, ammunition and firework classes, should be allowed to be landed inside the harbour in any quantities, but that all other explosives in excess of 100 lb. in weight should be unloaded outside the harbour.

4. There was no prohibition against vessels entering the harbour with explosives in any quantity, if intended for other ports, and secured in a properly constructed magazine.

5. There was also no prohibition against explosives of all kinds being landed inside the harbour, provided the quantity was not in excess of 100 lb. in weight.

6. In his despatch printed with G.O., No. 118, Marine, dated 16th April 1892, the Secretary of State forwarded a complaint from the Home Agents of the British India Steam Navigation Company to the effect that the steamship *Rewa* was excluded from the harbour because she had on board gunpowder * in excess of 100 lb. in weight, such gunpowder being intended for Calcutta. It was explained in reply that this exclusion was ordered for special reasons, and a copy of the rules promulgated with G.O., No. 106, Marine, dated 1st April 1892, was forwarded to the Secretary of State for information. In his despatch

* Class 1.

recorded with G.O., No. 289, Marine, dated 10th August 1892, the Secretary of State accepted the Madras Government rules as obviating the difficulties previously supposed to exist.

7. In paragraph 3 of their letter recorded with G.O., No. 217, Marine, dated 18th June 1892, the Harbour Trust Board proposed that explosives of classes 2 to 5 should be "absolutely excluded from the harbour." This suggestion was at first disallowed by Government. But on a representation by the Chamber of Commerce, it was subsequently admitted—*vide* paragraph 1 of G.O., No. 380, Marine, dated 24th October 1893. The rules embodying this absolute exclusion were finally approved in G.O., No. 232, Marine, dated 16th June 1894. These rules have been in force from 1894 up to the present time.

8. In 1895 the rules were modified so as to admit of the landing and shipment of gunpowder inside the harbour *in any quantity*, but the entrance of ammunition charged with or containing explosives of classes 2 to 5 in excess of 100 lb. in weight was prohibited. The following further modifications of the rules have recently been suggested to the Government of India, but have not yet been adopted:—

(1) Gunpowder (which is now landed or shipped inside the harbour in any quantity) to be limited to 560 lb. in weight.

(2) Small arm safety cartridges (now restricted to 100 lb.) to be landed or shipped in any quantity.

9. The Secretary of State with his despatch No. 7, Financial (Stores), dated 28th July 1898, recorded above, now forwards copies of communications received from the Home Agents of the British India Steam Navigation Company, and of a memorandum by the Director-General of Stores on the subject of the rules governing the discharge of explosives at Madras. The correspondence has arisen in connection with the exclusion from the harbour, in May last, of a vessel which carried explosives of a class prohibited from entering under the existing rules.

10. The restrictions as to entry into the harbour of explosives of classes 2 to 5 and of class 6 charged with or containing explosives of classes 2 to 5 now complained of by the Home Agents of the British India Steam Navigation Company are not, it is observed, of recent date, but were imposed in 1894. The Home Agents of the British India lines do not, however, seem to have been acquainted with the change of rules, though their local agents, Messrs. Binny & Co., were informed of the alteration—G.O., No. 232, Marine, dated 16th June 1894, having been duly communicated to them. What the British India Steamship agents apparently require is the re-introduction of the rules of 1892 promulgated with G.O., No. 106, Marine, dated 1st April 1892.

11. The Chairman, Harbour Trust Board, has also forwarded a representation from certain Calcutta firms interested in the importation of explosives, in which they object to the rules which require that vessels shall, before entering the Madras Harbour, discharge their cargoes of explosives though they may be intended for another port.

12. As regards the proposed restriction of gunpowder landed inside the harbour to 560 lb., the Chairman, Harbour Trust Board, now brings to notice that this limit will practically exclude all gunpowder intended for Madras, as almost all consignments are in excess of this quantity.

13. As the effect of the rules does not seem to have been clearly apprehended by importers, and, where understood, is objected to in some quarters, it seems desirable that the whole question should be fully discussed and carefully considered by a representative Committee. His Excellency the Governor in Council accordingly resolves that such a Committee shall be formed, and that the Chamber of Commerce, Madras, and local and Calcutta importing firms interested in the matter be invited to nominate representatives to sit on the Committee. The official members will be the following:—

The Chairman, Harbour Trust Board, who will be President.

The Presidency Port Officer.

The Inspector-General of Ordnance with the permission of the Lieutenant-General Commanding the division.

The President will take the requisite steps to form the Committee in accordance with the present orders of Government.

14. When formed, the Committee will consider and report upon the procedure to be adopted on the arrival at the port of Madras of a vessel laden with any or all of the seven classes of explosives (1) consigned to Madras, (2) consigned to Calcutta, and in connection therewith the following points are suggested for the consideration of the Committee:—

(1) If explosives of classes 2 to 5 and of class 6 charged with or containing explosives of classes 2 to 5, with the exception of "safety cartridges," are on board, the magazines containing them should, it is thought, be kept closed while the vessel is in the harbour.

(2) A vessel containing such explosives consigned both to Madras and Calcutta would then have to land so much as was intended for Madras outside the harbour, and close the magazine before such vessel could enter the harbour.

(3) It is observed that at Colombo explosives of all classes and in any quantity are admitted inside the harbour provided they are secured in properly constructed magazines.

15. The Secretary of State will, meanwhile, be made acquainted with the steps taken in the matter.

[Here enter No. 10, Marine, dated 29th November 1898.]

(True Extract.)

(Signed) W. B. DEWINTON,
Secretary to Government.

To the Chairman, Harbour Trust Board, with a reprint of the following papers:—

Printed as appendix II.

G.O., No.	106,	Marine, dated	1st April	1892.
" "	118,	" "	16th "	
Despatch No.	5,	Marine, dated	23rd April	1892.
G.O., No.	217,	Marine, dated	18th June	1892.
" "	289,	" "	10th August	"
" "	380,	" "	24th October	1893.
" "	232,	" "	16th June	1894.
" "	250,	" "	27th "	"
" "	1794,	Judicial, "	20th July	"
" Nos.	193–94,	Marine, "	2nd "	1895.
" No.	269,	" "	3rd September	"
" Nos.	540–41,	" "	27th June	1898.
" "	623–24,	" "	18th July	"

To the Presidency Port Officer.
" Judicial Department.
Copy to the Deputy Adjutant-General for the information of the Madras Command
Lieutenant-General Commanding the Division Forces

Exd. Md. Pahilvan.

APPENDIX I.

Explosive Rules.

Rules 1, 2, 3, 4, 5 and 7 to regulate the transport of explosives, made by the Governor-General in Council and published under Government of India Notification, No. 1417, dated the 24th June 1887, and printed as an appendix hereto, shall, subject to the following rules, apply to the transport of explosives within the limits of the port of Madras.

Rule (*a*).—The master of any vessel arriving at the port of Madras with explosives exceeding 100 lb. in weight on board as cargo shall give notice thereof to the pilot or harbour master, who shall come on board such vessel, immediately on his boarding.

Rule (*b*).—The agents of any vessel expected to arrive at the port of Madras and known to have explosives exceeding 100 lb. in weight on board as cargo, and the consignee or consignees of, and other person or persons interested in, such explosives so expected to arrive by any vessel at the port, shall give notice of the fact of such explosives being on board such vessel to the Chairman of the Harbour Trust Board not less than 48 hours before the arrival of such vessel, and the agents or consignor or consignors or other person or persons interested in any explosives exceeding 100 lb. in weight intended to be shipped as cargo on board any vessel in the port of Madras shall give a like notice of their or his intention to ship such explosives by such vessel 48 hours before any such explosives shall be shipped. Every such notice shall be in writing and shall contain a statement showing the quantities and nature of the explosives to be landed at, or shipped from, Madras, and of those intended for other ports or, as the case may be, of the port or ports for which any such explosives may be shipped. Upon receipt of any such notice, the Chairman of the Harbour Trust Board shall depute an officer to remain on board the vessel in charge of such explosives in cases where the same are to be landed and until the same shall have been removed from the Board's premises for deposit in the magazine on shore appointed for that purpose, or in cases where explosives are to be shipped, until the same shall have been shipped on board the vessel named in such notice.

Rule (*c*).—Every vessel entering the port of Madras having on board explosives of classes 2, 3, 4 or 5, or division I of class 7 (as defined under the rules made by the Governor-General in Council under section 5 of the Indian Explosives Act, 1884), or having on board explosives of "class 6 — Ammunition class" charged with or containing explosives of classes 2, 3, 4 or 5 in excess of 100 lb. in weight *or having on board, for discharge, at Madras explosives of class* 1—*Gunpowder class— in excess of* 560 *lb. in weight*, shall on arrival at the port, proceed to a distance of not less than one mile north of the north arm and half a mile off shore outside the harbour and shall not be permitted to enter the harbour until all such explosives have been discharged; after which, provided the requirements of rule (*e*) as regards the security of explosives remaining on board have been met, the

Class 6.—*Ammunition Class.*

* * * *

The Ammunition class has three divisions:—
Division 1 comprises exclusively—
Safety cartridges. | Railway fog signals.
Safety fuzes for blasting. | Percussion caps.
Division 2 comprises any ammunition, as before defined, which does not contain its own means of ignition and is not included in Division 1, such as—
Cartridges for small arms, which are not safety cartridges,
Cartridges and charges for cannon, shells, mines, blasting, or other like purposes,
Shells and torpedoes containing any explosive,
Fuzes for blasting, which are not safety fuzes,
Fuzes for shells,
Tubes for firing explosives.
War rockets,
which do not contain their own means of ignition.
Division 3 comprises any ammunition, as before defined, which contains its own means of ignition and is not included in Division 1, such as—
Detonators.
Cartridges for small arms which are not safety cartridges,
Fuzes for blasting, which are not safety fuzes,
Fuzes for shells,
Tubes for firing explosives,
which do contain their own means of ignition.
By ammunition containing its own means of ignition is meant ammunition having an arrangement, whether attached to it or forming part of it, which is adapted to explode or fire the same by friction or percussion.

Class 7.—*Firework Class.*

The term "firework" comprises firework composition and manufactured fireworks.
Division 1.— * * * *
Division 2.—The term "manufactured fireworks" means any explosive of the foregoing classes and any firework composition, when such explosive or composition is enclosed in any case or contrivance, or is otherwise manufactured so as to form a squib, cracker, serpent, rocket (other than a war rocket), maroon, star, lance, wheel, Chinese fire Roman candle, or other article adapted for the production of pyrotechnic effects or pyrotechnic signals.

vessel may be permitted to enter the harbour and to discharge of ship therein *explosives of class I—Gunpowder class—not exceeding* 560 *lb. in weight, or other* explosives not being of classes 2, 3, 4 or 5, or ammunition, containing or charged with explosives of classes 2, 3, 4, and 5, or fireworks composition, class 7, division I. *Provided that nothing in this rule shall prevent the landing and shipment, inside the harbour, in any quantity, of small arm safety cartridges, when properly packed in tin cases hermetically closed.* Whilst any explosives shall remain on board, such vessel shall have a red flag kept flying at the foremast head between sunrise and sunset and one red light at the ensign staff or peak, in addition to the usual anchor light between sunset and sunrise, and the master or chief officer shall remain on board of her until the explosives intended for the port of Madras shall have been discharged.

Rule (*d*).—The master of every vessel receiving or delivering any explosives shall see that the platform in the vessel's hold to be used in receiving or delivering such explosives and the gangways and combings of the hatchways of such vessel are covered with tannel hides or other suitable paddings; that the barrels or boxes containing any such explosives and received on board any such vessel are carefully stowed therein; that the hatches of such vessel are properly secured and locked, and that the key of the magazine in which any such explosives may be stowed remains in his own possession. In shipping or discharging any explosives, tanned hides or wadmiltilts shall be laid down in those portions of the vessel over which the barrels or boxes containing any such explosives shall pass, and cushions properly stuffed and covered with leather shall be placed in the hold and on the deck of the vessel in the places on to which any such barrels or boxes shall be lowered. All persons concerned in the handling, or in supervising the handling, of any such barrels or boxes of explosives, shall wear suitable shoes without any metal nails or other metal in or upon them or shall wear no shoes.

Rule (*e*).—No vessel having on board explosives exceeding 100 lb. weight shall enter the Madras Harbour unless such explosives are secured in a properly-constructed magazine to be approved of by the Deputy Conservator of the Port or other officer deputed by him to inspect it.

Rule (*f*).—"Barges, lighters and boats in the port of Madras having on board any explosives shall be kept scrupulously clean and free from loose explosives and shall not, when at anchor, lie closer than 1 *cable's length or* 200 *yards* from any of the shipping in the port or from any public landing place, and all cases of explosives in any such barges, lighters or boats shall be securely covered with tarpaulins. Whilst any such explosives shall remain on board, there shall be kept a red flag flying on every such barge, lighter or boat between sunrise and sunset and a red light in an elevated position shall be shown from any such barge, lighter or boat between sunset and sunrise. No fires, smoking or matches, shall be allowed on board any such barge, lighter or boat, nor any light of any kind *except the red light mentioned above and except in the case of* properly decked barges on the deck of which may be allowed one lantern of good pattern. *Kerosine or other explosive oil is not to be used for the abovementioned lights.* The tindal and at least half of the crew of every such barge, lighter or boat shall remain on board thereof until all the explosives are discharged therefrom.

Rule (*g*).—All barges, lighters and boats having any explosives on board *to be landed outside of the harbour*, shall remain off shore until orders are received from the officer directing the landing to approach the beach. Not more than two such barges, lighters or boats shall be permitted to unload at a time, and such unloading shall take place either at the bay in the revetment at Cosimode or at the north end of the revetment according to the state of wind and current.

Rule (*h*).—With the sanction of the Chairman of the Harbour Trust Board, which will be accorded only on production of the required special permit from the Collector of Sea Customs, explosives not prohibited under rule (*c*) if properly packed as required by rule 2 of the rules issued by the Governor-General in Council under section 5 of the Indian Explosives Act, 1884, may be shipped on board, or landed from a vessel lying at the ordinary moorings within the harbour. Shipment of any such explosives shall be effected under the precautions and conditions mentioned and contained in these rules, and such explosives must be taken on board the vessel for which they are intended, immediately after the boat by which such explosives are taken off to such vessel has come alongside the same, and no cargo boat or other vessel having fire on board shall be allowed to lie *nearer than* 1 *cable's length or* 200 *yards of* such vessel during the time that any explosives are being shipped on board the same.

Rule (*i*).—When explosives (other than those mentioned in Class 6, and Division 2, Class 7, of the rules made by the Governor-General in Council under section 5 of the Indian Explosives Act, 1884) are shipped or landed within the Madras port limits, the smoking of tobacco on board the vessel on which they shall be shipped or from which they shall be landed shall be prohibited, and all fires and lights on board shall be extinguished before the barge, lighter or boat bringing such explosives for shipment or receiving such explosives to be landed shall come alongside of such vessel. In the case of a steamer, should it be necessary that the fires in her engine-room should remain lighted, the barge, lighter or boat so bringing or receiving such explosives shall be placed to the windward of the steamer's funnel, and in the event of the steamer swinging, such explosives are to be covered with tarpaulins until such barge, lighter or boat is removed to a safe and proper position. No explosives other than those mentioned in the above two classes shall be discharged from a ship or shipped from the shore before 6–30 A.M. or after 4 P.M.

Rule (*j*).—The Chairman of the Harbour Trust Board, or any other person he may depute to act on his behalf, may from time to time prohibit the shipping or landing of explosives of any kind whatever within the Madras Harbour or may grant permission to ship or land any explosives within the harbour only on such conditions as may seem expedient.

Rule (*k*).—No magazine on board any vessel containing explosives other than safety fuzes, cartridges and caps shall be opened while such ship is inside the Madras harbour without the permission of the Chairman of the Harbour Trust Board, *or other person he may depute to act for him*, except in cases of emergency, and in case, in the opinion of the Chairman of the Harbour Trust Board, the emergency was not such as to justify the master of such vessel in opening or allowing to be opened such magazine, he shall be deemed to have contravened this rule. Such magazine shall remain open only for the time required to remove or load explosives, and that operation shall always be performed in the presence of an officer of the ship.

Rule (*l*).—If any person shall contravene any of the foregoing rules, he shall on conviction be punished with fine which may extend to one thousand rupees.

RULES framed by the Governor-General of India in Council under section 5 of the Indian Explosives Act, 1884, and published under Government of India Notification, No. 1417, dated the 24th June 1887.

For the purposes of these rules, explosives shall be classified as follows, namely—

Class 1	... ...	Gunpowder.
„ 2	... ...	Nitrate-mixture.
„ 3	... ...	Nitro-compound.
„ 4	... ...	Chlorate-mixture.
„ 5	... ...	Fulminate.
„ 6	... ...	Ammunition.
„ 7	... ...	Firework.

And when an explosive falls within the description of more than one class, it shall be deemed to belong exclusively to the latest of the classes within the description of which it falls.

CLASS 1.—*Gunpowder Class.*

The term "gunpowder" means exclusively gunpowder ordinarily so called.

CLASS 2.—*Nitrate-mixture Class.*

The term "nitrate-mixture" means any preparation, other than gunpowder ordinarily so called, formed by the mechanical mixture of a nitrate with any form of carbon or with any carbonaceous substance not possessed of explosive properties, whether sulphur be or be not added to such preparation and whether such preparation be or be not mechanically mixed with any other non-explosive substance.

The nitrate-mixture class comprises such explosives as—

Pyrolithe, | Pudrolithe, | Poudre saxifragine,

and any preparation coming within the above definition.

CLASS 3.—*Nitro-compound Class.*

The term "nitro-compound" means any chemical compound possessed of explosive properties, or capable of combining with metals to form an explosive compound, which is produced by the chemical action of nitric acid (whether mixed or not with sulphuric acid) or of a nitrate mixed with sulphuric acid upon any carbonaceous substance, whether such compound is mechanically mixed with other substances or not.

The nitro-compound class has two divisions:—

Division 1 comprises such explosives as—

Nitro-glycerine,	Lithofracteur,	Glyoxiline,
Dynamite,	Dualine,	Methylic nitrate.

and any chemical compound or mechanically-mixed preparation which consists, either wholly or partly, of nitro-glycerine or of some other liquid nitro-compound.

Division 2 comprises such explosives as—

Gun-cotton, ordinarily so called,	Schultz's powder,
Gun paper,	Nitro-mannite,
Xyloidine,	Picrates,
Gun sawdust,	Picric powder,
Nitrated gun cotton,	Tonite (or cotton-powder),
Cotton-gunpowder,	

and any nitro-compound, as before defined, which is not comprised in the first division.

CLASS 4.—*Chlorate-mixture Class.*

The term "chlorate mixture" means any explosive containing a chlorate.

The chlorate mixture class has two divisions:—

Division 1 comprises such explosives as—

Horsley's blasting powder,	Brain's blasting powder,

and any chlorate preparation which consists partly of nitro-glycerine or of some other liquid nitro-compound.

Division 2 comprises such explosives as—

Horsley's original blasting powder, Erhardt's powder, Reverley's powder, Hochstadtor's blasting charges,	Reichen's blasting charges, Teutonite, Chlorated gun-cotton,

and any chlorate-mixture as before defined, which is not comprised in the first division.

CLASS 5.—*Fulminate Class.*

The term "fulminate" means any chemical compound or mechanical mixture, whether included in the foregoing classes or not, which, from its great susceptibility to detonation, is suitable for employment in percussion caps or any other appliances for developing detonation, or which from its extreme sensibility to explosion, and from its great instability (that is to say, readiness to undergo decomposition from very slight exciting causes), is especially dangerous.

This class consists of two divisions:

Division 1 comprises such compounds as the fulminates of silver and of mercury, and preparations of these substances, such as are used in percussion caps, and any preparation consisting of a mixture of a chlorate with phosphorous, or certain descriptions of phosphorous compounds, with or without the addition of carbonaceous matter, and any preparation consisting of a mixture of a chlorate with sulphur, or with a sulphurate, with or without carbonaceous matter.

Division 2 comprises such substances as the chloride and the iodide of nitrogen, fulminating gold and silver, diazobenzol, and the nitrate of diazobenzol.

CLASS 6.—*Ammunition Class.*

The term "ammunition" means an explosive of any of the foregoing classes when enclosed in any case or contrivance, or otherwise adapted or prepared so as to form a cartridge or charge for small-arms, cannon, or any other weapon, or for blasting, or to form any safety or other fuze for blasting or for shells, or to form any tube for firing explosives, or to form a percussion cap, a detonator, a fog signal, a shell, a torpedo, a war rocket, or other contrivance other than a firework.

The term "percussion cap" does not include a detonator.

The term "detonator" means a capsule or case which is of such strength and construction, and contains an explosive of the fulminate-explosive class in such quantity, that the explosion of one capsule or case will communicate the explosion to other like capsules or cases.

The term "safety fuze" means a fuze for blasting which burns and does not explode, and which does not contain its own means of ignition, and which is of such strength and construction and contains an explosive in such quantity that the burning of such fuze will not communicate laterally with other like fuzes.

The expression "safety cartridges" means cartridges for small-arms of which the case can be extracted from the small-arm after firing, and which are so closed as to prevent any explosion in one cartridge being communicated to other cartridges.

The ammunition class has three divisions:

Division 1 comprises exclusively—

Safety cartridges. Safety fuzes for blasting.	Railway fog signals. Percussion caps.

Division 2 comprises any ammunition, as before defined, which does not contain its own means of ignition and is not included in Division 1, such as—

Cartridges for small arms, which are not safety cartridges,
Cartridges and charges for cannon, shells, mines, blasting, or other like purposes,
Shells and torpedoes containing any explosive,
Fuzes for blasting, which are not safety fuzes,
Fuzes for shells,
Tubes for firing explosives,
War rockets,
which do not contain their own means of ignition.

Division 3 comprises any ammunition, as before defined, which contains its own means of ignition and is not included in Division 1, such as—

Detonators,
Cartridges for small-arms which are not safety cartridges,
Fuzes for blasting, which are not safety fuzes,
Fuzes for shells,
Tubes for firing explosives,
which do contain their own means of ignition.

By ammunition containing its own means of ignition is meant ammunition having an arrangement, whether attached to it or forming part of it, which is adapted to explode or fire the same by friction or percussion.

CLASS 7.—*Firework Class.*

The term "firework" comprise firework composition and manufactured fireworks.

Division 1.—The term "firework composition" means any chemical compound or mechanically-mixed preparation of an explosive or inflammable nature which is used for the purpose of making manufactured fireworks, and is not included in the former classes or explosives, and also any coloured fire composition.

Division 2.—The term "manufactured firework" means any explosive of the foregoing classes and any firework composition, when such explosive or composition is enclosed in any case or contrivance, or is otherwise manufactured so as to form a squib, cracker, serpent, rocket (other than a war rocket), maroon, star, lance, wheel, Chinese fire, Roman candle or other article adapted for the production of pyrotechnic effects or pyrotechnic signals.

TRANSPORT.

(*a*) *Packing.*

2. The following general rules shall be observed with respect to the packing of explosives for conveyance:—

I. Each class of explosive shall be separately packed.

II. An explosive, not being an explosive of the 5th (fulminate) class or of the 2nd and 3rd (divisions of the 6th ammunition) class or of the 1st division of the 7th (firework) class, shall, if not exceeding 5 lb. in quantity, be contained in a substantial case, bag, canister, or other receptacle made and closed so as to prevent the explosive from escaping.

III. An explosive of the 1st (gunpowder) class, which is intended to be used for blasting purposes, may be carried in barrels covered with waxcloth or gunny.

IV. In every other case the explosive shall be contained in a double package. The inner package shall be a substantial case, bag, canister, or other receptacle, made and closed so as to prevent the explosive from escaping, and the outer package shall be a box, barrel, or case of wood or metal or other solid material, and shall be of such strength, construction and character that will not be broken or accidentally opened, or become defective or insecure whilst being conveyed, and will not allow the explosive to escape. Provided as follows:—

(*a*) If the explosive is explosive of the 1st or gunpowder class, or is explosive of the 2nd (nitrate-mixture) class, or is gun-cotton or other explosive of the 2nd division of the 3rd (nitro-compound) class, the quantity of explosive in any one outer package shall not, in the case of explosive of the first two classes, exceed 100 lb., and in the case of the last, 50 lb.; and if the explosive be gun-cotton, it shall be carried thoroughly saturated with water.

(*b*) If the explosive belongs to the 1st division of the 3rd (nitro-compound) class or to the 4th (chlorate-mixture) class, the inner package shall be without any metal in its construction, and the inner or outer package or both shall be thoroughly waterproof. No one of the inner packages shall contain more than 10 lb., and the aggregate quantity of the explosive in any one outer package shall not exceed 50 lb.;

(*c*) If the explosive belongs to the 5th (fulminate) class, it shall be packed in such manner as the Governor-General in Council may specially direct;

(*d*) If the explosive belongs to the 1st division of the 6th (ammunition) class or is any explosive of the 2nd division, an outer package shall not be required, but it may be contained in quantity not exceeding 100 lb. in a single package, which shall be a box, barrel, or case not less than $\frac{3}{4}$ of an inch in thickness of such strength, construction and character as will not be broken or accidentally opened or become defective or insecure whilst being conveyed, and will not allow the explosive to escape.

(*e*) If the explosive belongs to the 3rd division of the 6th (ammunition) class, it shall be packed in a double package. The inner package shall not contain more than 2 lb. of such explosive, and no more than 50 lb. shall be contained in the outer package;

(*f*) If the explosive belongs to the 1st division of the 7th (firework) class, it shall be contained in a double package. The inner package shall be a substantial canister, case or other receptacle hermetically closed, and containing no more than 1 lb. of explosive, and no more than 20 lb. shall be contained in outer package ; and

(*g*) If the explosive belongs to the 2nd division of the 7th (firework) class, it shall be contained in a box, barrel or case of wood, metal or other solid material, and of such strength, construction and character that it will not be broken or accidentally opened, or become defective or insecure whilst being conveyed, and will not allow any explosive to escape, and the quantity of explosive in any one package shall not exceed 100 lb.

V. Whatever be the amount of the explosive, and to whatever class or division of a class it belongs, the following conditions shall be observed :—

(*a*) The interior of every package, whether single or double, shall be kept free from grit and otherwise clean ;

(*b*) Every package, whether single or double, when actually used for the packing of explosive, shall not be used for the packing of any other explosive of the same or any other class or for any other purpose ;

(*c*) There shall not be any iron or steel in the construction of any such single package or inner or outer package unless the same is effectually covered with tin, zinc or other suitable material ;

(*d*) On the outermost package there shall be affixed in conspicuous characters, by means of a brand or securely-attached label or mark, the word "Explosive," followed by the name of the explosive, or other description of the contents, and the name and address of the owners or sender ; and

(*e*) The amount of explosive in any single package, or, if there is a double package, in any one outer package, shall not exceed the amount specified in the foregoing rules, except with the consent of, and under conditions to be approved by, an officer appointed by the local Government in this behalf.

3. If any person commits a breach of any of the foregoing rules relating to the packing of explosives for conveyance, he shall be punished with fine which may extend to Rs. 1,000.

(b) Mode of Conveyance.

4. The following general rules shall be observed with respect to the conveyance of explosives :—

I. No explosive shall be conveyed from place to place unless packed in the manner provided for in the foregoing rules.

II. There shall not be conveyed in any carriage or vessel, which is being used for the conveyance of an explosive, any explosive of a different class and division, of whatsoever nature, which contains its own means of ignition, unless it be sufficiently separated therefrom to prevent any fire or explosion which may take place in one such explosive being communicated to another.

III. No explosive shall be loaded or unloaded except between sunrise and sunset.

IV. Whilst the explosive is being loaded on, or unloaded out of, any carriage or vessel, no fire or artificial light, nor any article which is liable to cause or communicate fire or explosion (such as charcoal, lucifer matches, articles for striking a light, petroleum to which the Petroleum Act or any Act repealing or amending the same applies, or any spirit or oil or substance that gives forth an inflammable vapour at a temperature below 100° Fahrenheit), shall be, or shall be allowed to be, brought, had, or used dangerously near to such carriage, ship or boat ; and no smoking shall be allowed in, on, or dangerously near to the same, provided that when the use of a light for the purpose of such loading or unloading is unavoidable, a lamp of such construction, position or character as not to cause any danger from fire or explosion may be used ; and no person, while handling any explosive (except gunpowder explosive of Division 1, Class 6, or explosive of Class 7 if packed in accordance with the packing rules), shall wear boots [or shoes with iron or steel nails, heels, or tips.

V. In loading or unloading any explosive, the casks and packages containing the same shall be passed from hand to hand and not rolled upon the ground ; they shall not be thrown or dropped down, but shall be carefully deposited and stored.

VI. The explosive shall not be conveyed except in the interior of carriage so enclosed on all sides with wood or metal, or in the hold of a ship or boat having a close deck, so closed as effectually to protect the explosive against accident by fire from without. If the explosive cannot be so secured, it shall be completely covered with painted cloth, tarpaulin, or other suitable material so as to effectually protect it against communication of fire.

VII. There shall not be any iron or steel in the interior of the portion of the carriage or vessel with which the case containing the explosive is in contact, unless the same be effectually covered with leather, wood, cloth or other suitable material.

VIII. In the stowing of explosive, due precautions shall be taken by means of a partition or otherwise, and by careful stowing, to secure such explosive from being brought into contact with, or endangered by, any other article or substance conveyed in such carriage or vessel which

is liable to cause fire or explosion ; and if the explosive is dangerously affected by water, due precautions shall be taken to exclude water from coming into contact with such explosive.

IX. The amount of explosive conveyed in any one carriage or vessel at any one time shall not exceed 2,000 lb. unless the carriage be so enclosed on all sides with wood or metal, or the vessel have a close deck, so closed as effectually to protect the explosive against accident by fire from without, in which case the amount of explosive conveyed shall not exceed the following :—

	TONS.
In any one carriage on a railway	10
„ „ other carriage	2
„ „ vessel	20

NOTE.—This rule must in the case of dynamite conveyed by railway be read subject to paragraph XII of rule 6.

X. Nothing in the foregoing rules except (Rule I) shall apply to any explosive of the 1st division of the 6th (ammunition) class, provided all due precautions are taken for the prevention of accidents.

5. The following rules shall be observed with respect to the conveyance of explosives otherwise than by public railway :—

I. No explosive shall be conveyed in a carriage or boat whilst carrying or plying for public passengers, unless the quantity be less than 5 lb., and notice has been given beforehand to the person in charge of such carriage or boat, provided that there shall not be conveyed in any such carriage or boat, any explosive of the 5th (fulminate) class, or any explosive of the 3rd division of the 6th (ammunition) class or of the 1st division of the 3rd (nitro-compound) class, except—

(i) dynamite, which may be carried in the form of cartridges up to the limit of 5 lb. provided that no detonators are carried in the same compartment ; and

(ii) detonators to the number of 200, provided that the amount of fulminate of mercury in the package or packages containing the detonators shall in no case exceed in the aggregate 3 oz. (a certificate to this effect being given by the Agent of the Company by whom the detonators are tendered for transport), provided also that no dynamite is carried in the same compartment.

II. With respect to the conveyance by carriage or vessel of explosive of the 5th (fulminate) class, or of the 3rd division of the 6th (ammunition) class, or of the 1st division of the 7th (firework) class, or of larger quantities than 5 lb. of any other explosive, the following regulations shall be observed :—

(1) The person in charge of the carriage or vessel shall not drive or conduct the same in a dangerous or reckless manner, and shall take all due precautions to avoid fire and explosion, and no person shall do any act or thing in relation to the explosive which tends to cause fire or explosion, and is not reasonably necessary for the conveyance of the explosive or for work immediately connected with such conveyance ; and a person who is intoxicated shall not have charge of any carriage or vessel conveying explosive, and shall not be permitted to be in, or on, or attending, the same.

(2) A person shall not forward to any warehouseman or carrier a consignment of explosive, unless he has given notice to such warehouseman or carrier beforehand stating the name and quantity of the explosive proposed to be conveyed and the name and address of the proposed consignee, and has had an intimation that the warehouseman or carrier is prepared to receive the consignment ; and a warehouseman or carrier shall not make such an intimation, nor receive such consignment, unless he is prepared to receive it, and forthwith to despatch the same, or to deposit it in a magazine or at a place at which a person is licensed to possess the same.

(3) The carriage or vessel conveying the explosive shall be in charge of, and constantly attended by, some competent person, or by a sufficient number of competent persons, and such persons shall not, if the amount of explosive conveyed exceed 100 lb., stop or delay for a longer time than may be reasonably necessary, or stop unnecessarily at any place where such stopping would be attended with special public danger.

6. If any person commits a breach of any of the foregoing rules relating to the mode of conveyance of explosives, he shall be punished with a fine which may extend to Rs. 1,000.

APPENDIX II.

GOVERNMENT OF MADRAS.

MARINE DEPARTMENT.

G.O., No. 106, Marine, dated 1st April 1892.

Read the following papers :—

From Messrs. PARRY & Co., to the Chief Secretary to Government, dated Madras, 23rd October 1891.

We have the honour to acknowledge receipt of a copy of the draft rules for regulating the transport and importation of explosives in the port of Madras, with general order, dated 17th of October 1891, No. 459, thereon, and beg to say that we, as importers, have no objections to make to the proposed rules.

(Signed) PARRY & Co.

From Messrs. BINNY & Co., to the Chief Secretary to Government, dated Madras, 3rd November 1891.

We have the honour to acknowledge receipt of G.O., Marine, No. 459, of 17th ultimo, requesting us to submit any remarks we may desire to offer regarding the draft rules for regulating import and export of explosives at Madras.

2. We beg to state that we see nothing to object to in these rules, excepting that portion of Rule B which imposes on agents of vessels a responsibility which, in our opinion, should rest alone on the importer or exporter of the explosives.

3. The Port Officer is in error in saying that agents must necessarily be aware of explosives arriving. They are sometimes in possession of information in the matter, but frequently have no advice before steamer's arrival, and it is the consignee and shipper who have correct and early information as to explosives to arrive and to be shipped. We therefore respectfully submit that Rule B should be amended as was suggested by the Harbour Trust Board.

4. We presume that, before the rules are brought into force, sufficient time will be allowed to enable agents of vessels to communicate by letter with their principals in England, in order that the latter may regulate their action in connection with explosives.

(Signed) BINNY & Co.

From Messrs. BEST & Co., to the Chief Secretary to Government, dated Madras, 10th November 1891.

We have the honour to acknowledge receipt of G.O., No. 459, dated 17th October, on the subject of transport and importation of explosives, and beg herewith to make the following remarks in regard to same.

2. We beg specially to draw your attention to Rule F, wherein it is contemplated to legislate for the construction of magazines on board steamers, to our mind in unnecessary detail, and we wish to point out the very grave inconvenience that may arise from same, and how it may greatly increase the difficulties which already exist in the shipment of explosives to this country. We venture to apply the term "unnecessary" to the details suggested, as steamers carrying explosives from Great Britain do so subject to the rules and regulations of the Board of Trade, and, considering the stringent measures that are taken to protect the public and to ensure proper precautions being taken, we respectfully beg to submit that they are sufficient to meet the case.

3. Being particularly interested in the explosive compounds manufactured by Nobel's Explosives Company, we would take this opportunity by pointing out to the exceptional hardship which may be inflicted on these articles by the adoption of the rule as it at present stands. The above referred to compounds, *i.e.*, dynamite, blasting gelatine, &c., have now become commodities of considerable commercial importance in India, being very extensively used by Government and in private enterprise, and from the excellence and uniformity of their manufacture have established a reputation for effectiveness, reliability and safety during transport which is unrivalled. Major Morant, R.E., in his report on Nobel's dynamite, compiled at the instance of the Madras Government in 1879–80, mentions that "Experience has proved down to the present time that the danger of dynamite in its carriage by rail, ship or cart becomes absolutely *nil*, so long as the detonators by which it is exploded do not travel with it in the same carriage," and subsequent experience has not shown any diminution of the safety to which the above-mentioned officer testifies.

4. Our principals have surmounted the difficulties in getting freight for their manufactures to a considerable extent, owing to the safety which is now becoming generally admitted of their transport, but the difficulties are still great, as they always will be in the case of explosives of any kind, and they would be certainly increased a hundredfold if ship-owners are to be held liable for local rules of the above nature, notwithstanding their having satisfied the Board of Trade survey. The only means of transit is by the common carrier, as the importations of explosives are in comparatively small quantities at a time, and it is impossible therefore to charter specially for their conveyance, and if the ordinary cargo boat is to be hampered by minute details as to the construction of its magazines, it will simply decline to carry explosives, whereby we beg to submit that a very important trade will be greatly harassed, and both public and private enterprise seriously impeded.

5. We also beg to request that consideration may be given to the admission of steamers into the harbour with explosives on board, of an approved quality and standard of safety, not for discharge, but to enable the carrier to complete its engagements at this port. Frequently steamers bring out Nobel's dynamite, &c., for Madras and Calcutta, or for the latter port only, and, considering its absolute safety, which we think is beyond dispute, seeing the disinterested authorities that have expressed that opinion, it seems a very unnecessary and laborious undertaking to insist on our landing the Calcutta consignment outside the harbour as directed, conveying it some 2 or 3 miles to our licensed magazines, and reshipping it after the steamer has completed her discharge inside the harbour, to say nothing of the detention and expense to the vessel. Government may not feel disposed to exempt all explosives from the above treatment, but we respectfully beg to request that provision may be made for exceptions being made in regard to those of a recognized quality and standard so long as they are stored in the magazine approved of by the *Board of Trade Authorities* at port of shipment, and we again suggest the undesirability of entering into minute details as to the construction of such magazines.

6. With reference to Rule J, we would suggest its being framed with less ambiguity, as it is possible that an official might put a literal interpretation upon it, which would lead to serious inconvenience, and we cannot think it is the intention or wish of the Marine Department to extinguish all fires on board a vessel on which the explosives specified are shipped, thereby including the furnaces.

(Signed) BEST & Co.

From the Chairman, Chamber of Commerce, Madras, to the Chief Secretary to Government, dated Madras, 23rd November 1891.

I have the honour to acknowledge the receipt of the Proceedings of the Madras Government, dated the 17th ultimo, No. 459, forwarding for an expression of the Chamber's opinion, a set of draft rules for regulating the transport and importation of explosives in the port of Madras.

2. After carefully considering the rules and the letter of the Chairman of the Harbour Trust Board, the Chamber is inclined to support the recommendations of the Harbour Trust Board, which meet with its general approval.

3. The Chamber ventures also to suggest that at least six months' notice be given before the rules are enforced, to admit of their being communicated to London and other ports.

(Signed) S. R. TURNBULL,
Chairman.

From W. AUSTIN, Esq., C.S., Chairman, Harbour Trust Board, Madras, to the Chief Secretary to Government, dated Madras, 28th October 1891, No. 2068.

I have the honour to submit, for the information and approval of Government, a copy of Resolution, No. 4, passed by the Trustees at their meeting of 9th instant, absolutely excluding from the harbour vessels with dynamite and other nitro-glycerine explosive compounds on board, except under special circumstances and with the Chairman's written permission.

2. The exceptional cases when vessels will be admitted will apply to all men-of-war and Government transports, on board of which proper precautions are always taken and explosives are handled and stored with care, but the Trustees are strongly of opinion that a stop must at once be put to steamers entering this harbour with thirty or forty tons of nitro-glycerine explosives on board as ordinary cargo, that quantity being more than sufficient to absolutely wreck the harbour and all buildings within miles, should any accident occur.

Vessels with dynamite for Madras discharge it outside before entering the harbour. It is only recently that the steamers calling here have commenced to carry nitro-glycerine explosive compounds for Calcutta, which, on arrival in the Hughli, have to be discharged before entering harbour limits, and it is very easy to arrange for shipment by direct steamer, so that there is absolutely no necessity for the Trustees to permit the continuance of a risk which can be so easily avoided.

G.O., No. 459, Marine, dated 17th October, has been received since the Trustees passed this resolution, and I will, after their next meeting, again address Government with a view to bring into harmony with this decision of the Trust rule (*i*) published therein and the Port rules for vessels arriving within the port with ammunition, &c., published in the Instructions to Commanders of vessels furnished to them by the Deputy Conservator on the arrival of each ship.

ENCLOSURE.

EXTRACT of Proceedings of the Trustees of the Harbour of Madras, at a meeting held at the offices of the Board on Friday, the 9th day of October 1891.

* * * * *

4. Read correspondence with Messrs. Gordon, Woodroffe and Co. regarding vessels entering the harbour with dynamite and other explosives on board for other ports.

Read minutes by Captain M. Bean, Her Majesty's Indian Marine, the Hon'ble Mr. J. A. Boyson, Major O. V. Boddy, R.E., and Mr. Cowasjee Eduljee Panday.

Resolution.—Resolved, unanimously, that vessels with dynamite and other nitro-glycerine compounds on board be absolutely excluded from entering the harbour, except in special cases and with the written permission of the Chairman, who is invited to address Government in reference to the rules now under its consideration.

From W. AUSTIN, Esq., C.S., Chairman, Harbour Trust Board, Madras, to the Chief Secretary to Government, dated Madras, 25th November 1891, No. 2372.

Referring to G.O., Marine, No. 259, dated 17th October 1891, I have the honour to submit, for the information of Government, copies of resolutions passed by the Trustees at their last four meetings, in reference to the rules regarding the transport and importation of explosives at the port of Madras; and I forward herewith, for ready reference, a copy of the rules as printed in the above Government order with the alterations now suggested by the Board shown in red ink.

2. The Trustees are further of opinion that the rules made by His Excellency the Governor-General in Council, and which have been adopted in Bombay, should be made to apply to the port of Madras also. I enclose a copy for ready reference.

3. With regard to the position to be taken up by vessels discharging explosives outside the harbour, viz., not less than one mile north of the north arm and half a mile off shore, I would remark that this is at a safe distance from the harbour and the city, and is also convenient for masula boats, the only two spots where they can now land being immediately to the north of the extended revetment protecting the foreshore beyond Cassimode, or between its south end and the north end of the old revetment; the ship in the position assigned would be about midway between the two, and boats would land either to north or south according to circumstances of wind and current.

ENCLOSURES.

EXTRACT of Proceedings of the Trustees of the Harbour of Madras, at a meeting held at the offices of the Board on Friday, the 20th day of November 1891.

* * * * *

2. Read and discussed again the draft rules for the transport and importation of explosives in the port of Madras.

Read letter, No. 2864 of 1891, dated 9th November, from Captain Bean, Her Majesty's Indian Marine, Port Officer, Bombay, communicating a copy of the rules in force at that port under the Explosives Act.

Read telegram from the Master Attendant, Colombo, dated 18th November, intimating the procedure adopted there regarding the berthing of ships with explosives on board.

Read Rules 1 to 5 and 7, framed by the Governor-General in Council under section 5 of the Indian Explosives Act, 1884.

Read minutes by Captain Creagh, Her Majesty's Indian Marine, and Major O. V. Boddy, R.E.

Resolution.—Resolved that Resolution No. 4, of 9th October, be confirmed, and that, in the opinion of this Board, the rules of the Government of India, Nos. 1 to 5 and 7, read above, should be made applicable to the port of Madras, and that the alterations now suggested in Rules (*a*) (*c*) (*f*) (*i*) (*j*) of the rules for the importation and transport of explosives in this port be submitted to Government for approval.

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EXTRACT of Proceedings of the Trustees of the Harbour of Madras, at a meeting held at the offices of the Board on Friday, the 6th day of November 1891.

* * * * *

8. Read letter, No. 2068, dated 28th October, addressed to the Chief Secretary to Government, regarding the Board's resolution, No. 4, dated 9th October, prohibiting vessels with dynamite on board entering the harbour.

Read G.O., No. 459, Marine, dated 17th instant, directing that a copy of the draft rules for regulating the transport and importation of explosives in the port of Madras be forwarded to the Chamber of Commerce and certain firms for remarks, and calling on the Presidency Port Officer to report on certain points.

Read letter from the Presidency Port Officer, No. 929-1406-M., dated 30th October, forwarding, for the information and remarks of the Trustees, a draft of proposed alterations in Rules (*i*) and (*j*).

Read letter from the Deputy Port Conservator, No. 2054, dated 29th October, requesting a definite ruling as to the quantity of gunpowder or explosives other than nitro-glycerine compounds, which may be brought by merchant vessels inside the harbour.

Read minutes by the Hon'ble Mr. J. A. Boyson and Major O. V. Boddy, R.E.

Resolution.—Resolved, that the position to be taken up by vessels discharging explosives within the limits of the port of Madras shall be not less than one mile north of the north arm of the harbour and half-a-mile off shore.

Resolved also, that the further consideration of Rules (*i*) and (*j*) be deferred until the next meeting.

* * * * *

EXTRACT of Proceedings of the Trustees of the Harbour of Madras at a meeting held at the offices of the Board on Friday the 23rd day of October 1891.

* * * * *

1. Read again correspondence with Messrs. Gordon, Woodroffe & Co. regarding vessels entering the harbour with dynamite and other explosives on board for other ports.

Read correspondence with the Depury Port Conservator in reference to the Board's Resolution, No. 4, dated 9th October.

Read Port Rules regarding the entry of vessels into the harbour with explosives on board.

Read again draft rules for regulating the transport, &c., of explosives in the port of Madras referred to in the Chairman's letter to the Presidency Port Officer, No. 91-C., dated 21st May 1891.

Read letter from Messrs. Binny & Co., dated 21st October, and minutes by Mr. Varadarajulu Chetty, Haji Hadi Badsha Sait and the Hon'ble Mr. J. A. Boyson.

Resolution.—Resolved, that the proceedings of last meeting be confirmed as now amended.

* * * * *

EXTRACT of Proceedings of the Trustees of the Harbour of Madras at a meeting held at the offices of the Board on Friday the 9th day of October 1891.

* * * * *

4. Read correspondence with Messrs. Gordon, Woodroffe & Co. regarding vessels entering the harbour with dynamite and other explosives on board for other ports.

Read minutes by Captain M. Bean, Her Majesty's Indian Marine, the Hon'ble Mr. J. A. Boyson, Major O. V. Boddy, R.E., and Mr. Cowasjee Eduljee Panday.

Resolution.—Resolved, unanimously, that vessels with dynamite and other nitro-glycerine compounds on board be absolutely excluded from entering the harbour, except in special cases and with the written permission of the Chairman, who is invited to address Government in reference to the rules now under its consideration.

* * * * *

From Captain B. P. CREAGH, H. M.'s I. M., Officiating Presidency Port Officer, to the Chief Secretary to Government, dated Madras, 2nd December 1891, No. 929–438 G.

I have the honour to forward the accompanying final draft of rules for regulating the transport and importation of explosives in the port of Madras, revised in further communication with the Chairman of the Harbour Trust Board and with reference to the remarks in G.O., No. 459, Marine, dated 17th October 1891. The revisions made are shown in red ink. I forward, in original, the Chairman, Harbour Trust Board's, letter to me on the subject of this revision (No. 458-C., dated 23rd November 1891).

ENCLOSURE.

From W. AUSTIN, Esq., C.S., Chairman, Harbour Trust Board, to the Presidency Port Officer, dated Madras, 23rd November 1891, No. 458-C.

I have the honour to acknowledge the receipt of your letter, No. 929–1406 M., dated 30th October 1891, in reference to G.O., No. 459, Marine, dated 17th idem.

The draft rules for the transport and importation of explosives at Madras have been carefully considered by the Trustees at their last three meetings, and I forward for your information copies of resolutions then passed and also enclose copy of the rules printed in G.O., No. 459, showing in red ink the alterations now suggested by the Board.

The Trustees also approve of your suggestion that the rules made by His Excellency the Governor-General in Council under section 5 of the Indian Explosives Act, 1884, and which have been adopted in Bombay, should be made to apply to the port of Madras also.

You will note that under Rule (*c*) the Board as Conservator has fixed the anchorage of a ship discharging explosives outside the harbour at not less than one mile north of the north arm, and half-a-mile off shore. This position is at a safe distance from the harbour and is also convenient for masulah boats carrying explosives to land either between the old and new stone revetments protecting the foreshore beyond Ráyapuram and Cassimode, or at the north end of the new revetment, according to the state of wind and current.

From Messrs. ARBUTHNOT & Co., Madras, to the Chief Secretary to Government, dated 4th December 1891.

We have the honour to acknowledge receipt of G.O., No. 459, dated 17th October 1891, regarding the transport and importation of explosives in the port of Madras. We have perused same and have no remarks to offer.

ORDER—dated 1st April 1892, No. 106, Marine.

After careful consideration of the foregoing papers, the Government directs—

(1) that Rule (*b*) stand as altered by Government—*vide* G.O., dated 17th October 1891, No. 459;

* The rules have accordingly been re-lettered.

(2) that Rule (*f*) be omitted;*

(3) that Rule (*i*) stand as revised by the Presidency Port Officer and approved by the Harbour Trust Board;

(4) that Nos. 1 to 5 and 7 of the rules issued by the Government of India in June 1887 be adopted for observance in this Presidency;

(5) that the rules shall not come into force until six † months from their publication for information in the *Fort St. George Gazette*.

† The date will be regulated accordingly when the rules are finally published for guidance.

2. The rules as approved are printed below. They will be forwarded for the sanction of the Government of India with reference to section 5 (1) of Act IV of 1884.

3. The following notification will be published in the *Fort St. George Gazette*:—

NOTIFICATION.

In accordance with section 18 (1) and (3) of Act IV of 1884—the Indian Explosives Act—the following draft rules for regulating the transport and importation of explosives in the port of Madras are published for the information of persons likely to be affected thereby, and notice is hereby given that they will be taken into consideration at or after the first day of June 1891.

RULES.

Rules 1, 2, 3, 4, 5 and 7 to regulate the transport of explosives made by the Governor-General in Council and published under Government of India Notification, No. 1417, dated the 24th June 1887, and printed as an appendix hereto, shall, subject to the following rules, apply to the transport of explosives within the limits of the port of Madras.

Rule (*a*).—The master of any vessel arriving at the port of Madras with explosives exceeding 100 lb. in weight on board as cargo shall give notice thereof to the pilot or harbour master, who shall come on board such vessel immediately on his boarding.

Rule (*b*).—The agents of any vessel expected to arrive at the port of Madras and known to have explosives exceeding 100 lb. in weight on board as cargo, and the consignee or consignees of, and other person or persons interested in, such explosives so expected to arrive by any vessel at the port, shall give notice of the fact of such explosives being on board such vessel to the Chairman of the Harbour Trust Board not less than 48 hours before the arrival of such vessel, and the agents or consignor or consignors or other person or persons interested in any explosives exceeding 100 lb. in weight intended to be shipped as cargo on board any vessel in the port of Madras shall give a like notice of their or his intention to ship such explosives by such vessel 48 hours before any such explosives shall be shipped. Every such notice shall be in writing and shall contain a statement showing the quantities and nature of the explosives to be landed at, or shipped from, Madras, and of those intended for other ports or, as the case may be, of the port or ports for which any such explosives may be shipped. Upon receipt of any such notice, the Chairman of the Harbour Trust Board shall depute an officer to remain on board the vessel in charge of such explosives in cases where the same are to be landed and until the same shall have been removed from the Board's premises for deposit in the magazine on shore appointed for that purpose, or in cases where explosives are to be shipped until the same shall have been shipped on board the vessel named in such notice.

Rule (*c*).—Every vessel having on board explosives intended to be landed at the port of Madras, with the exception of those mentioned in Division 2, Class 6, "Ammunition class," and Division 2, Class 7, "Manufactured Firework class" (under the rules made by the Governor-General in Council under section 5 of the Indian Explosives Act, 1884), in excess of 100 lb. in weight, shall, on arrival at the port, proceed to a distance of not less than one mile north of the north arm, and half-a-mile off shore outside the harbour, and shall there remain until such explosives have been discharged from such vessel; after which, provided that the requirements of Rule (*e*) as regards the security of explosives still remaining on board have been met, the vessel may be permitted to enter the harbour. Whilst any explosives shall remain on board, such vessel shall have a red flag kept flying at the foremast head between sunrise and sunset and one red light at the ensign staff or peak in addition to the usual anchor light between sunset and sunrise, and the master or chief officer shall remain on board of her until the explosives intended for the port of Madras shall have been discharged.

CLASS 6.—*Ammunition Class.*

* * * * *

The ammunition class has three divisions—

Division 1 comprises exclusively—

Safety cartridges.	Railway fog signals.
Safety fuzes for blasting.	Percussion caps.

Division 2 comprises any ammunition, as before defined, which does not contain its own means of ignition and is not included in Division 1, such as—

Cartridges for small arms, which are not safety cartridges,
Cartridges and charges for cannon, shells, mines, blasting, or other like purposes,
Shells and torpedoes containing any explosive,
Fuzes for blasting, which are not safety fuzes,
Fuzes for shells,
Tubes for firing explosives,
War rockets,

which do not contain their own means of ignition.

Division 3 comprises any ammunition, as before defined, which contains its own means of ignition and is not included in Division 1, such as—

Detonators,
Cartridges for small arms which are not safety cartridges,
Fuzes for blasting, which are not safety fuzes,
Fuzes for shells,
Tubes for firing explosives,

which do contain their own means of ignition.

By ammunition containing its own means of ignition is meant ammunition having an arrangement, whether attached to it or forming part of it, which is adapted to explode or fire the same by friction or percussion.

CLASS 7.—*Firework Class.*

The term "firework" comprises firework composition and manufactured fireworks.

Division 1.—The term "firework composition" means any chemical compound or mechanically-mixed preparation of an explosive or inflammable nature which is used for the purpose of making manufactured fireworks, and is not included in the former classes of explosives, and also any coloured fire composition.

Division 2.—The term "manufactured firework" means any explosive of the foregoing classes and any firework composition, when such explosive or composition is enclosed in any case or contrivance, or is otherwise manufactured so as to form a squib, cracker, serpent, rocket (other than a war-rocket), maroon, star, lance, wheel, Chinese fire, Roman candle, or other article adapted for the production of pyrotechnic effects or pyrotechnic signals.

Rule (*d*).—The master of every vessel receiving or delivering any explosives shall see that the platform in the vessel's hold to be used in receiving or delivering such explosives and the gangways and combings of the hatchways of such vessel are covered with tanned hides or other suitable paddings; that the barrels or boxes containing any such explosives and received on board any such vessel are carefully stowed therein; that the hatches of such vessel are properly secured and locked, and that the key of the magazine in which any such explosives may be stowed remains in his own possession. In shipping or discharging any explosives, tanned hides or wadmiltilts shall be laid down in those portions of the vessel over which the barrels or boxes containing any such explosives shall pass, and cushions properly stuffed and covered with leather shall be placed in the hold and on the deck of the vessel in the places on to which any such barrels or boxes shall be lowered. All persons concerned in the handling, or in supervising the handling, of any such barrels or boxes of explosives, shall wear suitable shoes without any metal nails or other metal in or upon them or shall wear no shoes.

Rule (*e*).—No vessel having on board explosives exceeding 100 lb. weight shall enter the Madras Harbour unless such explosives are secured in a properly-constructed magazine to be approved of by the Deputy Conservator of the Port or other officer deputed by him to inspect it.

Rule (*f*).—Barges, lighters and boats in the port of Madras having on board any explosives shall be kept scrupulously clean and free from loose explosives and shall not, when at anchor, lie closer than half-a-mile from any of the shipping in the port or from any public landing place and all cases of explosives in any such barges, lighters or boats shall be securely covered with tarpaulins. Whilst any such explosives shall remain on board, there shall be kept a red flag flying on every such barge, lighter or boat between sunrise and sunset, and a red light in an elevated position shall be shown from every such barge, lighter or boat between sunset and sunrise. No fires, smoking or matches shall be allowed on board any such barge, lighter or boat, nor any light of any kind except in properly-decked barges, on the deck of which may be allowed one lanthorn of good pattern. The tindal and at least half the crew of every such barge, lighter or boat shall remain on board thereof until all explosives are discharged therefrom.

Rule (*g*).—All barges, lighters and boats having any explosives on board shall remain off shore until orders are received from the officer directing the landing to approach the beach. Only one such barge, lighter or boat shall be permitted to unload at a time, and such unloading shall take place either between the old and new stone revetments protecting the foreshore beyond Ráyapuram and Cassimode or at the north end of the new revetment according to the state of wind and current.

Rule (*h*).—With the sanction of the Chairman of the Harbour Trust Board, explosives of the descriptions * mentioned in Division 2 of Class 6—*Ammunition Class*, and Division 2, Class 7—*Manufactured Firework Class* (under the rules made by the Governor-General in Council under section 5 of the Indian Explosives Act, 1884) in any quantities, exclusive of nitro-glycerine compounds, and other explosives up to 100 lb. in weight if properly packed as required by Rule 2 of the rules issued by the Governor-General in Council under section 5 of the Indian Explosives Act, 1884, and unaccompanied by detonators or percussion caps, may be shipped on board, or landed from, a vessel lying at the ordinary moorings within the harbour. Shipment of any such explosives shall be effected under the precautions and conditions mentioned and contained in these rules, and such explosives must be taken on board the vessel for which they are intended immediately the boat by which such explosives are taken off to such vessel is alongside the same, and no cargo boat or other vessel having fire on board shall be allowed to lie near such vessel during the time that any explosives are being shipped on board the same.

* *Vide* marginal note to Rule (*c*).

Rule (*i*).—When explosives (other than those mentioned in Division 2, Class 6, and Division 2, Class 7, of the rules made by the Governor-General in Council under section 5 of the Indian Explosives Act, 1884) are shipped or landed within the Madras port limits, the smoking of tobacco on board the vessel on which they shall be shipped or from which they shall be landed shall be prohibited, and all fires and lights on board shall be extinguished before the barge, lighter or boat bringing such explosives for shipment or receiving such explosives to be landed shall come alongside of such vessel. In the case of a steamer, should it be necessary that the fires in her engine-room should remain lighted, the barge, lighter or boat so bringing or receiving such explosives shall be placed to the windward of the steamer's funnel, and in the event of the steamer swinging, such explosives are to be covered with tarpaulins until such barge, lighter or boat is removed to a safe and proper position. No explosives other than those mentioned in the above two classes shall be discharged from a ship or shipped from the shore before 6-30 A.M. or after 4 P.M.

Rule (*j*).—The Chairman of the Harbour Trust Board, or any other person he may depute to act on his behalf, may from time to time prohibit the shipping or landing of explosives of any kind whatever within the Madras Harbour or may grant permission to ship or land any explosives within the harbour only on such conditions as may seem expedient.

Rule (*k*).—No magazine on board any vessel and containing explosives other than safety fuzes, cartridges and caps shall be opened while such ship is inside the Madras Harbour without the permission of the Chairman of the Harbour Trust Board except in cases of emergency, and in case, in the opinion of the Chairman of the Harbour Trust Board, the emergency was not such as to justify the master of such vessel in opening or allowing to be opened such magazine, he shall be deemed to have contravened this rule.

Rule (*l*).—If any person shall contravene any of the foregoing rules, he shall on conviction be punished with fine which may extend to one thousand rupees.

APPENDIX.

RULES framed by the Governor-General of India in Council under section 5 of the Indian Explosives Act, 1884, and published under Government of India Notification, No. 1417, dated the 24th June 1887.

1. For the purposes of these rules, explosives shall be classified as follows, namely—

Class	1	Gunpowder.
"	2	Nitrate-mixture.
"	3	Nitro-compound.
"	4	Chlorate-mixture.
"	5	Fulminate.
"	6	Ammunition.
"	7	Firework.

And when an explosive falls within the description of more than one class, it shall be deemed to belong exclusively to the latest of the classes within the description of which it falls.

CLASS 1.—*Gunpowder Class.*

The term "gunpowder" means exclusively gunpowder ordinarily so called.

CLASS 2.—*Nitrate-mixture Class.*

The term "nitrate-mixture" means any preparation, other than gunpowder ordinarily so called, formed by the mechanical mixture of a nitrate with any form of carbon or with any carbonaceous substance not possessed of explosive properties, whether sulphur be or be not added to such preparation and whether such preparation be or be not mechanically mixed with any other non-explosive substance.

The nitrate-mixture class comprises such explosives as—

Pyrolithe, | Pudrolithe, | Poudre saxifragine,

and any preparation coming within the above definition.

CLASS 3.—*Nitro-compound Class.*

The term "nitro-compound" means any chemical compound possessed of explosive properties, or capable of combining with metals to form an explosive compound, which is produced by the chemical action of nitric acid (whether mixed or not with sulphuric acid) or of a nitrate mixed with sulphuric acid upon any carbonaceous substance, whether such compound is mechanically mixed with other substances or not.

The nitro-compound class has two divisions:—

Division 1 comprises such explosives as—

Nitro-glycerine, | Dynamite, | Lithofracteur, | Dualine, | Glyoxiline, | Methylic nitrate,

and any chemical compound or mechanically-mixed preparation which consists, either wholly or partly, of nitro-glycerine or of some other liquid nitro-compound.

Division 2 comprises such explosives as—

Gun-cotton, ordinarily so called, | Gun paper, | Xyloidine, | Gun sawdust, | Nitrated gun-cotton, | Cotton-gunpowder, | Schultz's powder, | Nitro-mannite, | Picrates, | Picric powder, | Tonite (or cotton-powder),

and any nitro-compound, as before defined, which is not comprised in the first division.

CLASS 4.—*Chlorate-mixture Class.*

The term "chlorate-mixture" means any explosive containing a chlorate.

The chlorate-mixture class has two divisions:—

Division 1 comprises such explosives as—

Horsley's blasting powder, | Brain's blasting powder,

and any chlorate preparation which consists partly of nitro-glycerine or of some other liquid nitro-compound.

Division 2 comprises such explosives as—

Horsley's original blasting powder, | Erhardt's powder, | Reverley's powder, | Hochstadtor's blasting charges, | Reichen's blasting charges, | Teutonite, | Chlorated gun cotton,

and any chlorate-mixture as before defined, which is not comprised in the first division.

CLASS 5.—*Fulminate Class.*

The term "fulminate" means any chemical compound or mechanical mixture, whether included in the foregoing classes or not, which, from its great susceptibility to detonation, is suitable for employment in percussion caps or any other appliances for developing detonation, or which, from its extreme sensibility to explosion, and from its great instability (that is to say, readiness to undergo decomposition from very slight exciting causes), is especially dangerous.

This class consists of two divisions:—

Division 1 comprises such compounds as the fulminates of silver and of mercury, and preparations of these substances, such as are used in percussion caps, and any preparation consisting of a mixture of a chlorate with phosphorus, or certain descriptions of phosphorous compounds, with or without the addition of carbonaceous matter, and any preparation consisting of a mixture of a chlorate with sulphur, or with a sulphurate, with or without carbonaceous matter.

Division 2 comprises such substances as the chloride and the iodide of nitrogen, fulminating gold and silver, diazobenzol, and the nitrate of diazobenzol.

CLASS 6.—*Ammunition Class.*

The term "ammunition" means an explosive of any of the foregoing classes when enclosed in any case or contrivance, or otherwise adapted or prepared so as to form a cartridge or charge for small-arms, cannon, or any other weapon, or for blasting, or to form any safety or other fuze for blasting or for shells, or to form any tube for firing explosives, or to form a percussion cap, a detonator, a fog signal, a shell, a torpedo, a war rocket, or other contrivance other than a firework.

The term "percussion cap" does not include a detonator.

The term "detonator" means a capsule or case which is of such strength and construction, and contains an explosive of the fulminate-explosive class in such quantity, that the explosion of one capsule or case will communicate the explosion to other like capsules or cases.

The term "safety fuze" means a fuze for blasting which burns and does not explode, and which does not contain its own means of ignition, and which is of such strength and construction and contains an explosive in such quantity that the burning of such fuze will not communicate laterally with other like fuzes.

The expression "safety cartridges" means cartridges for small-arms of which the case can be extracted from the small-arm after firing, and which are so closed as to prevent any explosion in one cartridge being communicated to other cartridges.

The ammunition class has three divisions :—
Division 1 comprises exclusively—

Safety cartridges.	Railway fog signals.
Safety fuzes for blasting.	Percussion caps.

Division 2 comprises any ammunition, as before defined, which does not contain its own means of ignition and is not included in Division 1, such as—
Cartridges for small-arms, which are not safety cartridges,
Cartridges and charges for cannon, shells, mines, blasting, or other like purposes,
Shells and torpedoes containing any explosive,
Fuzes for blasting, which are not safety fuzes,
Fuzes for shells,
Tubes for firing explosives,
War rockets,
which do not contain their own means of ignition.

Division 3 comprises any ammunition, as before defined, which contain its own means of ignition and is not included in Division 1, such as—
Detonators,
Cartridges for small-arms which are not safety cartridges,
Fuzes for blasting, which are not safety fuzes,
Fuzes for shells,
Tubes for firing explosives,
which do contain their own means of ignition.

By ammunition containing its own means of ignition is meant ammunition having an arrangement, whether attached to it or forming part of it, which is adapted to explode or fire the same by friction or percussion.

CLASS 7.—*Firework Class.*

The term "firework" comprises firework composition and manufactured fireworks.

Division 1.—The term "firework composition" means any chemical compound or mechanically-mixed preparation of an explosive or inflammable nature which is used for the purpose of making manufactured fireworks, and is not included in the former classes of explosives, and also any coloured fire composition.

Division 2.—The term "manufactured firework" means any explosive of the foregoing classes and any firework composition, when such explosive or composition is enclosed in any case or contrivance, or is otherwise manufactured so as to form a squib, cracker, serpent, rocket (other than a war rocket), maroon, star, lance, wheel, Chinese fire, Roman candle, or other article adapted for the production of pyrotechnic effects or pyrotechnic signals.

TRANSPORT.

(*a*)—*Packing.*

2. The following general rules shall be observed with respect to the packing of explosives for conveyance :—

I. Each class of explosive shall be separately packed.

II. An explosive, not being an explosive of the 5th (fulminate) class or of the 2nd and 3rd (divisions of the 6th ammunition) class or of the 1st division of the 7th (firework) class, shall, if not exceeding 5 lb. in quantity, be contained in a substantial case, bag, canister or other receptacle made and closed so as to prevent the explosive from escaping.

III. An explosive of the first (gunpowder class), which is intended to be used for blasting purposes, may be carried in barrels covered with waxcloth or gunny.

IV. In every other case the explosive shall be contained in a double package. The inner package shall be a substantial case, bag, canister or other receptacle, made and closed so as to prevent the explosive from escaping, and the outer package shall be a box, barrel, or case of wood or metal or other solid material, and shall be of such strength, construction and character that will not be broken or accidentally opened, or become defective or insecure whilst being conveyed, and will not allow the explosive to escape. Provided as follows :—

(*a*) If the explosive is explosive of the 1st or gunpowder class, or is explosive of the 2nd (nitrate-mixture) class, or is gun-cotton or other explosive of the 2nd division of the 3rd (nitro-compound) class, the quantity of explosive in any one outer package shall not, in the case of explosive of the first two classes, exceed 100 lb., and in the case of the last 50 lb.; and if the explosive be gun-cotton, it shall be carried thoroughly saturated with water.

(*b*) If the explosive belongs to the 1st division of the 3rd (nitro-compound) class or to the 4th (chlorate-mixture) class, the inner package shall be without any metal in its construction, and the inner or outer package or both shall be thoroughly water-proof. No one of the inner packages shall contain more than 10 lb., and the aggregate quantity of the explosive in any one outer package shall not exceed 50 lb.

(*c*) If the explosive belongs to the 5th (fulminate) class, it shall be packed in such manner as the Governor-General in Council may specially direct.

(*d*) If the explosive belongs to the 1st division of the 6th (ammunition) class or is any explosive of the 2nd division, an outer package shall not be required, but it may be contained in quantity not exceeding 100 lb. in a single package, which shall be a box, barrel, or case not less than $\frac{3}{4}$ths of an inch in thickness of such strength, construction and character as will not be broken or accidentally opened or become defective or insecure whilst being conveyed, and will not allow the explosive to escape.

(*e*) If the explosive belongs to the 3rd division of the 6th (ammunition) class, it shall be packed in a double package. The inner package shall not contain more than 2 lb. of such explosive, and no more than 50 lb. shall be contained in the outer package.

(*f*) If the explosive belongs to the 1st division of the 7th (firework) class, it shall be contained in a double package. The inner package shall be a substantial canister, case, or other receptacle hermetically closed, and containing no more than 1 lb. of explosive, and no more than 20 lb. shall be contained in outer package, and

(*g*) If the explosive belongs to the 2nd division of the 7th (firework) class, it shall be contained in a box, barrel or case of wood, metal or other solid material, and of such strength, construction and character that it will not be broken or accidentally opened, or become defective or insecure whilst being conveyed, and will not allow any explosive to escape, and the quantity of explosive in any one package shall not exceed 100 lb.

V. Whatever be the amount of the explosive, and to whatever class or division of a class it belongs, the following conditions shall be observed :—

(*a*) The interior of every package, whether single or double, shall be kept free from grit and otherwise clean.

(*b*) Every package, whether single or double, when actually used for the packing of explosive shall not be used for the packing of any other explosive of the same or any other class or for any other purpose.

(*c*) There shall not be any iron or steel in the construction of any such single package or inner or outer package unless the same is effectually covered with tin, zinc or other suitable material.

(*d*) On the outermost package there shall be affixed in conspicuous characters, by means of a brand or securely-attached label or mark, the word "Explosive," followed by the name of the explosive, or other description of the contents, and the name and address of the owners or sender; and

(*e*) The amount of explosive in any single package, or, if there is a double package, in any one outer package, shall not exceed the amount specified in the foregoing rules, except with the consent of, and under conditions to be approved by, an officer appointed by the local Government in this behalf.

3. If any person commits a breach of any of the foregoing rules relating to the packing of explosives for conveyance, he shall be punished with fine which may extend to Rs. 1,000.

(*b*)—*Mode of Conveyance.*

4. The following general rules shall be observed with respect to the conveyance of explosives :—

I. No explosive shall be conveyed from place to place unless packed in the manner provided for in the foregoing rules.

II. There shall not be conveyed in any carriage or vessel, which is being used for the conveyance of an explosive, any explosive of a different class and division, of whatsoever nature, which contains its own means of ignition, unless it be sufficiently separated therefrom to prevent any fire or explosion which may take place in one such explosive being communicated to another.

III. No explosive shall be loaded or unloaded except between sunrise and sunset.

IV. Whilst the explosive is being loaded on, or unloaded out of, any carriage or vessel, no fire or artificial light, nor any article which is liable to cause or communicate fire or explosion (such as charcoal, lucifer matches, articles for striking a light, petroleum to which the Petroleum Act or any Act repealing or amending the same applies, or any spirit or oil or substance that gives forth an inflammable vapour at a temperature below 100° (Fahrenheit), shall be, or shall be allowed to be, brought, had, or used dangerously near to such carriage, ship or boat; and no smoking shall be allowed in, on, or dangerously near to the same, provided that when the use of a light for the purpose of such loading or unloading is unavoidable, a lamp of such construction, position, or character as not to cause any danger from fire or explosion may be used; and no person, while handling any explosive (except gunpowder explosive of division I, class 6, or explosive of class 7, if packed in accordance with the packing rules), shall wear boots or shoes with iron or steel nails, heels, or tips.

V. In loading or unloading any explosive, the casks and packages containing the same shall be passed from hand to hand and not rolled upon the ground; they shall not be thrown or dropped down, but shall be carefully deposited and stored.

VI. The explosive shall not be conveyed except in the interior of a carriage so enclosed on all sides with wood or metal, or in the hold of a ship or boat having a close deck, so closed as effectually to protect the explosive against accident by fire from without. If the explosive cannot be so secured, it shall be completely covered with painted cloth, tarpaulin, or other suitable material so as to effectually protect it against communication of fire.

VII. There shall not be any iron or steel in the interior of the portion of the carriage or vessel with which the case containing the explosive is in contact, unless the same be effectually covered with leather, wood, cloth or other suitable material.

VIII. In the stowing of explosive, due precautions shall be taken by means of a partition or otherwise, and by careful stowing, to secure such explosive from being brought into contact with, or endangered by, any other article or substance conveyed in such carriage or vessel which is liable to cause fire or explosion; and if the explosive is dangerously affected by water, due precautions shall be taken to exclude water from coming into contact with such explosive.

IX. The amount of explosive conveyed in any one carriage or vessel at any one time shall not exceed 2,000 lb. unless the carriage be so enclosed on all sides with wood or metal, or the vessel have a close deck, so closed as effectually to protect the explosive against accident by fire from without, in which case the amount of explosive conveyed shall not exceed the following:—

	TONS.
In any one carriage on a railway	10
„ „ other carriage	2
„ „ vessel	20

NOTE.—This rule must in the case of dynamite conveyed by railway be read subject to paragraph XII of Rule 6.

X. Nothing in the foregoing rules (except Rule 1) shall apply to any explosive of the 1st division of the 6th (ammunition) class, provided all due precautions are taken for the prevention of accidents.

5. The following rules shall be observed with respect to the conveyance of explosives otherwise than by public railway:—

I. No explosive shall be conveyed in a carriage or boat whilst carrying or plying for public passengers, unless the quantity be less than 5 lb. and notice has been given beforehand to the person in charge of such carriage or boat, provided that there shall not be conveyed in any such carriage or boat any explosive of the 5th (fulminate) class, or any explosive of the 3rd division of the 6th (ammunition) class or of the 1st division of the 3rd (nitro-compound) class, except—

(i) dynamite, which may be carried in the form of cartridges up to the limit of 5 lb., provided that no detonators are carried in the same compartment; and

(ii) detonators to the number of 200, provided that the amount of fulminate of mercury in the package or packages containing the detonators shall in no case exceed in the aggregate 3 oz. (a certificate to this effect being given by the Agent of the Company by whom the detonators are tendered for transport), provided also that no dynamite is carried in the same compartment.

II. With respect to the conveyance by carriage or vessel of explosive of the 5th (fulminate) class, or of the 3rd division of the 6th (ammunition) class, or of the 1st division of the 7th (firework) class, or of larger quantities than 5 lb. of any other explosive, the following regulations shall be observed:—

(1) The person in charge of the carriage or vessel shall not drive or conduct the same in a dangerous or reckless manner, and shall take all due precautions to avoid fire and explosion, and no person shall do any act or thing in relation to the explosive which tends to cause fire or explosion, and is not reasonably necessary for the conveyance of the explosive or for work immediately connected with such conveyance; and a person who is intoxicated shall not have charge of any carriage or vessel conveying explosive, and shall not be permitted to be in, or on, or attending, the same.

(2) A person shall not forward to any warehouseman or carrier a consignment of explosive, unless he has given notice to such warehouseman or carrier beforehand, stating the name and quantity of the explosive proposed to be conveyed, and the name and address of the proposed consignee, and has had an intimation that the warehouseman or carrier is prepared to receive the consignment; and a warehouseman or carrier shall not make such an intimation, nor receive such consignment, unless he is prepared to receive it, and forthwith to despatch the same, or to deposit it in a magazine or at a place at which a person is licensed to possess the same.

(3) The carriage or vessel conveying the explosive shall be in charge of, and constantly attended by, some competent person, or by a sufficient number of competent persons, and such persons shall not, if the amount of explosive conveyed exceed 100 lb., stop or delay for a longer time than may be reasonably necessary, or stop unnecessarily at any place where such stopping would be attended with special public danger.

6. If any person commits a breach of any of the foregoing rules relating to the mode of conveyance of explosives, he shall be punished with a fine which may extend to Rs. 1,000.

(True Extract.)

(Signed) J. F. PRICE,
Chief Secretary.

Letter—to the Secretary to the Government of India, Home Department, dated Fort St. George, 1st April 1892, No. 107, Marine.

With reference to section 5 (1) of Act IV of 1884—the Indian Explosives Act—I am directed to forward for sanction a draft set of rules which it is proposed to make for regulating the transport and importation of explosives in the port of Madras.

2. I am to request that, should there be no objection, the sanction applied for may reach this Government before the 15th May next.

(Signed) J. F. PRICE,
Chief Secretary.

G.O., Marine, dated 16th April 1892, No. 118.

Read—the following papers:—

Despatch from the Right Honourable the Secretary of State for India, to His Excellency the Governor in Council, Fort St. George, dated India Office, London, 18th February 1892, No. 2, Financial (Stores).

I enclose for your Lordship's consideration a copy of a letter, dated 21st January 1892, from Messrs. Gellatly, Hankey, Sewell and Company, the Agents in this country of the British India Steam Navigation Company, relative to certain new regulations affecting vessels carrying gunpowder and cartridges, said to have been adopted at the port of Madras.

2. It is alleged that vessels carrying more than 100 lb. of gunpowder are required to remain outside the breakwater at Madras until the gunpowder has been transhipped, or discharged into powder boats, and Messrs. Gellatly state that, if this regulation be maintained, the Company will be unable any longer to carry cartridges or gunpowder for the Government of India to *Calcutta*.

3. For some time past the shipment of explosives to Calcutta has been mainly confined to the vessels of the British India Company's line from London, calling at Madras, as the Peninsular and Oriental Steam Navigation Company are precluded by the terms of their present mail contract from carrying this class of stores, and opportunities of shipment by vessels not belonging to either of these companies rarely occur.

4. Gunpowder and ammunition are delivered for inspection at the Royal Ordnance Factories when they are not actually made there, and London is practically the only available port of shipment.

5. It will thus be seen that, if the regulations at Madras are as described in Messrs. Gellatly's letter, the shipment of gunpowder and explosives to Calcutta is rendered extremely difficult, if not impracticable. In view, therefore, of the serious inconvenience and possibly grave consequences that might result, I shall be glad to be informed, as soon as possible, whether the shipment of gunpowder and explosives for Government is affected by any new regulations at Madras, and, if so, what steps you propose to take to meet the difficulty which has arisen.

ENCLOSURE.

From Messrs. GELLATLY, HANKEY, SEWELL AND COMPANY, to the Director-General of Stores, India Office, dated Dock House, Billiter Street, London, E.C., 21st January 1892.

We beg to enclose extract of a letter from Messrs. Mackinnon, Mackenzie and Co., the managing Agents of the British India Steam Navigation Company in Calcutta, relative to a new regulation which has been issued at Madras, and which will prevent us in future from carrying cartridges or gunpowder for you to that port. They write as follows:—

"We have to bring to your notice that this steamer * was detained at Madras on her present outward voyage owing to the enforcement of a new regulation by the authorities.

* S.S. *Rewa*.

"She arrived at Madras at 5-30 A.M. on 20th instant, but was prohibited from entering the harbour on account of having gunpowder on board. She remained outside the harbour till 2 P.M. on Tuesday, 22nd instant, during which time the 400 boxes of gunpowder for Calcutta were transhipped to the S.S. *Kangra;* she then proceeded inside the breakwater to discharge general cargo, which was not completed till the morning of 23rd instant.

"We have not yet received full particulars from Madras of the new regulations, but from the Commander of the *Rewa* we learn that all vessels with more than 100 lb. of gunpowder on board must remain outside the breakwater until the gunpowder has been transhipped or discharged into powder boats.

"This proceeding would of course cause great delay to the home line steamers, in addition to the risk that would be run, and, under the circumstances, we think you should for the present refuse to book gunpowder to Calcutta.

"On receipt of further particulars from Madras, we will again communicate with you."

As you are aware, the British India Steam Navigation Company is the only service that is able to take your powder from London to Calcutta, and unless you can get the restriction which has been laid on at Madras withdrawn, it will be impossible for the Company to do so any longer.

From W. P. AUSTIN, Esq., C.S., Chairman, Harbour Trust Board, Madras, to the Chief Secretary to Government, dated 23rd March 1892, No. 4091.

I have the honour to acknowledge the receipt of Reference on No. 237 of 1892, Marine No. 503, with copy of despatch from the Right Honourable the Secretary of State for India, No. 2, Financial (Stores), dated 18th February 1892, which is returned herewith.

2. In reply I have to submit for the information of Government copy of a letter No. 496, dated 18th instant (received 22nd), from the Deputy Port Conservator, in reply to a reference made to him in regard to the above despatch. I also enclose copies of the only letters which passed between Messrs. Binny and Company, Agents for the *Rewa*, and the Deputy Conservator regarding the admission of that vessel into the Madras Harbour, with 400 barrels of gunpowder on board for Calcutta, in December 1891.

3. It will be observed that the *Rewa* was excluded from the harbour not under any new rule framed by the Harbour Trust Board, but by the Deputy Port Conservator, in his capacity of Executive Port Officer, under the rule relating to the arrival of a vessel within port limits with gunpowder or other explosives on board in excess of 100 lb.—*vide* page 5 of Instructions to Commanders of vessels enclosed herewith for reference.

4. It appears that neither the Agents of the steamer nor the Commander made any request that the *Rewa's* magazine should be examined by the Deputy Conservator as provided in the Port rules.

5. Messrs. Binny and Company referred to me, complaining of the Deputy Conservator's action, and requested that I would "instruct that the vessel be brought in," and I replied that I could "not undertake to overrule the Deputy Conservator," he being a responsible professional officer, appointed direct by Government, for the express purpose of carrying out the executive administration of Port rules.

6. I would specially invite the attention of Government to paragraph 3 of the Deputy Conservator's letter under reference, and to the fact that the *Rewa* not only had a large quantity of gunpowder on board, but also carried matches, turpentine, and other combustibles.

7. I should add that the Trustees have no objection to Government ammunition, division 2, class 6, ammunition class (under the rules made by the Governor-General in Council) being both landed and shipped within the harbour in any quantity, and no objection has ever been raised to this being done: it is in fact of weekly, almost daily, occurrence, and I may mention that the British India S.S. *Goorkha*, on her last voyage to Calcutta with a large quantity of Government ammunition on board, was admitted to the harbour by the Deputy Port Conservator.

ENCLOSURE.

From the Deputy Conservator of the Port of Madras, to the Chairman, Harbour Trust Board, Madras, dated 18th March 1892, No. 496.

I have the honour to acknowledge copies of documents relating to the admission of vessels into the Madras Harbour having explosives on board for other ports, forwarded to me for remarks, and in reference to the same would observe that no new regulations have been brought into force with regard to gunpowder, but, as you are aware, the subject has been more or less before the Board for two or three years past.

1. Secretary of State's despatch.
2. Government reference.
3. Do. order.
4. Rules for transport of explosives.

2. Formerly in most cases, as far as I know, information was given by the Agents when vessels with explosives on board for other ports were expected, and the question of admission was discussed by the Board and its decision acted on. In the case of the *Rewa* no intimation was given, the Agents alleging they were not aware of any explosives for other ports being on board, and it is suspected that other vessels have been allowed to enter the harbour, having on board large quantities of explosives, without the knowledge or permission of the Port authorities.

3. No request was made to inspect the *Rewa's* magazine, and it is not known if the gunpowder was stored in a magazine at all; moreover she had a large quantity of matches on board for this port, besides turpentine and other combustibles, and it is not known how much cargo of that description she had for Calcutta.

4. If delay only is entailed on a vessel by remaining outside the harbour to discharge, it does not appear to be a matter of very great consequence as compared with the risk of having a wreck or wrecks through explosions inside the harbour; and it would appear to be very desirable, in the interest of Madras, that explosives intended for Calcutta should be shipped direct to that port.

5. The Madras Harbour runs quite sufficient risk of having its usefulness impaired by wrecks through possible collision, which is unavoidable, and there is no necessity to multiply risks by adding possible explosions, but on the contrary they should, if possible, be diminished.

6. The Government, I gather from the Secretary of State's despatch, ship explosives to Calcutta by British India Home line, but I do not know that they are the only shippers and whether the serious inconvenience and possible grave consequences alluded to apply to the Government only or to other shippers also. Grave consequences would result to Madras if an explosion took place within the harbour.

7. There are several lines of steam ships running direct to Calcutta from the United Kingdom, if not from the port of London, besides other vessels which could keep up the regular supply of gunpowder, and in the case of national emergency, ships with explosives on board for Calcutta might be admitted to the Madras Harbour.

8. It is evident from paragraph 3 of the Secretary of State's despatch that the Post Office authorities do not consider the mails safe in the same vessel with explosives, and there seems to be no occasion for Madras running greater risks on account of explosives for other ports; and with regard to Rules E and F, the amount of gunpowder or other explosives that may be brought inside the harbour should at least be defined.

Order—Marine, dated 16th April 1892, No. 118.

The following telegram and letter will be addressed to the Right Honourable the Secretary of State:—

Your Financial Despatch No. 2, 18th February last. *Rewa* was excluded from entering harbour under special circumstances. There is now no objection to vessels with more than 100 lb. explosives on board entering harbour, provided that explosives are secured in a magazine which meets with the approval of the Port authorities. Letter follows.

2. The portion of the Instructions to Commanders under which the Deputy Conservator refused permission to the *Rewa* to enter the harbour has no legal basis and is cancelled.

(True Extract.)

(Signed) J. F. PRICE,
Chief Secretary.

Letter—to the Right Honorable the Secretary of State for India, dated Fort St. George, 23rd April 1892, No. 5, Marine.

In reply to your Lordship's Despatch, Financial (Stores) No. 2, dated 18th February 1892, and in confirmation of our telegram of the 16th instant, we have the honour to inform your Lordship that the exclusion of the S.S. *Rewa* from the Madras Harbour, referred to by Messrs. Gellatly, Hankey, Sewell & Co. was ordered by the Deputy Conservator of the Port under the authority of certain Instructions to Commanders issued by the Presidency Port Officer in 1889, one of which forbade the entry into the harbour, without the permission of the Deputy Conservator of the Port, of any vessel having on board more than 100 lb. of explosives. The *Rewa* had on board 400 barrels of gunpowder, and in addition a quantity of matches, turpentine, and other combustibles which were consigned to Madras. The Deputy Conservator, therefore, refused permission to the *Rewa* to enter the harbour.

2. The instruction under which he acted had no legal basis and has now been cancelled.

3. We beg to forward, for your Lordship's information, copy of our Proceedings of the 1st instant, No. 106, Marine, in which are embodied a set of draft rules which we propose to issue for regulating the transport and importation of explosives in the port of Madras. Your Lordship will observe that provision has been made for vessels entering the harbour with explosives on board for other ports, provided such explosives are stored in a magazine which meets the approval of the Deputy Conservator or other officer deputed by him to inspect it. We trust that these rules will obviate any future difficulty of the nature of that referred to in your Lordship's despatch under reply.

4. We would add that no objection has ever been taken by the Port authorities to the landing and shipping within the harbour of ammunition, as specified in rule (*c*) in G.O., dated 1st April 1892, No. 106.

G.O., dated 18th June 1892, No. 217, Marine.

Read—the following papers :—

From W. P. AUSTIN, Esq., C.S., Chairman, Harbour Trust Board, Madras, to the Chief Secretary to Government, dated 30th May 1892, No. 738.

I have the honour to submit, for the information of Government, copy of a resolution passed by the Trustees at their meeting of the 13th instant, in reference to the proposed rules for regulating the transport and importation of explosives at Madras, and I am requested to remark as follows for the consideration of Government.

2. (1) With reference to rule (*c*) it is to be observed that, after a vessel has discharged explosives intended for this port, provided that the requirements of rule (*e*) as regards the security of explosives still remaining on board have been met, the vessel *may* be permitted to enter the harbour.

(2) The Trustees would wish it to be distinctly understood that this permission to enter the harbour with explosives on board is not to be construed into a right that such a vessel *shall* be permitted to enter the harbour. The Board would wish to reserve to itself the right, as Conservator, under rule V (*a*) of the Port rules, to direct that any such vessel shall take up any berth within the limits of the *port* which may be assigned by the Deputy Port Conservator. This practically gives the Board the right to exclude any vessel from the *harbour* for any reason which may appear of sufficient importance.

3. *Rule* (*h*).—When the Board resolved to exclude from the harbour vessels having on board nitro-glycerine compounds, the classification of explosives under the rules framed by the Governor-General in Council was not before it; and the Board is now strongly of opinion that explosives of classes 2 to 5 inclusive should be absolutely excluded from the harbour.

4. Gunpowder, if secured in a properly constructed magazine the Trustees do not object to, provided that the ship having it on board has proper appliances for flooding the magazine in case of fire, and that it shall be incumbent upon the Commander of every vessel carrying gunpowder to report the same and abide by the decision of the Deputy Conservator as to whether the magazine is properly constructed or not, and that the ship shall then take up such a berth within the limits of the *port* as the Deputy Conservator may then direct.

5. The Board does not anticipate that any inconvenience will result to the trade of this port in explosives by the exclusion of vessels carrying classes 2 to 5 from the harbour.

6. It is impossible to make invidious distinctions in rules approved and published by Government, and the Board would point out for the serious consideration of Government that, as the rules now stand, explosives of classes 2 to 5 of admittedly inferior manufacture—and therefore dangerous—may be brought inside the harbour in any quantity, unless the Deputy Conservator takes the responsibility of excluding the ship on account of the construction of the magazine, which in a foreign ship would not be subject to Board of Trade survey.

7. To do so in the case of a vessel having a large cargo to discharge here would cause great inconvenience and expense, not only to the ship, but to the consignees.

8. On the other hand, the Board considers that, if such vessels are admitted, an appalling disaster must sooner or later occur and the necessity for running this risk is not apparent.

9. Explosives of classes 2 to 5, if intended for Calcutta, can always be shipped direct without the least difficulty or inconvenience, and the practical result of the notice given sometime since to agents of foreign lines calling at this port has been that their steamers have ceased to carry explosives for Calcutta, the result being that such have been shipped direct, probably in British bottoms; while, although the owners of these steamers may have lost a few shillings a ton extra freight upon dangerous cargo, it is clear that neither the trade of this port nor of Calcutta has or will suffer any inconvenience or loss.

10. Referring to paragraph 4 *supra*, I am further requested to suggest that the Right Honourable the Secretary of State may be addressed with a view to procuring from the Board of Trade Surveyor a certificate, in the case of all steamers carrying gunpowder, that he has inspected and approved the magazine and that all has been stowed therein to his approval; on production of this certificate the vessel would at once be admitted to the harbour without the detention which must unavoidably occur should a local survey be necessary.

ENCLOSURE.

EXTRACT of Proceedings of the Trustees of the Harbour of Madras at a meeting held at the Offices of the Board on Friday the 27th day of May 1892.

* * * * *

4. Read draft letter to the Chief Secretary to Government in reference to the proposed rules for the transport and importation of explosives at the port of Madras.

Read minutes by Messrs. H. Scott, G. L. Chambers and S. R. Turnbull and Captain H. A. Street, R.I.M.

Approved and resolved unanimously that in the opinion of the Trustees classes 2 to 5 should be absolutely excluded from the harbour and that to his draft letter the Chairman be invited to add the suggestion made by Mr. Scott regarding the grant of a survey certificate by the Board of Trade for magazines containing gunpowder which on production of such certificate may then be admitted without local survey.

* * * * *

(True Extract.)

(Signed) C. PINSENT,
Secy., Harbour Trust Board.

From W. P. AUSTIN, Esq., C.S., Chairman, Harbour Trust Board, Madras, to the Chief Secretary to Government, dated 2nd June 1892, No. 774.

Referring to the concluding paragraph of my letter, No. 738, dated 30th May, I have the honour to inform you that, from inquiries since made, I learn that the magazine of every steamer from London carrying explosives is surveyed by an Inspector of the Thames Conservancy, who grants certificates as to the stowage of all explosives shipped in that river, and in the case of Government gunpowder a certificate is also required from a Government Inspector as well as from the Thames Conservancy.

2. These certificates would be all that is needed to enable the Deputy Conservator to decide without local survey as to whether a vessel with gunpowder on board may be admitted to the harbour or not, and it will therefore be unnecessary for Government to address the Right Honorable the Secretary of State upon the subject.

Order—dated 18th June 1892, No. 217, Marine.

The Government does not agree in the view taken by the Board. Provided proper precautions as to storage are taken, the risk should be infinitesimal, whereas the inconvenience to shipping and trade from the exclusion from the harbour of vessels carrying explosives would be extreme.

2. The Government is not prepared to modify rule (*h*), but rule (*e*) will be altered by the substitution of "shall" for "may" in line 31. It will then read, "the vessel shall be permitted to enter the harbour."

3. So much of the existing Port rules as conflicts with the rules printed in G.O., dated 1st April 1892, No. 106, as amended by this order, will be cancelled. The Presidency Port Officer will lose no time in submitting for sanction, in supersession of those issued under G.O., dated 15th June 1889, No. 261, a draft set of Port rules revised accordingly.

(True Extract.)

(Signed) J. F. PRICE,
Chief Secretary.

G.O., dated 10th August 1892, No. 289, Marine.

Read—the following paper:—

Despatch from the Right Honorable the Secretary of State for India, to His Excellency the Right Honorable the Governor in Council, Fort St. George, dated India Office, London, 14th July 1892, No. 8—Financial (Stores).

I have considered in Council your Lordship's letter in the Marine Department, dated 23rd April 1892, No. 5, relative to the circumstances under which the S.S. *Rewa* was excluded from the Madras harbour until she had discharged her gunpowder, and enclosing copy of draft rules which it is proposed to issue for the regulation of the transport and importation of explosives in that port.

2. I observe with satisfaction that by these regulations the difficulties referred to in my Financial (Stores) despatch, No. 2, dated 18th February, will be avoided. It should, however, be noted with reference to rule (*e*) that all magazines, for either Government or private explosives, on vessels conveying Government cargo are constructed in accordance with the Admiralty regulations, and are subject to the approval of the Surveyor of Shipping to this office; such magazines will therefore, if kept locked, it is assumed, not be objected to by the Deputy Conservator of the Port or other officer deputed by him.

Order—dated 10th August 1892, No. 289, Marine.

Communicated to the Presidency Port Officer, with reference to G.Os., dated 1st April 1892, No. 106, and dated 16th April 1892, No. 118.

(True Extract.)

(Signed) J. F. PRICE,
Chief Secretary.

G.O., dated 24th October 1893, No. 380, Marine.

Read—again the following papers:—

G.O., dated 17th October 1891, No. 459, Marine.
" 1st April 1892 " " 106 "
" 18th June " " 217 "

Read—also the following papers:—

From C. J. LYALL, Esq., C.I.E., Secretary to the Government of India, Home Department (Public), to the Chief Secretary to the Government of Madras, dated Simla, 31st May 1892, No. 1552.

I am directed to acknowledge the receipt of your letter * No. 107, dated the 1st ultimo, forwarding a draft set of rules which it is proposed to issue for regulating the transport and importation of explosives in the port of Madras, and in reply to convey the following observations.

* (and telegraphic reminder, No. 208, dated 6th May 1892.)

2. By clause (2) of Home Department notification, No. 1417, dated 24th June 1887, as amended by Home Department notification, No. 1488, dated 2nd August 1890, power is reserved to Local Governments to make special rules to regulate the transport of explosives in ports, which rules may supersede in whole or in part the general rules as to transport framed by the Governor-General in Council under the first-mentioned of the above notifications. So far, therefore, as the draft rules submitted with your letter relate to transport, there is no objection to them; and as a matter of fact they do not purport to supersede any of the general rules on the subject (save rule 6, which relates to transport by rail), their object being to supplement those rules with more detailed regulations providing for the particular circumstances of the port of Madras.

3. With regard, however, to so much of the draft as deals with importation, the legal position is different. The Local Government has no power to supersede in any respect any of the general rules on the subject which were published with the notification of June 1887, though there is no objection to its supplementing those rules, so long as the supplementary rules are not inconsistent with the general ones. The Government of India do not think that there is any necessary inconsistency between the draft rules submitted with your letter and the general rules relating to importation. It is, however, desirable to show on the face of the notification that these special rules must be read subject to the general ones and are merely subsidiary to them; and with this view I am to suggest that the notification under which the rules are to be finally published should take the following form:—

"In exercise of the power conferred by section 5 of the Indian Explosives Act, IV of 1884, the Governor of Madras in Council is pleased, with the previous sanction of the Governor-General in Council, to make the following rules to regulate the transport and importation of explosives in the port of Madras.

"These rules, in so far as they relate to the importation of explosives into the port of Madras, are subsidiary to the rules relating to the importation of explosives made by the Governor-General in Council and published under Home Department notification, dated the 24th June 1887, No. 1417."

4. The rules should be examined in detail, with especial reference to the foregoing remarks, by the law officers of the Government of Madras before they are published.

5. Subject to these remarks, the Governor-General in Council sanctions the rules submitted with your letter under acknowledgment.

Reference, dated 14th June 1892, No. 1647.

From E. BARCLAY, Esq., Government Solicitor, Madras, to the Chief Secretary to Government, dated 11th July 1892, No. 279.

I beg to acknowledge receipt of your official memorandum, dated 14th June 1892, No. 554, Marine Department, with the papers relating to the transport and importation of explosives in Madras.

2. What is required by the letter of the Government of India, dated 31st May last, No. 1552, is that the rules as to importation of explosives into the port of Madras framed by the Local Government should be examined in detail with the rules as to importation framed by the Government of India, with a view to ascertaining whether the former in any way supersede or are contrary to the latter. Unfortunately, the two sets of rules have been prepared on such different lines that it is somewhat difficult to compare them.

3. To avoid repetition I will, so far as may be necessary, refer to the rules of the Local Government by their distinguishing letters and to the rules of the Government of India by their numbers.

4. Rules (*a*), (*b*), (*c*), (*d*) and (*e*) refer more particularly, though not wholly, to the arrangements to be made in respect to the arrival at Madras of vessels with explosives on board exceeding 100 lb. in weight, the positions such vessels are to take up, &c., and rules (*f*) and (*g*) relate to barges, lighters and boats having explosives on board. Except rule (*b*), I do not think that any of these rules actually supersede or are inconsistent with any of the rules framed by the Government of India as to the importation of explosives; but rules (*a*), (*b*), (*c*), (*d*) and (*e*) refer to vessels having on board explosives exceeding 100 lb. in weight, and there is no such limitation in the rules of the Governor-General in Council.

5. Rule (*h*) provides that, with the sanction of the Chairman of the Harbour Trust Board, explosives of the descriptions mentioned in Division 2 of Class 6, Ammunition class, and Division 2, Class 7, Manufactured Firework class (under the rules made by the Governor-General in Council) in any quantities, exclusive of nitro-glycerine compounds and other explosives up to 100 lb. in weight, if properly packed as required by rule 2 of the rules issued by the Governor-General in Council and unaccompanied by detonators or percussion caps, may be landed from a vessel lying at the ordinary moorings within the harbour. Rule 8 provides that an explosive shall not be imported by sea into British India, except under, and in accordance with, the conditions of a license to import the explosive granted under the (Governor-General's) rules, provided that any explosive other than an explosive specified in rule 11 may, previous to the grant of an importation license, if certified to be of British manufacture, or if not of British manufacture, if imported from the United Kingdom and covered by the certificate granted by one of Her Majesty's Inspectors of Explosives in England, be landed in accordance with such regulations as the Local Government may prescribe in this behalf, and be stored in a place set apart by the Local Government for this purpose. The Governor-General may extend this privilege to any such explosive not being of British manufacture regarding which he is satisfied that it has been manufactured under adequate official supervision.

6. With regard to the granting of the license, rule 13 provides for its being granted by the Local Government or by some officer specially authorized by the Local Government in that behalf; and as the rules applicable to the port of Madras are

issued by the Local Government, I think that the Chairman of the Harbour Trust Board may be taken to be the officer specially authorized by the Local Government to grant licenses. But rule (*h*) will require alteration, as it merely contemplates the sanction of the Chairman for the importation of explosives; while, by the Governor-General's rules a special license, for which payment is to be made, is contemplated.

7. Again, the explosives referred to in Rule 11 are gunpowder and explosives of the 1st division of the 6th (Ammunition) class and explosives of the 7th (Firework) class. The explosives which according to Rule (*h*) may, with the sanction of the Chairman, Harbour Trust Board, be imported in any quantities (exclusive of nitro-glycerine compounds and Division 2, Class 6, Ammunition class, which comprises any ammunition, *i.e.*, an explosive of any of the classes numbered 1 to 5 when enclosed in any case or contrivance or otherwise adopted or prepared so as to form a cartridge or charge for small arms, cannon or any other weapon, or for blasting or to form any safety or other fuze for blasting or for shells or to form any tube for firing explosives or to form a percussion cap, a detonator, a fog-signal, a torpedo, a war rocket or other contrivance other than a firework which do not contain their own means of ignition, and Division 2, Class 7, Manufactured Firework class, *i.e.*, firework composition and manufactured fireworks. According to Rule (*h*), all these may be imported in any quantities with the sanction of the Chairman. But this seems to directly overrule Rule 8 (proviso) read with Rule 11, at any rate so far as Class 7, the Firework class, is concerned, for as to that class and also Class 6, the Division 1, the license to import the same at Madras may be granted by the Commissioner of Police.

8. Again, Rule (*h*) provides that other explosives up to 100 lb. in weight if properly packed as required by Rule 2 and unaccompanied by detonators or percussion caps may be landed with the sanction of the Chairman of the Harbour Trust Board. This seems to supersede the proviso to Rule 8 which admits of the importation previous to grant of a license of any explosive other than those mentioned in Rule 11, if of British manufacture or if imported from the United Kingdom and covered by a certificate of an Inspector of Explosives, and empowers the Governor-General in Council to extend this privilege to any such explosive not of British manufacture regarding which he is satisfied that it has been manufactured under adequate official supervision. The proviso to Rule 8 contains no such limitation as to weight of explosives as is contained in Rule (*h*).

9. The third clause of Rule 8 provides that before any explosive is landed under the proviso to that rule the consignee shall give to the chief Customs officer of the port such undertaking, with or without security, as the said officer thinks sufficient, to obey in the event of the explosive failing to satisfy the prescribed tests, such directions as to its disposal as the Local Government may see fit to prescribe. There is no provision similar to this in the rules of the Local Government; but Rule (*b*) provides that the Agents of any vessel expected to arrive at the port of Madras and known to have explosives exceeding 100 lb. in weight on board as cargo and the consignee or consignees of, and other person or persons interested in, such explosives, shall give notice of the fact to the Chairman of the Harbour Trust Board not less than 48 hours before the arrival of the vessel. Every such notice shall be in writing and shall contain a statement showing the quantities and nature of the explosives to be landed at Madras and of those intended for other ports. These two rules might be read together, but they seem hardly consistent. By Rule 8 the undertaking by the consignee is to be given to the chief Customs officer; while by Rule (*b*), the notice by the Agent, consignee or other person interested is to be given to the Chairman of the Harbour Trust Board. Again, the undertaking required by Rule 8 is to apply to explosives mentioned in the proviso to that rule, while under Rule B the notice thereby required is to be given in respect to all kinds of explosives exceeding 100 lb. in weight on board a vessel as cargo.

10. Rule (*b*) also provides that upon receipt of the notice therein mentioned the Chairman of the Harbour Trust Board shall depute an officer to remain on board the vessel in charge of the explosives, in cases where the same are to be landed, and until the same shall have been removed from the Board's premises for deposit in the magazine on shore appointed for that purpose. This seems inconsistent with Rule 15, which provides that on the arrival in any port at which importation of explosives is

lawful of a ship having on board an explosive other than an explosive of the description referred to in Rule 11, such officer as the chief Customs officer authorizes in this behalf shall, as soon as may be, proceed on board and obtain samples of the explosive. Of course, these two rule could be worked together; but it would probably be inconvenient and unnecessary for two different officers under different authorities to go on board the ship, one to obtain samples of the explosives and the other to practically remain in charge of the explosives. The rules of the Local Government seem to contemplate the Chairman of the Harbour Trust Board being the chief authority with reference to the importation of explosives, while the rules of the Governor-General contemplate the chief Customs officer being such authority.

11. Rule (*i*) provides precautions to be taken in landing certain explosives and does not seem inconsistent with any rule of the Governor-General in Council.

Rule (*j*) at first sight seems inconsistent with the general scope of the rules of the Governor-General; but is, I think, intended to apply only to the Madras harbour, not to the port generally.

12. Rule (*l*) is, I think, inconsistent with Rule 9. Rule (*l*) provides that if any person shall contravene any of that set of rules he shall on conviction be punished with fine which may extend to Rs. 1,000, while Rule 9 provides that if any person imports an explosive in contravention of Rule 8 he shall be punished with fine which may extend to Rs. 3,000.

13. On the whole, I think it would be found extremely difficult and very inconvenient to work the two sets of rules together, even after those of the Local Government have been amended so as to avoid the inconsistencies I have pointed out. If I may be allowed to make a suggestion on the subject, I think the simplest plan would be to frame the rules of the Local Government on the lines of those of the Governor-General in Council, but retaining such of the former as relate specially to the port of Madras and are not inconsistent with any of the latter.

From S. R. TURNBULL, Esq., Chairman, Chamber of Commerce, Madras, to the Chief Secretary to Government, dated Madras, 20th July 1892.

With reference to the Proceedings of Government, dated the 18th ultimo, No. 217, Marine, with a copy of which the Chamber has been favoured, I have the honour to inform you that the Chamber observes with much regret that the Government is not prepared to agree in the view taken by the Harbour Trust Board in respect to the non-admission into the harbour of vessels carrying nitrate-mixture and nitro-compound explosives. The suggestions of the Board contained in its letter of the 30th May last, embodied in the Government Order under reference, had the general approval of the Chamber after a careful consideration of the matter in the interests of the commerce of this port, and it seemed to it that the first duty of the Trust was to safeguard the port and the valuable buildings and property alongside from the risk which undoubtedly would attach to an indiscriminate admission into the port of vessels carrying dangerous explosives and from which the Trust would derive no benefit whatever. Independent of local interests, however, the Chamber is of opinion that owners of vessels which patronise this port for the discharge and shipment of general cargo, together with the insurers of that cargo, will have very serious objection to their ships and goods being berthed alongside of, say, a foreign steamer having on board, for Calcutta or other port, dynamite, nitro-glycerine (possibly of inferior quality) detonators, gun-powder, lucifer-matches, sulphuric acid and other explosive substances, the proper stowage of which has probably not been surveyed by any Board of Trade or other competent authority. The Chamber, therefore, strongly protests against the admission into the harbour of vessels carrying explosives of Classes 2 to 5, as it believes that their admission will have serious consequences, while their non-admission would in no way injure the reputation or revenue of the port.

Under these circumstances, I have the honour to request, on behalf of the Chamber, that the Government will be pleased to reconsider its decision and will give effect to the suggestions of the Harbour Trust Board.

From W. P. AUSTIN, Esq., I.C.S., Chairman, Harbour Trust Board, Madras, to the Chief Secretary to Government (through the Presidency Port Officer), dated 3rd September 1892, No. 2104.

I have the honour to acknowledge the receipt of G.O., dated 10th August, No. 289, Marine, communicating a despatch from the Right Honourable the Secretary of State for India, No. 8, Financial (Stores), dated India Office, 14th July 1892.

2. The Trustees would submit, for the consideration of Government, with reference to the rules for the importation of explosives at Madras, that the Board's *ad interim* order passed in accordance with G.O., dated 4th August 1892, No. 283, Marine, fully meets the wishes of the Secretary of State as to the admission of gun-powder and ammunition into the harbour.

3. The Trustees would again strongly urge that Classes 2 to 5 of the classes of explosives as framed by His Excellency the Governor-General in Council, viz., nitrate mixtures, nitro compounds, chlorate mixtures and fulminates, should be excluded from the harbour, and submit that no inconvenience to shipping would be caused by the exclusion of these explosives.

ENCLOSURES.

EXTRACT of Proceedings of the Trustees of the Harbour of Madras, at a Meeting held at the offices of the Board on Friday, the 19th day of August 1892.

* * * * *

15. Read endorsement No. 1300—1050-M., dated 16th August, by the Presidency Port Officer, communicating G.O., dated 4th idem, No. 283, Marine, directing the Harbour Board to deal, by an *ad interim* order, with the question of vessels being allowed to enter the harbour with explosives on board.

Read minutes by Mr. H. Scott and Captain Street, R.I.M.

Resolution—Resolved that under sections 8 and 6, Act X of 1889, and with reference to the rules framed thereunder, and to the above Government Order, the Deputy Conservator be directed to admit no vessel to the harbour carrying explosives in excess of 100 lb. until, in the case of gunpowder, he has satisfied himself that such is enclosed in a properly-constructed magazine, which is to remain closed while the ship is inside.

Resolved further that ammunition and manufactured fireworks be freely admitted to the harbour and may be landed or shipped therein in any quantity, but that Classes 2 to 5 of the classes as framed by His Excellency the Governor-General in Council be absolutely excluded from the harbour, viz., nitrate mixtures, nitro compounds, chlorate mixtures and fulminates.

* * * * *

EXTRACT of Proceedings of the Trustees of the Harbour of Madras, at a Meeting held at the offices of the Board on Friday, the 2nd day of September 1892.

* * * * *

5. Read draft letter to the Chief Secretary to Government, submitting that the Board's *ad interim* order passed in accordance with G.O., dated 4th August, No. 283, Marine, fully meets the wishes of the Secretary of State as to the admission of explosives into the harbour, and urging that Classes 2 to 5—nitrate mixtures, nitro compounds, chlorate mixtures and fulminates—should be excluded.

Read minute by Mr. G. L. Chambers.

Resolution.—Approved.

* * * * *

No. 1448—299-G.

Forwarded.

MADRAS, *6th September* 1892.

(Signed) H. A. STREET, Captain, R.I.M., *Presidency Port Officer.*

ORDER—dated 24th October 1893, No. 380, Marine.

The Government has permitted these papers to stand over in view to ascertain the effect of the *ad interim* order * passed by the Harbour Trust Board on the 19th August 1892—under the authority of G.O., dated 4th August 1892, No. 283—excluding absolutely from the Madras harbour vessels containing certain classes† of explosives. It is understood that no complaints of inconvenience to trade have resulted, and in deference to the representations of the Harbour Trust Board and the Chamber of Commerce, the Government has reconsidered its former orders on the subject and approves the draft rules for regulating the transport and importation of explosives in the port of Madras which are printed as an appendix to these Proceedings. They will be referred to the Advocate-General for an early expression of his opinion, with special reference to the communication from the Government of India recorded above.

* Printed above.

† Nitrate mixtures; nitro compounds; chlorate mixtures; and fulminates.

2. A perusal of the Government Solicitor's letter of the 11th July 1892 shows that that officer has fallen into certain errors in regard to the draft rules. With reference to his remarks in paragraphs 6, 7 and 8 it is observed that Rule (*h*) has nothing to do with the general provision or license to import, but merely deals with the question of in what cases and under what precautions landing and shipping of certain explosives—for which a license to import has been obtained from the proper officer, who is not the Chairman of the Harbour Trust Board—shall be carried out from and on vessels lying at the moorings within the harbour. There is no conflict or inconsistency in the rules. If the permission of the Chairman to land or ship within the harbour the particular explosives mentioned is refused, the vessel must effect the landing or shipment under the provisions of Rule (*c*).

3. Again, the inconsistencies referred to in paragraphs 9 and 10 of Mr. Barclay's letter are not real. There is no connection between the Customs test for importation of explosives generally and the precautions which the Harbour Trust Board takes for watching the landing and shipping of explosives. The Customs officer who takes samples has no concern with these precautions. Adverting to paragraph 12 it is remarked that there is no inconsistency in regard to Rule (*l*). It naturally provides a lighter penalty for breach of rules relating to transport of explosives within the port than is laid down for a breach of the general rules relating to import.

4. The Government Solicitor's observations are apparently due to his having failed to recognise that the rules referred to him relate only to transport within the port and not to import, and will only apply to explosives the import of which is properly licensed. They regulate the landing of explosives, the import of which has been permitted; the shipment of explosives for export; the places where the landing and shipment are to take place and the precautions to be observed in moving explosives within the port limits.

(True Extract.)

(Signed) J. F. PRICE,
Chief Secretary.

APPENDIX.

RULES.

Rules 1, 2, 3, 4, 5 and 7 to regulate the transport of explosives, made by the Governor-General in Council and published under Government of India Notification, No. 1417, dated the 24th June 1887, and printed as an appendix hereto, shall, subject to the following rules, apply to the transport of explosives within the limits of the port of Madras.

Rule (*a*).—The master of any vessel arriving at the port of Madras with explosives exceeding 100 lb. in weight on board as cargo shall give notice thereof to the pilot or harbour master, who shall come on board such vessel, immediately on his boarding.

Rule (*b*).—The agents of any vessel expected to arrive at the port of Madras and known to have explosives exceeding 100 lb. in weight on board as cargo, and the consignee or consignees of, and other person or persons interested in, such explosives so expected to arrive by any vessel at the port, shall give notice of the fact of such explosives being on board such vessel to the Chairman of the Harbour Trust Board not less than 48 hours before the arrival of such vessel, and the agents or consignor or consignors or other person or persons interested in any explosives exceeding 100 lb. in weight intended to be shipped as cargo on board any vessel in the port of Madras shall give a like notice of their or his intention to ship such explosives by such vessel 48 hours before any such explosives shall be shipped. Every such notice shall be in writing and shall contain a statement showing the quantities and nature of the explosives to be landed at, or shipped from, Madras, and of those intended for other ports or, as the case may be, of the port or ports for which any such explosives may be shipped. Upon receipt of any such notice, the Chairman of the Harbour Trust Board shall depute an officer to remain on board the vessel in charge of such explosives in cases where the same are to be landed and until the same shall have been removed from the Board's premises for deposit in the magazine on shore appointed for that purpose, or in cases where explosives are to be shipped until the same shall have been shipped on board the vessel named in such notice.

Rule (*c*).—Every vessel having on board explosives intended to be landed at the port of Madras, with the exception of those mentioned in Division 2, Class 6, "Ammunition class," and Division 2, Class 7, "Manufactured Firework class" (under the rules made by the Governor-General in Council under section 5 of the Indian Explosives Act, 1884), in excess of 100 lb. in weight, shall, on arrival at the port, proceed to a distance of not less than one mile north of the North Arm, and half-a-mile off-shore outside the Harbour, and shall there remain until such explosives have been discharged from such vessel; after which, provided that the requirements of Rule (*e*) as regards the security of explosives still remaining on board have been met, and such explosives are not of Classes 2, 3, 4 or 5 as defined in the rules above cited, the vessel may be permitted to enter the harbour. Whilst any explosives shall remain on board, such vessel shall have a red flag kept flying at the foremast head between sunrise and sunset and one red light at the ensign staff or peak in addition to the usual anchor light between sunset and sunrise, and the master or chief officer shall remain on board of her until the explosives intended for the port of Madras shall have been discharged.

CLASS 6.—*Ammunition Class.*

* * * * *

The Ammunition class has three divisions:—

Division 1 comprises exclusively—

Safety cartridges.	Railway fog signals.
Safety fuzes for blasting.	Percussion caps.

Division 2 comprises any ammunition, as before defined, which does not contain its own means of ignition and is not included in Division 1, such as—

Cartridges for small-arms, which are not safety cartridges,
Cartridges and charges for cannon, shells, mines, blasting, or other like purposes,
Shells and torpedoes containing any explosive,
Fuzes for blasting, which are not safety fuzes,
Fuzes for shells,
Tubes for firing explosives,
War rockets,

which do not contain their own means of ignition.

Division 3 comprises any ammunition, as before defined, which contains its own means of ignition and is not included in Division 1, such as—

Detonators,
Cartridges for small-arms which are not safety cartridges,
Fuzes for blasting, which are not safety fuzes,
Fuzes for shells,
Tubes for firing explosives,

which do contain their own means of ignition.

By ammunition containing its own means of ignition is meant ammunition having an arrangement, whether attached to it or forming part of it, which is adapted to explode or fire the same by friction or percussion.

CLASS 7.—*Firework Class.*

The term "firework" comprises firework composition and manufactured fireworks.

Division 1.—The term "firework composition" means any chemical compound or mechanically-mixed preparation of an explosive or inflammable nature which is used for the purpose of making manufactured fireworks, and is not included in the former classes of explosives, and also any coloured fire composition.

Division 2.—The term "manufactured firework" means any explosive of the foregoing classes and any firework composition, when such explosive or composition is enclosed in any case or contrivance, or is otherwise manufactured so as to form a squib, cracker, serpent, rocket (other than a war-rocket), maroon, star, lance, wheel, Chinese fire, Roman candle, or other article adapted for the production of pyrotechnic effects or pyrotechnic signals.

Similar provisions shall apply to the case of a vessel on which explosives are to be shipped at Madras, with the exception that it shall not be necessary for such vessel to proceed to the locality indicated as soon as she arrives.

Rule (*d*).—The master of every vessel receiving or delivering any explosives shall see that the gang-platform in the vessel's hold to be used in receiving or delivering such explosives and the gangways and combings of the hatchways of such vessel are covered with tanned hides or other suitable paddings; that the barrels or boxes containing any such explosives and received on board any such vessel are carefully stowed therein; that the hatches of such vessel are properly secured and locked, and that the key of the magazine in which any such explosives may be stowed remains in his own possession. In shipping or discharging any explosives, tanned hides or wadmiltilts shall be laid down in those portions of the vessel over which the barrels or boxes

containing any such explosives shall pass, and cushions properly stuffed and covered with leather shall be placed in the hold and on the deck of the vessel in the places on to which any such barrels or boxes shall be lowered. All persons concerned in the handling, or in supervising the handling, of any such barrels or boxes of explosives, shall wear suitable shoes without any metal nails or other metal in or upon them or shall wear no shoes.

Rule (*e*).—No vessel having on board explosives exceeding 100 lb. weight shall enter the Madras Harbour unless such explosives are secured in a properly-constructed magazine to be approved of by the Deputy Conservator of the Port or other officer deputed by him to inspect it.

Rule (*f*).—Barges, lighters and boats in the port of Madras having on board any explosives shall be kept scrupulously clean and free from loose explosives and shall not, when at anchor, lie closer than half-a-mile from any of the shipping in the port or from any public landing place, and all cases of explosives in any such barges, lighters or boats shall be securely covered with tarpaulins. Whilst any such explosives shall remain on board, there shall be kept a red flag flying on every such barge, lighter, or boat between sunrise and sunset, and a red light in an elevated position shall be shown from every such barge, lighter or boat between sunset and sunrise. No fires, smoking or matches shall be allowed on board any such barge, lighter or boat, nor any light of any kind except in properly-decked barges, on the deck of which may be allowed one lanthorn of good pattern. The tindal and at least half the crew of every such barge, lighter or boat shall remain on board thereof until all explosives are discharged therefrom.

Rule (*g*).—All barges, lighters and boats having any explosives on board shall remain off-shore until orders are received from the officer directing the landing to approach the beach. Only one such barge, lighter or boat shall be permitted to unload at a time, and such unloading shall take place either between the old and new stone revetments protecting the foreshore beyond Royapuram and Casemode or at the north end of the new revetment according to the state of wind and current.

Rule (*h*).—With the sanction of the Chairman of the Harbour Trust Board, explosives of the descriptions* mentioned in Division 2 of Class 6—*Ammunition Class*—and Division 2, Class 7—*Manufactured Firework Class* (under the rules made by the Governor-General in Council under section 5 of the Indian Explosives Act, 1884) in any quantities, and other explosives, not being explosives of Classes 2, 3, 4 or 5 as defined in the rules aforesaid and not exceeding 100 lb. in weight, if properly packed as required by Rule 2 of the rules issued by the Governor-General in Council under section 5 of the Indian Explosives Act, 1884, and unaccompanied by detonators or percussion caps, may be shipped on board, or landed from, a vessel lying at the ordinary moorings within the harbour. Shipment of any such explosives shall be effected under the precautions and conditions mentioned and contained in these rules, and such explosives must be taken on board the vessel for which they are intended immediately the boat by which such explosives are taken off to such vessel is alongside the same, and no cargo boat or other vessel having fire on board shall be allowed to lie near such vessel during the time that any explosives are being shipped on board the same.

* *Vide* marginal note to Rule (*e*).

Rule (*i*).—When explosives (other than those mentioned in Division 2, Class 6, and Division 2, Class 7, of the rules made by the Governor-General in Council under section 5 of the Indian Explosives Act, 1884) are shipped or landed within the Madras port limits, the smoking of tobacco on board the vessel on which they shall be shipped or from which they shall be landed shall be prohibited, and all fires and lights on board shall be extinguished before the barge, lighter or boat bringing such explosives for shipment or receiving such explosives to be landed shall come alongside of such vessel. In the case of a steamer, should it be necessary that the fires in her engine-room should remain lighted, the barge, lighter or boat so bringing or receiving such explosives shall be placed to the windward of the steamer's funnel, and in the event of the steamer swinging, such explosives are to be covered with tarpaulins until such barge, lighter or boat is removed to a safe and proper position. No explosives other than those mentioned in the above two classes shall be discharged from a ship or shipped from the shore before 6-30 A.M. or after 4 P.M.

Rule (*j*).—The Chairman of the Harbour Trust Board, or any other person he may depute to act on his behalf, may from time to time prohibit the shipping or landing of explosives of any kind whatever within the Madras Harbour or may grant permission to ship or land any explosives within the harbour only on such conditions as may seem expedient.

Rule (*k*).—No magazine on board any vessel and containing explosives other than safety fuzes, cartridges and caps shall be opened while such ship is inside the Madras Harbour without the permission of the Chairman of the Harbour Trust Board except in cases of emergency, and in case, in the opinion of the Chairman of the Harbour Trust Board, the emergency was not such as to justify the master of such vessel in opening or allowing to be opened such magazine, he shall be deemed to have contravened this rule.

Rule (*l*).—If any person shall contravene any of the foregoing rules, he shall on conviction be punished with fine which may extend to one thousand rupees.

APPENDIX.

RULES framed by the Governor-General of India in Council under section 5 of the Indian Explosives Act, 1884, and published under Government of India Notification, No. 1417, dated the 24th June 1887.

1. For the purposes of these rules, explosives shall be classified as follows, namely—

Class 1	... ...	Gunpowder.
„ 2	... ...	Nitrate-mixture.
„ 3	... ...	Nitro-compound.
„ 4	... ...	Chlorate-mixture.
„ 5	... ...	Fulminate.
„ 6	... ...	Ammunition.
„ 7	... ...	Firework.

And when an explosive falls within the description of more than one class, it shall be deemed to belong exclusively to the latest of the classes within the description of which it falls.

CLASS 1.—*Gunpowder Class.*

The term "gunpowder" means exclusively gunpowder ordinarily so called.

CLASS 2.—*Nitrate-mixture Class.*

The term "nitrate-mixture" means any preparation, other than gunpowder ordinarily so called, formed by the mechanical mixture of a nitrate with any form of carbon or with any carbonaceous substance not possessed of explosive properties, whether sulphur be or be not added to such preparation and whether such preparation be or be not mechanically mixed with any other non-explosive substance.

The nitrate-mixture class comprises such explosives as—

Pyrolithe,
Pudrolithe,
Poudre saxifragine,

and any preparation coming within the above definition.

CLASS 3.—*Nitro-compound Class.*

The term "nitro-compound" means any chemical compound possessed of explosive properties, or capable of combining with metals to form an explosive compound, which is produced by the chemical action of nitric acid (whether mixed or not with sulphuric acid) or of a nitrate mixed with sulphuric acid upon any carbonaceous substance, whether such compound is mechanically mixed with other substances or not.

The nitro-compound class has two divisions:—

Division 1 comprises such explosives as—

Nitro-glycerine,
Dynamite,
Lithofracteur,
Dualine,
Glyoxiline,
Methylic nitrate,

and any chemical compound or mechanically-mixed preparation which consists, either wholly or partly, of nitro-glycerine or of some other liquid nitro-compound.

Division 2 comprises such explosives as—

Gun-cotton, ordinarily so called,
Gun paper,
Xyloidine,
Gun sawdust,
Nitrated gun-cotton,
Cotton-gunpowder,
Schultz's powder,
Nitro-mannite,
Picrates,
Picric powder,
Tonite (or cotton-powder),

and any nitro-compound, as before defined, which is not comprised in the first division.

CLASS 4.—*Chlorate-mixture Class.*

The term "chlorate-mixture" means any explosive containing a chlorate.

The chlorate-mixture class has two divisions:—

Division 1 comprises such explosives as—

Horsley's blasting powder,
Brain's blasting powder,

and any chlorate preparation which consists partly of nitro-glycerine or of some other liquid nitro-compound.

Division 2 comprises such explosives as—

Horsley's original blasting powder,
Erhardt's powder,
Reverley's powder,
Hochstadtor's blasting charges,
Reichen's blasting charges,
Teutonite,
Chlorated gun-cotton,

and any chlorate-mixture as before defined, which is not comprised in the first division.

Class 5.—*Fulminate Class.*

The term "fulminate" means any chemical compound or mechanical mixture, whether included in the foregoing classes or not, which, from its great susceptibility to detonation, is suitable for employment in percussion caps or any other appliances for developing detonation, or which, from its extreme sensibility to explosion, and from its great instability (that is to say, readiness to undergo decomposition from very slight exciting causes), is especially dangerous.

This class consists of two divisions:—

Division 1 comprises such compounds as the fulminates of silver and of mercury, and preparations of these substances, such as are used in percussion caps, and any preparation consisting of a mixture of a chlorate with phosphorus, or certain descriptions of phosphorous compounds, with or without the addition of carbonaceous matter, and any preparation consisting of a mixture of a chlorate with sulphur, or with a sulphurate, with or without carbonaceous matter.

Division 2 comprises such substances as the chloride and the iodide of nitrogen, fulminating gold and silver, diazobenzol, and the nitrate of diazobenzol.

Class 6.—*Ammunition Class.*

The term "ammunition" means an explosive of any of the foregoing classes when enclosed in any case or contrivance, or otherwise adapted or prepared so as to form a cartridge or charge for small-arms, cannon, or any other weapon, or for blasting, or to form any safety or other fuze for blasting or for shells, or to form any tube for firing exposives, or to form a percussion cap, a detonator, a fog signal, a shell, a torpedo, a war rocket, or other contrivance other than a firework.

The term "percussion cap" does not include a detonator.

The term "detonator" means a capsule or case which is of such strength and construction, and contains an explosive of the fulminate-explosive class in such quantity, that the explosion of one capsule or case will communicate the explosion to other like capsules or cases.

The term "safety fuze" means a fuze for blasting which burns and does not explode, and which does not contain its own means of ignition, and which is of such strength and construction and contains an explosive in such quantity that the burning of such fuze will not communicate laterally with other like fuzes.

The expression "safety cartridges" means cartridges for small-arms of which the case can be extracted from the small-arm after firing, and which are so closed as to prevent any explosion in one cartridge being communicated to other cartridges.

The ammunition class has three divisions:—

Division 1 comprises exclusively—

Safety cartridges.	Railway fog signals.
Safety fuzes for blasting.	Percussion caps.

Division 2 comprises any ammunition, as before defined, which does not contain its own means of ignition and is not included in Division 1, such as—

Cartridges for small-arms, which are not safety cartridges,
Cartridges and charges for cannon, shells, mines, blasting, or other like purposes,
Shells and torpedoes containing any explosive,
Fuzes for blasting, which are not safety fuzes,
Fuzes for shells,
Tubes for firing explosives,
War rockets,
which do not contain their own means of ignition.

Division 3 comprises any ammunition, as before defined, which contains its own means of ignition and is not included in Division 1, such as—

Detonators,
Cartridges for small-arms which are not safety cartridges,
Fuzes for blasting, which are not safety fuzes,
Fuzes for shells,
Tubes for firing explosives,
which do contain their own means of ignition.

By ammunition containing its own means of ignition is meant ammunition having an arrangement, whether attached to it or forming part of it, which is adapted to explode or fire the same by friction or percussion.

Class 7.—*Firework Class.*

The term "firework" comprises firework composition and manufactured fireworks.

Division 1.—The term "firework composition" means any chemical compound or mechanically-mixed preparation of an explosive or inflammable nature which is used for the purpose of making manufactured fireworks, and is not included in the former classes of explosives, and also any coloured fire composition.

Division 2.—The term "manufactured firework" means any explosive of the foregoing classes and any firework composition, when such explosive or composition is enclosed in any case or contrivance, or is otherwise manufactured so as to form a squib, cracker, serpent, rocket (other than a war rocket), maroon, star, lance, wheel, Chinese fire, Roman candle, or other article adapted for the production of pyrotechnic effects or pyrotechnic signals.

Transport.

(*a*)—*Packing.*

2. The following general rules shall be observed with respect to the packing of explosives for conveyance:—

I. Each class of explosive shall be separately packed.

II. An explosive, not being an explosive of the 5th (fulminate) class or of the 2nd and 3rd (divisions of the 6th ammunition) class or of the 1st division of the 7th (firework) class, shall, if not exceeding 5 lb. in quantity, be contained in a substantial case, bag, canister, or other receptacle made and closed so as to prevent the explosive from escaping.

III. An explosive of the first (gunpowder) class, which is intended to be used for blasting purposes, may be carried in barrels covered with waxcloth or gunny.

IV. In every other case the explosive shall be contained in a double package. The inner package shall be a substantial case, bag, canister, or other receptacle, made and closed so as to prevent the explosive from escaping, and the outer package shall be a box, barrel, or case of wood or metal or other solid material, and shall be of such strength, construction and character that will not be broken or accidentally opened, or become defective or insecure whilst being conveyed, and will not allow the explosive to escape. Provided as follows:—

(*a*) If the explosive is explosive of the 1st or gunpowder class, or is explosive of the 2nd (nitrate-mixture) class, or is gun-cotton or other explosive of the 2nd division of the 3rd (nitro-compound) class, the quantity of explosive in any one outer package shall not, in the case of explosive of the first two classes, exceed 100 lb., and in the case of the last 50 lb.; and if the explosive be gun-cotton, it shall be carried thoroughly saturated with water.

(*b*) If the explosive belongs to the 1st division of the 3rd (nitro-compound) class or to the 4th (chlorate-mixture) class, the inner package shall be without any metal in its construction, and the inner or outer package or both shall be thoroughly waterproof. No one of the inner packages shall contain more than 10 lb., and the aggregate quantity of the explosive in any one outer package shall not exceed 50 lb.

(*c*) If the explosive belongs to the 5th (fulminate) class, it shall be packed in such manner as the Governor-General in Council may specially direct.

(*d*) If the explosive belongs to the 1st division of the 6th (ammunition) class or is any explosive of the 2nd division, an outer package shall not be required, but it may be contained in quantity not exceeding 100 lb. in a single package, which shall be a box, barrel, or case not less than $\frac{3}{4}$ths of an inch in thickness of such strength, construction and character as will not be broken or accidentally opened or become defective or insecure whilst being conveyed, and will not allow the explosive to escape.

(*e*) If the explosive belongs to the 3rd division of the 6th (ammunition) class, it shall be packed in a double package. The inner package shall not contain more than 2 lb. of such explosive, and no more than 50 lb. shall be contained in the outer package.

(*f*) If the explosive belongs to the 1st division of the 7th (firework) class, it shall be contained in a double package. The inner package shall be a substantial canister, case, or other receptacle hermetically closed, and containing no more than 1 lb. of explosive, and no more than 20 lb. shall be contained in outer package, and

(*g*) If the explosive belongs to the 2nd division of the 7th (firework) class, it shall be contained in a box, barrel or case of wood, metal or other solid material, and of such strength, construction and character that it will not be broken or accidentally opened, or become defective or insecure whilst being conveyed, and will not allow any explosive to escape, and the quantity of explosive in any one package shall not exceed 100 lb.

V. Whatever be the amount of the explosive, and to whatever class or division of a class it belongs, the following conditions shall be observed:—

(*a*) The interior of every package, whether single or double, shall be kept free from grit and otherwise clean.

(*b*) Every package, whether single or double, when actually used for the packing of explosive, shall not be used for the packing of any other explosive of the same or any other class or for any other purpose.

(*c*) There shall not be any iron or steel in the construction of any such single package or inner or outer package unless the same is effectually covered with tin, zinc or other suitable material.

(*d*) On the outermost package there shall be affixed in conspicuous characters, by means of a brand or securely-attached label or mark, the word "Explosive", followed by the name of the explosive, or other description of the contents, and the name and address of the owners or sender; and

(*e*) The amount of explosive in any single package, or, if there is a double package, in any one outer package, shall not exceed the amount specified in the foregoing rules, except with the consent of, and under conditions to be approved by, an officer appointed by the local Government in this behalf.

3. If any person commits a breach of any of the foregoing rules relating to the packing of explosives for conveyance, he shall be punished with fine which may extend to Rs. 1,000.

(*b*)—*Mode of Conveyance.*

4. The following general rules shall be observed with respect to the conveyance of explosives:—

I. No explosive shall be conveyed from place to place unless packed in the manner provided for in the foregoing rules.

II. There shall not be conveyed in any carriage or vessel, which is being used for the conveyance of an explosive, any explosive of a different class and division, of whatsoever nature, which contains its own means of ignition, unless it be sufficiently separated therefrom to prevent any fire or explosion which may take place in one such explosive being communicated to another.

III. No explosive shall be loaded or unloaded except between sunrise and sunset.

IV. Whilst the explosive is being loaded on, or unloaded out of, any carriage or vessel, no fire or artificial light, nor any article which is liable to cause or communicate fire or explosion (such as charcoal, lucifer matches, articles for striking a light, petroleum to which the Petroleum Act or any Act repealing or amending the same applies, or any spirit or oil or substance that gives forth an inflammable vapour at a temperature below 100° (Fahrenheit), shall be, or shall be allowed to be, brought, had, or used dangerously near to such carriage, ship or boat; and no smoking shall be allowed in, on, or dangerously near to the same, provided that when the use of a light for the purpose of such loading or unloading is unavoidable, a lamp of such construction, position or character as not to cause any danger from fire or explosion may be used; and no person, while handling any explosive (except gunpowder explosive of Division 1, Class 6, or explosive of Class 7, if packed in accordance with the packing rules), shall wear boots or shoes with iron or steel nails, heels, or tips.

V. In loading or unloading any explosive, the casks and packages containing the same shall be passed from hand to hand and not rolled upon the ground; they shall not be thrown or dropped down, but shall be carefully deposited and stored.

VI. The explosive shall not be conveyed except in the interior of a carriage so enclosed on all sides with wood or metal, or in the hold of a ship or boat having a close deck, so closed as effectually to protect the explosive against accident by fire from without. If the explosive cannot be so secured, it shall be completely covered with painted cloth, tarpaulin, or other suitable material so as to effectually protect it againt communication of fire.

VII. There shall not be any iron or steel in the interior of the portion of the carriage or vessel with which the case containing the explosive is in contact, unless the same be effectually covered with leather, wood, cloth or other suitable material.

VIII. In the stowing of explosive, due precautions shall be taken by means of a partition or otherwise, and by careful stowing, to secure such explosive from being brought into contact with, or endangered by, any other article or substance conveyed in such carriage or vessel which is liable to cause fire or explosion; and if the explosive is dangerously affected by water, due precautions shall be taken to exclude water from coming into contact with such explosive.

IX. The amount of explosive conveyed in any one carriage or vessel at any one time shall not exceed 2,000 lb. unless the carriage be so enclosed on all sides with wood or metal, or the vessel have a close deck, so closed as effectually to protect the explosive against accident by fire from without, in which case the amount of explosive conveyed shall not exceed the following:—

	Tons.
In any one carriage on a railway	10
„ „ other carriage	2
„ „ vessel	20

NOTE.—This rule must in the case of dynamite conveyed by railway be read subject to paragraph XII of Rule 6.

X. Nothing in the foregoing rules (except Rule 1) shall apply to any explosive of the 1st division of the 6th (ammunition) class, provided all due precautions are taken for the prevention of accidents.

5. The following rules shall be observed with respect to the conveyance of explosives otherwise than by public railway:—

I. No explosive shall be conveyed in a carriage or boat whilst carrying or plying for public passengers, unless the quantity be less than 5 lb., and notice has been given beforehand to the person in charge of such carriage or boat, provided that there shall not be conveyed in

any such carriage or boat any explosive of the 5th (fulminate) class, or any explosive of the 3rd division of the 6th (ammunition) class or of the first division of the 3rd (nitro-compound) class, except—

(i) dynamite which may be carried in the form of cartridges up to the limit of 5 lb., provided that no detonators are carried in the same compartment; and

(ii) detonators to the number of 200, provided that the amount of fulminate of mercury in the package or packages containing the detonators shall in no case exceed in the aggregate 3 oz. (a certificate to this effect being given by the Agent of the Company by whom the detonators are tendered for transport), provided also that no dynamite is carried in the same compartment.

II. With respect to the conveyance by carriage or vessel of explosive of the 5th (fulminate) class, or of the 3rd division of the 6th (ammunition) class, or of the 1st division of the 7th (firework) class, or of larger quantities than 5 lb. of any other explosive, the following regulations shall be observed:—

(1) The person in charge of the carriage or vessel shall not drive or conduct the same in a dangerous or reckless manner, and shall take all due precautions to avoid fire and explosion, and no person shall do any act or thing in relation to the explosive which tends to cause fire or explosion, and is not reasonably necessary for the conveyance of the explosive, or for work immediately connected with such conveyance; and a person who is intoxicated shall not have charge of any carriage or vessel conveying explosive, and shall not be permitted to be in, or on, or attending, the same.

(2) A person shall not forward to any warehouseman or carrier a consignment of explosive, unless he has given notice to such warehouseman or carrier beforehand, stating the name and quantity of the explosive proposed to be conveyed and the name and address of the proposed consignee, and has had an intimation that the warehouseman or carrier is prepared to receive the consignment; and a warehouseman or carrier shall not make such an intimation, nor receive such consignment, unless he is prepared to receive it, and forthwith to despatch the same, or to deposit it in a magazine or at a place at which a person is licensed to possess the same.

(3) The carriage or vessel conveying the explosive shall be in charge of, and constantly attended by, some competent person, or by a sufficient number of competent persons, and such persons shall not, if the amount of explosive conveyed exceed 100 lb., stop or delay for a longer time than may be reasonably necessary, or stop unnecessarily at any place where such stopping would be attended with special public danger.

7. If any person commits a breach of any of the foregoing rules relating to the mode of conveyance of explosives, he shall be punished with a fine which may extend to Rs. 1,000.

G.O., dated 16th June 1894, No. 232, Marine.

Read—again the following papers:—

G.O., dated 27th November 1893, No. 416, Marine.

G.O., dated 25th January 1894, No. 35, Marine.

Read—letter from the Chairman, Harbour Trust Board, dated 4th January 1894, No. 3296.

Order—dated 25th January 1894, No. 35, Marine.

The Government is not in possession of any particulars regarding the disaster at Santander.

2. The Government will, however, request the Secretary of State to obtain the information desired by the Harbour Trust Board.

3. Meanwhile, the consideration of the draft rules promulgated with G.O., dated 27th November 1893, No. 416, will be deferred.

(True Extract.)

(Signed) J. F. PRICE,
Chief Secretary.

Letter—to the Right Honourable the Secretary of State for India, dated Fort St. George, 30th January 1894, No. 1, Marine.

G.O., dated 26th January 1894, No. 36, Marine.

Read—the following papers:—

From the Hon'ble Mr. W. P. AUSTIN, I.C.S., Chairman, Harbour Trust Board, to the Chief Secretary to Government, dated Madras, 11th December 1893, No. 3055.

I have the honour to acknowledge the receipt of G.O., dated 27th November, No. 416, Marine, directing publication of draft rules for regulating the transport and importation of explosives; and giving notice that they will be taken into consideration on or after 1st February 1894.

2. The text of rule (*c*) runs as follows:—

"Every vessel having on board explosives intended to be landed at the port of Madras, with the exception of those mentioned in *Division* 2, Class 6, Ammunition class . . . . in excess of 100 lb. weight shall on arrival at the port proceed to a distance of not less than one mile north of the north arm, &c."

3. In their resolution, No. 15, dated 19th August 1892, the Trustees resolved "that ammunition and manufactured fireworks be freely admitted to the harbour."

4. I would therefore submit that in rule (*c*) the word and figure "*Division* 2" and in Rule (*h*) the word and figure, "*Division* 2 of" in reference to Class 6, Ammunition class, should be omitted, as otherwise Divisions 1 and 3 of the Ammunition class would be excluded from free entry into the harbour, which is not the intention of the Trustees.

I enclose a copy of the Government Order with the suggested alterations shown in red ink.

5. The word and figure "Division 2" where applicable to Class 7, Firework class, should stand, as it is intended to exclude Division 1, Firework *composition*.

From the Hon'ble Mr. W. P. AUSTIN, Collector of Sea Customs, to the Chief Secretary to Government, dated Madras, 13th January 1894, No. 82 G.

Referring to the notification of Government published in the supplements to the *Fort St. George Gazettes*, dated 28th November and 12th December 1893, containing certain draft rules framed under section 18 of the Indian Explosives Act, I have the honour to bring to the notice of Government that, as Rule (*h*) stands at present, it is likely to mislead masters of vessels bringing explosives of the kind referred to for importation at Madras, and cause them to discharge the same immediately the Chairman of the Harbour Trust Board accords his sanction thereto, and before the required special permit is obtained from this department, which is issued only on production of the necessary licenses from the Commissioner of Police authorizing their importation under the Government of India rules. Such cases have happened, and now that the Government is about to issue definite rules regulating landing, I think it would be well to make the matter clear by slightly modifying the rule in question as suggested below:—

Rule (*h*).—With the sanction of the Chairman, Harbour Trust Board, which will be accorded only on production of the required special permit from the Collector of Sea Customs, explosives of the descriptions . . . . may be shipped on board or landed from . . . .

Order—dated 26th January 1894, No. 36, Marine.

Ordered to lie over with reference to G.O., dated 25th January 1894, No. 35.

(True Extract.)

(Signed) J. F. PRICE,
Chief Secretary.

Read—also the following papers:—

Despatch from the Right Honourable the Secretary of State for India, to His Excellency the Right Honourable the Governor in Council of Fort St. George, dated India Office, London, 12th April 1894, No. 391 (Revenue, No. 4).

On receipt of the letter of your Excellency's Government, No. 1, Marine, of the 30th January, on the subject of the transport and importation of explosives, a communication was addressed* to the Foreign Office, but the information your Excellency wishes to obtain was eventually furnished by the Home Department in the correspondence herewith enclosed.†

* 28th February 1894.

† From Home Office, 30th March 1894, and enclosure.

ENCLOSURES.

From GODFREY LUSHINGTON, Esq., to the Under Secretary of State, India Office, dated Whitehall, 30th March 1894, No. B-15291/15.

With reference to your letter of the 17th instant (374), asking, for the use of the Government of Madras, to be furnished with details of the dynamite disaster at Santander, and with the rules in force at the Port of Hamburgh for the shipment of explosives, I am directed by the Secretary of State to acquaint you, for the information of the Secretary of State for India, that he has no information as regards the rules in force at the Port of Hamburgh.

As regards the Santander explosion I am to say that Mr. Asquith has received a number of documents and a good deal of information from the Foreign Office and other sources. Unfortunately the information is in some respects contradictory and in other respects (so far at any rate as scientific precision of detail goes) very imperfect, but by collecting the various accounts and rejecting those which are vaguely sensational, H.M. Inspectors of Explosives have found it possible to set forth in their annual report (now in the hands of the printers) what is believed to be a fairly reliable and sufficient account of the facts attending this deplorable disaster; and a Memorandum substantially embodying this information, drawn up by H.M. Chief Inspector, is enclosed, and also a Table of Distances referred to in that Memorandum, and H.M. Chief Inspector states that, if that table be adopted (the distances being reduced by one-half in cases where the explosive is all below the water line), it will be found to afford all reasonable protection against structural damage. It is impossible to provide against damage of a slighter character, as this may extend over considerable distances, as also may projectile effects.

MEMORANDUM.

The facts of the explosion at Santander in November last, as far as we have been able to collect them from various sources, official or other, appear to have been substantially as follows:

A quantity of dynamite had been brought to Santander by the vessel "Machichaco," and a small quantity of this was disembarked and everybody was given to understand that there was no more dynamite on board. Meanwhile, the vessel had caught fire, and after a time a tremendous explosion occurred.

According to the best evidence that we have been able to obtain (the accounts being somewhat contradictory), there was on board at the time of the explosion about 1,700 cases of 25 kilos each, which would equal about 54 lb. per case, and would give a total amount of 46½ tons (of 2,000 lb. each). The quay had become crowded with spectators to watch the burning ship, and gradually the fire spread until ultimately a tremendous explosion took place with disastrous results.

Not only was the steamer blown up, but also a part of the quay, including the majority of the persons thereon. Spars, rails, and indeed, all sorts of fragments were hurled in all directions and killed people at various distances. Some buildings were set on fire by burning debris, and very serious damage was done to various parts of the town, ships, quays, &c. In one instance a piece of iron "about the size of an ordinary-sized chest-of-drawers" is stated to have been hurled a distance of about quarter mile from the quay over the house-tops, fortunately without striking the house in front of which it lodged, and which was occupied at the moment by the Vice-Consul and his family.

The following passages are taken from our Annual Report, which is at present in the hands of the printers:—

"It would be unprofitable to attempt to reproduce here the appalling and often hysterical accounts of this disaster which appeared in some of the newspapers of the day, to set forth the many sensational incidents to which it is stated to have given rise, or to dwell on the horrors with which it was accompanied. Our efforts have rather been directed to ascertaining as

accurately as may be, for the purposes of reliable record and comparison, the exact details of the affair; and with this view the Foreign Office was moved to obtain some such trustworthy particulars as might be available from the British representatives at Santander and elsewhere. Although we have been favoured with a great deal of useful information, the fact that it has not been collected by an expert very considerably impairs its value in several directions; and we regret now that we did not, in view of the almost unique magnitude of the disaster, seek permission for one of us to visit Santander and there personally institute inquiries. However, we must now content ourselves with such information as we have been able to collect at second-hand.

"As regards the quantity that exploded, it can hardly, we think, have amounted to more than about 66,000 lb.: (distributed in 1,200 cases of 55 lb. each) = 33 tons.* And it must for ever remain unknown whether the amount which actually exploded was as much as this, for—

"1*st*.—It is conceivable, we may perhaps say probable, that some portion of the dynamite in the fore-hold was consumed by fire before the explosion, but this is unlikely to have been a large quantity, for we know, from the experiments at Llanberis in June 1872, that so small a quantity as 6 cwts. of dynamite cannot be relied upon to burn without explosion.†

"2*nd*.—We have no certain information as to whether any portion of the dynamite in the fore-hold was recovered unexploded. We should think it improbable that such could be the case, having regard to the tremendously powerful initial explosion (so to express it) which was established by the explosion which actually occurred.

"We think therefore that it may be safely assumed that the amount actually exploded did not greatly if at all fall below about 66,000 lb.: 33 tons (of 2,000 lb. each).

"As regards the damage done, this has to be considered under two principal aspects—

(*a*) loss of life and personal injury; and

(*b*) injury to property.

"With regard to loss of life, we are unable to say with certainty how many people were killed, but in a despatch, dated 14th December, the British Vice-Consul at Santander (Mr. Leopold Marsh) says the number killed (including those who have succumbed to their injuries during the last month) is 510. Of the number injured, we have no reliable estimate; one account places it at 'about 2,000.'

"With regard to injury to property, this was necessarily very great indeed, and necessarily also has been impossible to estimate. Nearly all the accounts we have seen run off into what we must characterize as extravagant and sensational descriptions which are of no sort of use for scientific purposes or accurate comparison. The local havoc was of course tremendous, and the destruction (partly by fire) of some houses, &c., on the spot pretty complete. It is also undisputable that debris (in some case of formidable character) was projected a considerable distance. The Vice-Consul, for instance, states that 'several pieces of iron' (he unfortunately omits to state the size or character) 'were projected a distance of a mile'; while a quantity of iron rails, which had formed part of the cargo of the exploded vessel, were hurled bent and twisted together with fractured chain cables, anchors, iron bolts, &c., descended within a radius of 300 yards. It is, we believe, incontestable that several persons were killed by falling debris though over what distance the accounts at our disposal are not sufficiently detailed to enable us to say, but we may believe it was probably not generally beyond the radius (300 yards) which has been mentioned as that over which rails and the more formidable objects were thrown.

"We have chiefly concerned ourselves with endeavouring to ascertain with some degree of approximate accuracy over what area *structural damage* was done, and we caused a definite inquiry to be addressed to the Vice-Consul as to whether any damage of that character (*i.e.*, damage to walls of substantial edifices, as distinguished from mere breakage of windows and the like) was effected beyond the distance corresponding to that which we have set down in the table of distances as the proper safety zone to be kept clear and which for 33 tons would be 2,370 yards.

"The Vice-Consul replies as follows:—

"The walls of substantially-constructed edifices, as well as those of lighter description, sustained no damage. This was one of the remarkable features of the explosion, which killing and wounding with its fiery blast and falling debris some hundreds of persons who were standing near, spent its force in demolishing window-frames and balconies, displacing and fracturing the partitions, ceilings and doors of the rooms of the houses three or four hundred yards off, besides breaking innumerable panes of glass and projecting heavy fragments of iron to extraordinary distances."

It is abundantly clear from the above that so far as protection from structural damage goes, and assuming the amount of dynamite which exploded on this occasion to have been about 33 tons, the distances adopted by us in our table of distances, and the sufficiency of which has sometimes been impugned, afford a very good and sufficient margin of safety.

24th March 1894. (Intld.) V. D. M.

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* "The difference between the amount *on board* (1,700 boxes) and the amount *exploded* (1,200 boxes) was the amount in the after-hold, which all escaped explosion which the account we have adopted represents 500 cases. But other accounts give slightly different figures, viz., 1,237 cases in the fore-hold and 463 boxes in the after-hold. If this account be accepted, the maximum amount exploded must be stated at 68,035 lb., or about 34 tons. The difference, however, is comparatively unimportant."

† "See Report of Guncotton Committee, 1871—4, pp. 91-92."

Rule (*b*).—The agents of any vessel expected to arrive at the port of Madras and known to have explosives exceeding 100 lb. in weight on board as cargo, and the consignee or consignees of, and other person or persons interested in, such explosives so expected to arrive by any vessel at the port, shall give notice of the fact of such explosives being on board such vessel to the Chairman of the Harbour Trust Board not less than 48 hours before the arrival of such vessel and the agents, consignor or consignors or other person or persons interested in any explosives exceeding 100 lb. in weight intended to be shipped as cargo on board any vessel in the port of Madras shall give a like notice of their or his intention to ship such explosives by such vessel 48 hours before any such explosives shall be shipped. Every such notice shall be in writing and shall contain a statement showing the quantities and nature of the explosives to be landed at, or shipped from, Madras, and of those intended for other ports or, as the case may be, of the port or ports for which any such explosives may be shipped. Upon receipt of any such notice, the Chairman of the Harbour Trust Board shall depute an officer to remain on board the vessel in charge of such explosives in cases where the same are to be landed and until the same shall have been removed from the Board's premises for deposit in the magazine on shore appointed for that purpose, or in cases where explosives are to be shipped until the same shall have been shipped on board the vessel named in such notice.

Rule (*c*).—Every vessel having on board explosives intended to be landed at the port of Madras, with the exception of those mentioned in Class 6, "Ammunition class," and Division 2, Class 7, "Manufactured Fire-work class" (under the rules made by the Governor-General in Council under section 5 of the Indian Explosives Act, 1884), in excess of 100 lb. in weight, shall, on arrival at the port, proceed to a distance of not less than one mile north of the North Arm, and half-a-mile off-shore outside the Harbour, and shall there remain until such explosives have been discharged from such vessel; after which, provided that the requirements of Rule (*e*) as regards the security of explosives still remaining on board have been met, and such explosives are not of Classes 2, 3, 4 or 5 as defined in the rules above cited, the vessel may be permitted to enter the harbour. Whilst any explosives intended for the port of Madras shall remain on board, such vessel shall have a red flag kept flying at the foremast head between sunrise and sunset and one red light at the ensign staff or peak in addition to the usual light between sunset and sunrise, and the master or chief officer shall remain on board of the vessel on which explosives are to be shipped shall have been discharged.

Similar provisions shall apply to the vessel on which explosives are to be shipped at Madras, with the exception that it shall not be necessary for such vessel to proceed to the locality indicated as soon as she arrives.

Rule (*d*).—The master of every vessel delivering any explosives shall see that the platform in the vessel's hold to be used for delivering such explosives and the gangways and combings of the hatchways are covered with tanned hides or other suitable paddings; that the barrels or boxes containing any such explosives and received on board any such vessel are carefully stowed therein, that the hatches of such vessel are properly secured and locked, and that the key of the magazine in which any such explosives may be stowed remains in his own possession. In shipping any explosives, tanned hides or wadmiltilts shall be laid down in those portions of the vessel over which the barrels or boxes containing any such explosives shall pass, and properly stuffed and covered with leather

Class 6.—*Ammunition Class.*

* * * *

The Ammunition class has divisions:—
Division 1 comprises exclusively—
Safety cartridges.
Safety fuzes for blasting.
Railway fog signals.
Percussion caps.

Division 2 comprises any ammunition, as before defined, which does not contain its own means of ignition and is not included in Division 1, such as—
Cartridges for small-arms which are not safety cartridges,
Cartridges and charges for guns, shells, mines, blasting, or other like purposes,
Shells and torpedoes containing any explosive,
Fuzes for blasting, which are not safety fuzes,
Fuzes for shells,
Tubes for firing explosives,
War rockets,
which do not contain their own means of ignition.

Division 3 comprises any ammunition, as before defined, which contains its own means of ignition and is not included in Division 1, such as—
Detonators,
Cartridges for small-arms which are not safety cartridges,
Fuzes for blasting, which are not safety fuzes,
Fuzes for shells,
Tubes for firing explosives,
which do contain their own means of ignition.

By ammunition containing its own means of ignition is meant ammunition having an arrangement, whether attached to it or not, which is part of it, which is adapted to explode or fire the same by friction or percussion.

Class 7.—

Class.

The term "firework" comprises fireworks and manufactured fireworks.

* * * *

Division 1.—

Division 2.—The term "manufactured" means any explosive of the foregoing classes and any firework composition which explosive or composition is enclosed in any case or contrivance, or is otherwise manufactured so as to form a squib, cracker, serpent, rocket (other than a war-rocket), tube, shell, mine, star, lance, wheel, Chinese fire, Roman candle, or other article adapted for the production of pyrotechnic effects or pyrotechnic signals.

TABLE showing Distances from Protected Works for Magazines

In any case where the Protected Work is effectively screened from the Magazine or Danger Building either by the natural features of the ground or by good and substantial artificial mounds of earth or mine refuse of such height
distance from that Protected Work (except for quantities of 1,000 lbs. and under) will be reduced one-half. Provided that when a natural hill so intervenes as to afford a degree of protection which in the opinion of a
Palaces to be less than two miles.

The figures in italics are the distances to be observed when Gunpowder only is to be stored or other explosives up to the equivalent of 5,000 *lbs. of Gunpowder, e*

Amount of Explosive to be allowed in the Magazine or Danger Building ..	pounds	500	1,000	1 "ton" 2,000	3,000	2 "tons" 4,000	5,000	6,000	7,000	8,000	9,000	5 "tons" 10,000	11,000	12,000	13,000	14,000	15,000	16,000	17,000	18,000	19,000	10 "tons" 20,000	22,000	24,000	26,000	28,000	15 "tons" 30,000	32,000	34,000	36,000	38,000	20 "tons" 40,000	42,000	44
Distances to be kept clear from—																																	
Room used in connection with the magazine, in pursuance of section 46 of the Act ..	yards	50 *35*	56 *35*	50	51	52	52	53	53	54	54	55	55	56	56	57	57	58	58	59	59	60	61	62	63	64	65	66	67	68	69	70	71	
Workshop used in connection with the magazine, in pursuance of section 47 of the Act [*see* note (*b*)]. ..	,,	,,	75 *50*	100 *75*	101 *90*	102	104	105	106	108	109	110	111	112	113	114	115	116	117	118	119	120	122	124	126	128	130	132	134	136	138	140	142	
Mineral or private railway, whether worked by steam or otherwise	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	
Highway or public footpath.	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	
Promenade or open place of resort for the public or for persons carrying on any trade or business ..	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	
Canal or navigable water ..	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	
Dock	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	
River wall or sea-water ..	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	
Pier or jetty	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	
Reservoir	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	
Room or workshop in connection with another magazine, store, or registered premises	,,	100 *65*	150 *100*	200 *150*	200 *175*	200	200	200	200	200	200	200	205	210	215	220	225	230	235	240	245	250	265	280	295	310	325	340	355	370	385	400	415	
Any other room or workshop or any shop	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	
Magazine for explosive ..	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	
Store do. ..	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	
Furnace, kiln, or fire for the use of any boiler, engine, or machine, or for any manufacturing purpose	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	
Public railway	,,	,,	,,	,,	210	215 *200*	225 *210*	235 *220*	240 *230*	250 *245*	255	265	270	280	285	290	300	305	310	315	325	330	345	355	370	380	395	410	420	435	445	460	475	
Dwelling-house, *with* the consent, in writing, of the occupier	,,	50 *35*	75 *50*	100 *75*	110 *90*	120 *100*	130 *110*	140 *125*	145 *140*	155 *150*	165 *160*	175	180	190	200	205	215	220	230	235	245	250	265	280	295	310	325	340	355	370	385	400	415	
Dwelling-house, *without* such consent	,,	100 *65*	150 *100*	200 *150*	240 *175*	280 *200*	320 *255*	365 *310*	405 *360*	445 *415*	485 *470*	525	560	590	625	655	690	720	750	785	815	850	920	990	1,060	1,130	1,200	1,265	1,330	1,395	1,460	1,525	1,590	1,6
Factory not belonging to Government	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	
Church or chapel	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	
University, college, or school	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	
Hospital or public institution	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	
Town hall or court of justice	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	
Covered market	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	
Theatre or building wherein persons are accustomed to assemble	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	
Public building in charge of the Commissioners of Her Majesty's Works and Public Buildings ..	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	
Factory or magazine occupied by a Secretary of State, the Commissioners of the Admiralty, or other Department of the Government, *with* the consent, in writing, of the Secretary of State, Commissioners, or Department ..	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	
Ditto *without* such consent	,,	880 *585*	1,320 *880*	1,760 *1,320*	1,780 *1,540*	1,805 *1,760*	1,825 *1,790*	1,850 *1,820*	1,870 *1,850*	1,890 *1,880*	1,910 *1,905*	1,930	1,950	1,970	1,990	2,005	2,025	2,040	2,060	2,075	2,095	2,110	2,145	2,180	2,215	2,255	2,290	2,325	2,360	2,395	2,430	2,465	2,500	2,5
Palace or house of residence of Her Majesty, Her Heirs and Successors	miles	2	2	2	2⅛	2¼	2¼	2⅜	2¼	2⅜	2⅜	2½	2⅝	3	3	3	3¼	3¼	3¼	3½	3⅝	3½	3¾	3¾	4	4¼	4¼	4½	4¾	4¾	5	5¼	5¼	

Notes.—(*a*) This table furnishes the basis on which applications for Licenses will be considered, but is susceptible to modification under special circumstances.
(*b*) Buildings and magazines *inside* a factory will be required to preserve the distances from each other specified in the second (Workshop) line of the table. The same rule will apply to two or more magazines, *not* in a factory, belonging to
(*c*) Detonators may be kept in an annexe near to or adjoining a magazine under the following conditions :—
(1) The amount of explosive contained in the detonators must not exceed 100 lb. reckoned in the proportion of not less than 2¼ lb. of explosive per 1,000 detonators. (This proportion represents roughly about 44,000 detonators of "
(2) The detonator annexe must be so constructed that not less than 2 ft. of masonry and 3 ft. of air-space shall intervene between any detonators in such annexe and the interior of the main magazine.

and other Danger Buildings.

that a line drawn from any part of the Magazine or Danger Building to any part of the Protected Work in question will pass through the intervening ground or mound, the Government Inspector justifies a further reduction, the distance shown in the Table will be reduced to one-quarter. In no case, however, is the distance from Her Majesty's

very half pound of such other explosive (with certain exceptions) being reckoned as 1 lb. of Gunpowder.

,000	46,000	48,000	25 "tons" 50,000	52,000	54,000	56,000	58,000	30 "tons" 60,000	62,000	64,000	66,000	68,000	35 "tons" 70,000	72,000	74,000	76,000	78,000	40 "tons" 80,000	82,000	84,000	86,000	88,000	45 "tons" 90,000	92,000	94,000	96,000	98,000	50 "tons" 100000
72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
144	146	148	150	152	154	156	158	160	162	164	166	168	170	172	174	176	178	180	182	184	186	188	190	192	194	196	198	200
,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,
,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,
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20	445	460	475	490	505	520	535	550	565	580	595	610	625	640	655	670	685	700	715	730	745	760	775	790	805	820	835	850
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85	500	510	525	540	550	565	575	590	605	615	630	640	655	670	680	695	705	720	735	745	760	770	785	800	810	825	835	850
30	445	460	475	490	505	520	535	550	565	580	595	610	625	640	655	670	685	700	715	730	745	760	775	790	805	820	835	850
55	1,720	1,785	1.850	1,915	1,980	2,015	2,110	2.175	2,240	2,305	2,370	2,435	2.500	2,570	2,640	2,710	2,780	2 850	2,915	2,980	3,045	3,110	3.175	3,240	3,305	3,370	3,435	3.500
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35	2,570	2,605	2,640	2,675	2,710	2,745	2,780	2,815	2,850	2,885	2,920	2,955	2,990	3,025	3,060	3,100	3,135	3,170	3,205	3,240	3,275	3,310	3,345	3,380	3,415	3,450	3,485	3,520
5½	5¾	5¾	6	6¼	6¼	6½	6½	6¾	7	7	7¼	7½	7½	7¾	8	8	8¼	8½	8½	8¾	8¾	9	9¼	9¼	9½	9¾	9¾	10

the same occupier or by mutual consent of the respective occupiers.

extuple " strength ; with detonators of greater strength the number would be of course less.

shall be placed in the hold and on the deck of the vessel in the places on to which any such barrels or boxes shall be lowered. All persons concerned in the handling, or in supervising the handling, of any such barrels or boxes of explosives, shall wear suitable shoes without any metal nails or other metal in or upon them or shall wear no shoes.

Rule (*e*).—No vessel having on board explosives exceeding 100 lb. weig shall enter the Madras Harbour unless such explosives are secured in a properly-construct magazine to be approved of by the Deputy Conservator of the Port or other officer deputed b him to inspect it.

Rule (*f*).—Barges, lighters and boats in the port of Madras having on rd any explosives shall be kept scrupulously clean and free from loose explosives and shall no when at anchor, lie closer than half-a-mile from any of the shipping in the port or from any olic landing place, and all cases of explosives in any such barges, lighters or boats shall be urely covered with tarpaulins. Whilst any such explosives shall remain on board, there sl be kept a red flag flying on every such barge, lighter, or boat between sunrise and sunse nd a red light in an elevated position shall be shown from every such barge, lighter or b between sunset and sunrise. No fires, smoking or matches shall be allowed on board an ch barge, lighter or boat, nor any light of any kind except in properly-decked barges, on deck of which may be allowed one lanthorn of good pattern. The tindal and at least half the w of every such barge, lighter or boat shall remain on board thereof until all explosives are arged therefrom.

Rule (*g*).—All barges, lighters and boats having any explo on board shall remain off-shore until orders are received from the officer directing the l g to approach the beach. Only one such barge, lighter or boat shall be permitted to unload time, and such unloading shall take place either between the old and new stone revetments ting the foreshore beyond Royapuram and Casemode or at the north end of the new rev at according to the state of wind and current.

Rule (*h*).—With the sanction of the Chairman of the H Trust Board, which will be accorded on production of the required special perm the Collector of Sea Customs, explosives descriptions * mentioned in Class 6—*Ammunition Class*—and Division 2, Class 7—*ctured Firework Class* (under the rules made by the Governor-General in Council under 5 of the Indian Explosives Act, 1884) in any quantities, and other explosives, not being sives of Classes 2, 3, 4 or 5 as defined in the rules aforesaid and not exceeding 100 lb. in il under section 5 of the Indian by Rule 2 of the rules issued by the Governor-General i cussion caps, may be shipped on Explosives Act, 1884, and unaccompanied by detonators within the harbour. Shipment of board, or landed from a vessel lying at the ordinary m s and conditions mentioned and any such explosives shall be effected under the pr n board the vessel for which they contained in these rules, and such explosives must be are taken off to such vessel is along- are intended immediately the boat by which such ex n board shall be allowed to lie near side the same, and no cargo boat or other vessel hav pped on board the same. such vessel during the time that any explosives are

* *Vide* marginal note to Rule (*e*).

tioned in Class 6, and Division 2, *Rule* (*i*).—When explosives (other than th Council under section 5 of the Indian Class 7, of the rules made by the Governor-Gen he Madras port limits, the smoking Explosives Act, 1884) are shipped or landed shipped or from which they shall be of tobacco on board the vessel on which they oard shall be extinguished before the landed shall be prohibited, and all fires and li ment or receiving such explosives to be barge, lighter or boat bringing such explosives of a steamer, should it be necessary that landed shall come alongside of such vessel. e barge, lighter or boat so bringing or the fires in her engine room should remain l ward of the steamer's funnel, and in the receiving such explosives shall be placed to e covered with tarpaulins until such barge, event of the steamer swinging, such explosion. No explosives other than those men- lighter or boat is removed to a safe and pro m a ship or shipped from the shore before tioned in the above two classes shall be di 6-30 A.M. or after 4 P.M.

Rule (*j*).—The Chairman of the Ha t Board, or any other person he may depute to act on his behalf, may from time t hibit the shipping or landing of explosives of any kind whatever within the Madra or may grant permission to ship or land any explosives within the harbour only on ons as may seem expedient.

Rule (*k*).—No magazine on bo sel and containing explosives other than safety fuzes, cartridges and caps shall be op such ship is inside the Madras Harbour without the permission of the Chairman of t bour Trust Board except in cases of emergency, and in case, in the opinion of the Chairma or allowing to be opened such magazine, he shall to justify the master of such vesse be deemed to have contravened th

Rule (*l*).—If any person sh any of the foregoing rules, he shall on conviction be punished with fine which may e thousand rupees.

Appendix.

Rules framed by the Governor-General of India in Council under section 5 of the Indian Explosives Act, 1884, and published under Government of India Notification, No. 1417, dated the 24th June 1887.

1. For the purposes of these rules, explosives shall be classified as follows, namely—

Class 1	... ...	Gunpowder.
„ 2	... ...	Nitrate-mixture.
„ 3	... ...	Nitro-compound.
„ 4	... ...	Chlorate-mixture.
„ 5	.. ..	Fulminate.
„ 6	... ...	Ammunition.
„ 7	... ...	Firework.

And when an explosive falls within the description of more than one class, it shall be deemed to belong exclusively to the latest of the classes within the description of which it falls.

Class 1.—*Gunpowder Class.*

The term "gunpowder" means exclusively gunpowder ordinarily so called.

Class 2.—*Nitrate-mixture Class.*

The term "nitrate-mixture" means any preparation, other than gunpowder ordinarily so-called, formed by the mechanical mixture of a nitrate with any form of carbon or with any carbonaceous substance not possessed of explosive properties, whether sulphur be or be not added to such preparation and whether such preparation be or be not mechanically mixed with any other non-explosive substance.

The nitrate-mixture class comprises such explosives as—

Pyrolithe,	Poudre saxifragine,
Pudrolithe,	

and any preparation coming within the above definition.

Class 3.—*Nitro-compound Class.*

The term "nitro-compound" means any chemical compound possessed of explosive properties, or capable of combining with metals to form an explosive compound, which is produced by the chemical action of nitric acid (whether mixed or not with sulphuric acid) or of a nitrate mixed with sulphuric acid upon any carbonaceous substance, whether such compound is mechanically mixed with other substances or not.

The nitro-compound class has two divisions :—

Division 1 comprises such explosives as—

Nitro-glycerine,	Dualine,
Dynamite,	Glyoxiline,
Lithofracteur,	Methylic nitrate,

and any chemical compound or mechanically-mixed preparation which consists, either wholly or partly, of nitro-glycerine or of some other liquid nitro-compound.

Division 2 comprises such explosives as—

Gun-cotton, ordinarily so-called,	Schultz's powder,
Gun paper,	Nitro-mannite,
Xyloidine,	Picrates,
Gun sawdust,	Picric powder,
Nitrated gun-cotton,	Tonite (or cotton-powder),
Cotton-gunpowder,	

and any nitro-compound, as before defined, which is not comprised in the first division.

Class 4.—*Chlorate-mixture Class.*

The term "chlorate-mixture" means any explosive containing a chlorate.

The chlorate-mixture class has two divisions :—

Division 1 comprises such explosives as—

Horsley's blasting powder,	Brain's blasting powder,

and any chlorate preparation which consists partly of nitro-glycerine or of some other liquid nitro-compound.

Division 2 comprises such explosives as—

Horsley's original blasting powder,	Reichen's blasting charges,
Erhardt's powder,	Teutonite,
Reverley's powder,	Chlorated gun-cotton,
Hochstadtor's blasting charges,	

and any chlorate-mixture as before defined, which is not comprised in the first division.

Class 5.—*Fulminate Class.*

The term "fulminate" means any chemical compound or mechanical mixture, whether included in the foregoing classes or not, which, from its great susceptibility to detonation, is suitable for employment in percussion caps or any other appliances for developing detonation, or which, from its extreme sensibility to explosion, and from its great instability (that is to say, readiness to undergo decomposition from very slight exciting causes), is especially dangerous.

This class consists of two divisions:—

Division 1 comprises such compounds as the fulminates of silver and of mercury, and preparations of these substances, such as are used in percussion caps, and any preparation consisting of a mixture of a chlorate with phosphorus, or certain descriptions of phosphorous compounds, with or without the addition of carbonaceous matter, and any preparation consisting of a mixture of a chlorate with sulphur, or with a sulphurate, with or without carbonaceous matter.

Division 2 comprises such substances as the chloride and the iodide of nitrogen, fulminating gold and silver, diazobenzol, and the nitrate of diazobenzol.

Class 6.—*Ammunition Class.*

The term "ammunition" means an explosive of any of the foregoing classes when enclosed in any case or contrivance, or otherwise adapted or prepared so as to form a cartridge or charge for small arms, cannon, or any other weapon, or for blasting, or to form any safety or other fuze for blasting or for shells, or to form any tube for firing explosives, or to form a percussion cap, a detonator, a fog signal, a shell, a torpedo, a war rocket, or other contrivance other than a firework.

The term "percussion cap" does not include a detonator.

The term "detonator" means a capsule or case which is of such strength and construction, and contains an explosive of the fulminate-explosive class in such quantity, that the explosion of one capsule or case will communicate the explosion to other like capsules or cases.

The term "safety fuze" means a fuze for blasting which burns and does not explode, and which does not contain its own means of ignition, and which is of such strength and construction and contains an explosive in such quantity that the burning of such fuze will not communicate laterally with other like fuzes.

The expression "safety catridges" means catridges for small-arms of which the case can be extracted from the small-arm after firing, and which are so closed as to prevent any explosion in one cartridge being communicated to other cartridges.

The ammunition class has three divisions:—

Division 1 comprises exclusively—

Safety cartridges,	Railway fog signals.
Safety fuzes for blasting.	Percussion caps.

Division 2 comprises any ammunition, as before defined, which does not contain its own means of ignition and is not included in Division 1, such as—

Cartridges for small-arms, which are not safety cartridges,
Cartridges and charges for cannon, shells, mines, blasting, or other like purposes,
Shells and torpedoes containing any explosive,
Fuzes for blasting, which are not safety fuzes,
Fuzes for shells,
Tubes for firing explosives,
War rockets,

which do not contain their own means of ignition.

Division 3 comprises any ammunition, as before defined, which contains its own means of ignition and is not included in Division 1, such as—

Detonators,
Cartridges for small-arms which are not safety cartridges,
Fuzes for blasting, which are not safety fuzes,
Fuzes for shells,
Tubes for firing explosives,

which do contain their own means of ignition.

By ammunition containing its own means of ignition is meant ammunition having an arrangement, whether attached to it or forming part of it, which is adapted to explode or fire the same by friction or percussion.

Class 7.—*Firework Class.*

The term "firework" comprises firework composition and manufactured fireworks.

Division 1.—The term "firework composition" means any chemical compound or mechanically-mixed preparation of an explosive or inflammable nature which is used for the purpose of making manufactured fireworks, and is not included in the former classes or explosives, and also any coloured fire composition.

Division 2.—The term "manufactured firework" means any explosive of the foregoing classes and any firework composition, when such explosive or composition is enclosed in any case or contrivance, or is otherwise manufactured so as to form a squib, cracker, serpent, rocket (other than a war rocket), maroon, star, lance, wheel, Chinese fire, Roman candle, or other article adapted for the production of pyrotechnic effects or pyrotechnic signals.

Transport.

(*a*)—*Packing.*

2. The following general rules shall be observed with respect to the packing of explosives for conveyance:—

I. Each class of explosive shall be separately packed.

II. An explosive, not being an explosive of the 5th (fulminate) class or of the 2nd and 3rd (divisions of the 6th ammunition) class or of the 1st division of the 7th (firework) class, shall, if not exceeding 5 lb. in quantity, be contained in a substantial case, bag, canister, or other receptacle made and closed so as to prevent the explosive from escaping.

III. An explosive of the first (gunpowder) class, which is intended to be used for blasting purposes, may be carried in barrels covered with wax-cloth or gunny.

IV. In every other case the explosive shall be contained in a double package. The inner package shall be a substantial case, bag, canister, or other receptacle, made and closed so as to prevent the explosive from escaping, and the outer package shall be a box, barrel, or case of wood or metal or other solid material, and shall be of such strength, construction and character that will not be broken or accidentally opened, or become defective or insecure whilst being conveyed, and will not allow the explosive to escape. Provided as follows:—

(*a*) If the explosive is explosive of the 1st or gunpowder class, or is explosive of the 2nd (nitrate-mixture) class, or is gun-cotton or other explosive of the 2nd division of the 3rd (nitro-compound) class, the quantity of explosive in any one outer package shall not, in the case of explosive of the first two classes, exceed 100 lb., and in the case of the last, 50 lb.; and if the explosive be gun-cotton, it shall be carried thoroughly saturated with water.

(*b*) If the explosive belongs to the 1st division of the 3rd (nitro-compound) class or to the 4th (chlorate-mixture) class, the inner package shall be without any metal in its construction, and the inner or outer package or both shall be thoroughly waterproof. No one of the inner packages shall contain more than 10 lb., and the aggregate quantity of the explosive in any one outer package shall not exceed 50 lb.

(*c*) If the explosive belongs to the 5th (fulminate) class, it shall be packed in such manner as the Governor-General in Council may specially direct.

(*d*) If the explosive belongs to the 1st division of the 6th (ammunition) class or is any explosive of the 2nd division, an outer package shall not be required, but it may be contained in quantity not exceeding 100 lb. in a single package, which shall be a box, barrel, or case not less than $\frac{3}{4}$ths of an inch in thickness of such strength, construction and character as will not be broken or accidentally opened or become defective or insecure whilst being conveyed, and will not allow the explosive to escape.

(*e*) If the explosive belongs to the 3rd division of the 6th (ammunition) class, it shall be packed in a double package. The inner package shall not contain more than 2 lb. of such explosive, and no more than 50 lb. shall be contained in the outer package.

(*f*) If the explosive belongs to the 1st division of the 7th (firework) class, it shall be contained in a double package. The inner package shall be a substantial canister, case, or other receptacle hermetically closed, and containing no more than 1 lb. of explosive, and no more than 20 lb. shall be contained in outer package, and

(*g*) If the explosive belongs to the 2nd division of the 7th (firework) class, it shall be contained in a box, barel or case of wood, metal or other solid material, and of such strength, construction and character that it will not be broken or accidentally opened, or become defective or insecure whilst being conveyed, and will not allow any explosive to escape, and the quantity of explosive in any one package shall not exceed 100 lb.

V. Whatever be the amount of the explosive, and to whatever class or division of a class it belongs, the following conditions shall be observed:—

(*a*) The interior of every package, whether single or double, shall be kept free from grit and otherwise clean.

(*b*) Every package, whether single or double, when actually used for the packing of explosive, shall not be used for the packing of any other explosive of the same or any other class or for any other purpose.

(*c*) There shall not be any iron or steel in the construction of any such single package or inner or outer package unless the same is effectually covered with tin, zinc or other suitable material.

(*d*) On the outermost package there shall be affixed in conspicuous characters, by means of a brand or securely-attached label or mark, the word "Explosive." followed by the name of the explosive, or other description of the contents, and the name and address of the owners or sender; and

(*e*) The amount of explosive in any single package, or, if there is a double package, in any one outer package, shall not exceed the amount specified in the foregoing rules, except with the consent of, and under conditions to be approved by, an officer appointed by the local Government in this behalf.

3. If any person commits a breach of any of the foregoing rules relating to the packing of explosives for conveyance, he shall be punished with fine which may extend to Rs. 1,000.

(*b*)—*Mode of Conveyance.*

4. The following general rules shall be observed with respect to the conveyance of explosives:—

I. No explosive shall be conveyed from place to place unless packed in the manner provided for in the foregoing rules.

II. There shall not be conveyed in any carriage or vessel, which is being used for the conveyance of an explosive, any explosive of a different class and division, of whatsoever nature, which contains its own means of ignition, unless it be sufficiently separated therefrom to prevent any fire or explosion which may take place in one such explosive being communicated to another.

III. No explosive shall be loaded or unloaded except between sunrise and sunset.

IV. Whilst the explosive is being loaded on, or unloaded out of, any carriage or vessel, no fire or artificial light, nor any article which is liable to cause or communicate fire or explosion (such as charcoal, lucifer matches, articles for striking a light, petroleum to which the Petroleum Act or any Act repealing or amending the same applies, or any spirit or oil or substance that gives forth an inflammable vapour at a temperature below 100° Fahrenheit), shall be, or shall be allowed to be, brought, had, or used dangerously near to such carriage, ship or boat; and no smoking shall be allowed in, on, or dangerously near to the same, provided that when the use of a light for the purpose of such loading or unloading is unavoidable, a lamp of such construction, position, or character as not to cause any danger from fire or explosion may be used; and no person, while handling any explosive (except gunpowder explosive of Division 1, Class 6, or explosive of class 7, if packed, in accordance with the packing rules), shall wear boots or shoes with iron or steel nails, heels, or tips.

V. In loading or unloading any explosive, the casks and packages containing the same shall be passed from hand to hand and not rolled upon the ground; they shall not be thrown or dropped down, but shall be carefully deposited and stored.

VI. The explosive shall not be conveyed except in the interior of a carriage so enclosed on all sides with wood or metal, or in the hold of a ship or boat having a close deck, so closed as effectually to protect the explosives against accident by fire from without. If the explosive cannot be so secured, it shall be completely covered with painted cloth, tarpaulin, or other suitable material so as to effectually protect it against communication of fire.

VII. There shall not be any iron or steel in the interior of the portion of the carriage or vessel with which the case containing the explosive is in contact, unless the same be effectually covered with leather, wood, cloth or other suitable material.

VIII. In the stowing of explosive, due precautions shall be taken by means of a partition or otherwise, and by careful stowing, to secure such explosive from being brought into contact with, or endangered by, any other article or substance conveyed in such carriage or vessel which is liable to cause fire or explosion; and if the explosive is dangerously affected by water, due precautions shall be taken to exclude water from coming into contact with such explosive.

IX. The amount of explosive conveyed in any one carriage or vessel at any one time shall not exceed 2,000 lb. unless the carriage be so enclosed on all sides with wood or metal, or the vessel have a close deck, so closed as effectually to protect the explosive against accident by fire from without, in which case the amount of explosive conveyed shall not exceed the following:—

	Tons.
In any one carriage on a railway	10
„ „ other carriage	2
„ „ vessel	20

NOTE.—This rule must in the case of dynamite conveyed by railway be read subject to paragraph XII of Rule 6.

X. Nothing in the foregoing rules (except Rule I) shall apply to any explosive of the 1st division of the sixth (ammunition) class, provided all due precautions are taken for the prevention of accidents.

5. The following rules shall be observed with respect to the conveyance of explosives otherwise than by public railway:—

I. No explosive shall be conveyed in a carriage or boat whilst carrying or plying for public passengers, unless the quantity be less than 5 lb., and notice has been given beforehand to the person in charge of such carriage or boat, provided that there shall not be conveyed in

any such carriage or boat any explosive of the 5th (fulminate) class, or any explosive of the 3rd division of the 6th (ammunition) class or of the 1st division of the 3rd (nitro-compound) class, except—

(i) dynamite, which may be carried in the form of cartridges up to the limit of 5 lb. provided that no detonators are carried in the same compartment; and

(ii) detonators to the number of 200, provided that the amount of fulminate of mercury in the package or packages containing the detonators shall in no case exceed in the aggregate 3 oz. (a certificate to this effect being given by the Agent of the Company by whom the detonators are tendered for transport), provided also that no dynamite is carried in the same compartment.

II. With respect to the conveyance by carriage or vessel of explosive of the 5th (fulminate) class, or of the 3rd division of the 6th (ammunition) class, or of the 1st division of the 7th (firework) class, or of larger quantities than 5 lb. of any other explosive, the following regulations shall be observed:—

(1) The person in charge of the carriage or vessel shall not drive or conduct the same in a dangerous or reckless manner, and shall take all due precautions to avoid fire and explosion, and no person shall do any act or thing in relation to the explosive which tends to cause fire or explosion, and is not reasonably necessary for the conveyance of the explosive or for work immediately connected with such conveyance; and a person who is intoxicated shall not have charge of any carriage or vessel conveying explosive, and shall not be permitted to be in, or on, or attending, the same.

(2) A person shall not forward to any warehouseman or carrier a consignment of explosive, unless he has given notice to such warehouseman or carrier beforehand stating the name and quantity of the explosive proposed to be conveyed and the name and address of the proposed consignee, and has had an intimation that the warehouseman or carrier is prepared to receive the consignment; and a warehouseman or carrier shall not make such an intimation, nor receive such consignment, unless he is prepared to receive it, and forthwith to despatch the same, or to deposit it in a magazine or at a place at which a person is licensed to possess the same.

(3) The carriage or vessel conveying the explosive shall be in charge of, and constantly attended by, some competent person, or by a sufficient number of competent persons, and such persons shall not, if the amount of explosive conveyed exceed 100 lb., stop or delay for a longer time than may be reasonably necessary, or stop unnecessarily at any place where such stopping would be attended with special public danger.

7. If any person commits a breach of any of the foregoing rules relating to the mode of conveyance of explosives, he shall be punished with a fine which may extend to Rs. 1,000.

(True Extract.)

(Signed) J. F. PRICE,
Chief Secretary.

G.O., dated 27th June 1894, No. 250, Marine:—

Read—the following paper:—

Telegram from the Chairman, Harbour Trust Board, Madras, dated 25th June 1894.

Order—dated 27th June 1894, No. 250 Marine.

The following erratum will be published in the *Fort St. George Gazette*:—

ERRATUM.

In Rule (*i*) of the rules to regulate the transport and importation of explosives in the port of Madras omit the word and figure "Division 2" in the first line.

(True Extract.)

(Signed) J. F. PRICE,
Chief Secretary.

G.O., No. 1794, Judicial, dated 20th July 1894 :—

Read—the following papers :—

G.O., dated 16th June 1894, No. 232, Marine.

ABSTRACT.—Notifying the rules regulating the transport and importation of explosives in the Port of Madras.

G.O., dated 27th June 1894, No. 250, Marine.

ABSTRACT.—Notifying an erratum in Rule (*i*) of the rules regulating the transport and importation of explosives in the Port of Madras.

Order—dated 20th July 1894, No. 1794, Judicial.

At the request of this Government, the Right Honorable the Secretary of State recently obtained and forwarded a copy of a memorandum prepared by Her Majesty's Chief Inspector of Explosives on the subject of the explosion of dynamite which occurred at Santander in November last. In this memorandum the Chief Inspector expressed the opinion that the circumstances attendant upon the explosion proved the sufficiency of the distances adopted in the Table of Distances in use in England. This table, which shows the minimum distances to be maintained between magazines for the storage of explosives and various classes of buildings (styled "Protected works" in the table), together with sections 46 and 47 of the Statute 38 Victoria, Chapter 17, which are alluded to in the table, will be printed as appendices to this order and communicated to all District Magistrates and the Commissioner of Police, Madras, for their information and guidance. Particular attention should be paid to Note (*c*) to the table which contains information regarding the storage of detonators in proximity to explosives and, in this connection, a reference should be made to G.O., dated 18th February 1881, No. 381, Judicial, and to the conditions endorsed upon Form E of the licenses prescribed under the Indian Explosives Act, 1884.

(True Extract.)

(Signed) A. D. G. SHELLEY, Captain, R.E.,
Under Secretary to Govt., P.W.D.,
for Chief Secretary.

[Appendices.

APPENDIX I.

TABLE showing Distances from Protected Works for Magazines an

natural features of the ground or by good and substantial artificial mounds of earth or mine refuse of such height th
f. Provided that when a natural hill so intervenes as to afford a degree of protection which in the opinion of a Go

to be observed when Gunpowder only is to be stored or other explosives up to the equivalent of 5,000 lbs. of Gunpowder, ever

,000	14,000	15,000	16,000	17,000	18,000	19,000	10 "tons" **20,000**	22,000	24,000	26,000	28,000	15 "tons" **30,000**	32,000	34,000	36,000	38,000	20 "tons" **40,000**	42,000	44,000
56	57	57	58	58	59	59	**60**	61	62	63	64	**65**	66	67	68	69	**70**	71	72
13	114	115	116	117	118	119	**120**	122	124	126	128	**130**	132	134	136	138	**140**	142	144
"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
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	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
	220	225	230	235	240	245	**250**	265	280	295	310	**325**	340	355	370	385	**400**	415	430
	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
	290	300	305	310	315	325	**330**	345	355	370	380	**395**	410	420	435	445	**460**	475	485
	205	215	220	230	235	245	**250**	265	280	295	310	**325**	340	355	370	385	**400**	415	430
	655	690	720	750	785	815	**850**	920	990	1,060	1,1[illegible]0	**1,200**	1,265	1,330	1,395	1,460	**1,525**	1,590	1,655
	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
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	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
	05	2,025	2,040	2,060	2,075	2,095	**2,110**	2,145	2,180	2,215	2,255	**2,290**	2,325	2,360	2,395	2,430	**2,465**	2,500	2,535
		3¼	3¼	3¼	3½	3½	**3½**	3¾	3¾	4	4¼	**4¼**	4½	4¾	4¾	5	**5¼**	5¼	5½

o modification under special circumstances.
ecified in the second (Workshop) line of the table. The same rule will apply to two or more magazines, *not* in a factory, belonging to th

portion of not less than 2¼ lb. of explosive per 1,000 detonators. (This proportion represents roughly about 44,000 detonators of " se
-space shall intervene between any detonators in such annexe and the interior of the main magazine.

d other Danger Buildings.

t a line drawn from any part of the Magazine or Danger Building to any part of the Protected Work in qu
vernment Inspector justifies a further reduction, the distance shown in the Table will be reduced to one-qu

half pound of such other explosive (with certain exceptions) being reckoned as 1 *lb. of Gunpowder.*

46,000	48,000	25 "tons" 50.000	52,000	54,000	56,000	58,000	30 "tons" 60.000	62,000	64,000	66,000	68,000	35 "tons" 70.000	72,000	74,000	76,000	78,000	40 "tons" 80.0
73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	9
146	148	150	152	154	156	158	160	162	164	166	168	170	172	174	176	178	18
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445	460	475	490	505	520	535	550	565	580	595	610	625	640	655	670	685	70
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500	510	525	540	550	565	575	590	605	615	630	640	655	670	680	695	705	72
445	460	475	490	505	520	535	550	565	580	595	610	625	640	655	670	685	70
1,720	1,785	1,850	1,915	1,980	2,045	2,110	2,175	2,240	2,305	2,370	2,435	2,500	2,570	2,640	2,710	2,780	2,85
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2,570	2,605	2,640	2,675	2,710	2,745	2,780	2,815	2,850	2,885	2,920	2,955	2,990	3,025	3,060	3,100	3,135	3.17
5¾	5¾	6	6¼	6¼	6½	6½	6¾	7	7	7¼	7¼	7½	7¾	8	8	8¼	

estion will pass through the intervening ground or mound, the
rter. In no case, however, is the distance from Her Majesty's

82,000	84,000	86,000	88,000	45 "tons" 90.000	92,000	94,000	96,000	98,000	50 "tons" 100000
91	92	93	94	95	96	97	98	99	100
182	184	186	188	190	192	194	196	198	200
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,,	,,	,,	,,	,,	,,	,,	,,	,,	,,
715	730	745	760	775	790	805	820	835	850
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735	745	760	770	785	800	810	825	835	850
715	730	745	760	775	790	805	820	835	850
2,915	2,980	3,045	3,110	3.175	3,240	3,305	3,370	3,435	3.500
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3,205	3,240	3,275	3,310	3,345	3,380	3,415	3,450	3,485	3,520
8½	8¾	8¾	9	9¼	9¼	9½	9¾	9¾	10

e same occupier or by mutual consent of the respective occupiers.

tuple" strength ; with detonators of greater strength the number would be of course less.

In any case where the Protected Work is effectively screened from the Magazine or Danger Building either by distance from that Protected Work (except for quantities of 1,000 lbs. and under) will be reduced on Palaces to be less than two miles.

The figures in italics are the dista

Amount of Explosive to be allowed in the Magazine or Danger Building ..	pounds	500	1,000	1 "ton" 2,000	3,000	2 "tons" 4,000	5,000	6,000	7,000	8,000	9,000	5 "tons" 10,000	11,000	12,000
Distances to be kept clear from—														
Room used in connection with the magazine, in pursuance of section 46 of the Act ..	yards	50 *35*	50 *35*	50	51	52	52	53	53	54	54	55	55	56
Workshop used in connection with the magazine, in pursuance of section 47 of the Act [*see* note (*b*)]. ..	,,	,,	75 *50*	100 *75*	101 *90*	102	104	105	106	108	109	110	111	113
Mineral or private railway, whether worked by steam or otherwise	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,
Highway or public footpath.	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,
Promenade or open place of resort for the public or for persons carrying on any trade or business ..	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,
Canal or navigable water ..	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,
Dock	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,
River wall or sea-water ..	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,
Pier or jetty	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,
Reservoir	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,
Room or workshop in connection with another magazine, store, or registered premises	,,	100 *65*	150 *100*	200 *150*	200 *175*	200	200	200	200	200	200	200	205	210
Any other room or workshop or any shop	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,
Magazine for explosive ..	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,
Store do. ..	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,
Furnace, kiln, or fire for the use of any boiler, engine, or machine, or for any manufacturing purpose	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,
Public railway	,,	,,	,,	,,	210	215 *200*	225 *210*	235 *220*	240 *230*	250 *245*	255	265	270	280
Dwelling-house, *with* the consent, in writing, of the occupier	,,	50 *35*	75 *50*	100 *75*	110 *90*	120 *100*	130 *110*	140 *125*	145 *140*	155 *150*	165 *160*	175	180	190
Dwelling-house, *without* such consent	,,	100 *65*	150 *100*	200 *150*	240 *175*	280 *200*	320 *255*	365 *310*	405 *360*	445 *415*	485 *470*	525	560	600
Factory not belonging to Government	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,
Church or chapel	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,
University, college, or school	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,
Hospital or public institution	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,
Town hall or court of justice	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,
Covered market	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,
Theatre or building wherein persons are accustomed to assemble	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,
Public building in charge of the Commissioners of Her Majesty's Works and Public Buildings ..	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,
Factory or magazine occupied by a Secretary of State, the Commissioners of the Admiralty, or other Department of the Government, *with* the consent, in writing, of the Secretary of State, Commissioners, or Department ..	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,
Ditto *without* such consent	,,	880 *585*	1,320 *880*	1,760 *1,320*	1,780 *1,540*	1,805 *1,760*	1,825 *1,790*	1,850 *1,820*	1,870 *1,850*	1,890 *1,880*	1,910 *1,905*	1,930	1,950	1,970
Palace or house of residence of Her Majesty, Her Heirs and Successors	miles	2	2	2	2⅛	2¼	2¼	2⅜	2½	2½	2⅝	2¾		

Notes.—(*a*) This table furnishes the basis on which applications for Licenses will be consi
(*b*) Buildings and magazines *inside* a factory will be required to preserve the dista
(*c*) Detonators may be kept in an annexe near to or adjoining a magazine under t
(1) The amount of explosive contained in the detonators must not exceed 10
(2) The detonator annexe must be so constructed that not less than 2 ft. of r

APPENDIX II.

Provision in favour of gunmakers, &c., making cartridges.

46. The occupier of a magazine, store, or registered premises for any explosive shall not be required by this Act to take out a factory license by reason that in connexion with such magazine, store, or premises he fills for sale or otherwise any cartridge for small arms with the said explosive, so that he observe the following regulations; namely,

(1) There shall not be in the room in which such filling is being carried on more than five pounds of gunpowder, or the prescribed amount of any other explosive, except it is made up into safety cartridges; and

(2) Any work unconnected with the making of the cartridges shall not be carried on in the room while such filling is being carried on; and

(3) There shall not be in the room while such filling is being carried on any fire nor any artificial light, except a light of such construction, position, or character as not to cause any danger of fire or explosion; and

(4) In the case of a magazine or store, the room in which the filling is carried on shall be detached from the magazine or store, but in the immediate neighbourhood thereof, and at such distance therefrom as may be specified, in the case of a magazine by the license, and in the case of a store by an Order in Council relating to stores; and

(5) The occupier shall give notice in the case of a magazine to the Secretary of State, and in the case of a store or registered premises to the local authority, that he intends to carry on such filling of cartridges as is allowed by this section.

Provided that this section shall not, except with the consent of the Secretary of State, apply to any magazine or store for which a continuing certificate has been obtained under this Act, which consent the Secretary of State, if satisfied that the filling of cartridges in accordance with this section ought (due regard being had to the safety of the public) to be allowed, may grant either absolutely or upon such conditions as he may, under the special circumstances of the case, think expedient to secure the safety of the public.

The regulations in this section and any conditions so made by the Secretary of State, as last aforesaid, shall be deemed to be general rules under this Act relating to the magazine, store, and registered premises respectively, and the breach of them shall be punished accordingly.

Provision in favour of owners of mines and quarries, as to making charges, &c., for blasting.

47. The occupier of any magazine or store for any explosive shall not be required by this Act to take out a factory license by reason that, in connexion with such magazine or store, he, by filling cartridges, making charges, drying, sifting, fitting, or otherwise, adapts or prepares the said explosive for use exclusively in his mine or quarry, or in some excavation or work carried on by him or under his control, so that he observe the following regulations; namely,

(1) There shall not be in the workshop in which such adaptation or preparation is carried on more than one hundred pounds of gunpowder or the prescribed amount of any other explosive; and

(2) Any work unconnected with such adaptation or preparation shall not be carried on in the said workshop while such adaptation or preparation is being carried on; and

(3) The said workshop shall be detached from the magazine or store, but in the immediate neighbourhood thereof, and at such distance therefrom as may be specified, in the case of a magazine by the license and in the case of a store by an Order in Council relating to stores; and

(4) An explosive of one description shall not be converted into an explosive of another description, and shall not be unmade or resolved into its ingredients; and

(5) The occupier shall give notice, in the case of a magazine to the Secretary of State, and in the case of a store to the local authority, that he intends to carry on such adaptation or preparation as is allowed by this section.

Provided that this section shall not, except with the consent of the Secretary of State, apply to any magazine or store for which a continuing certificate has been obtained under this Act, which consent the Secretary of State, if satisfied that the adaptation or preparation in accordance with this section, ought (due regard being had to the safety of the public) to be allowed, may grant either absolutely or upon such conditions as he may, under the special circumstances of the case, think expedient to secure the safety of the public.

The regulations in this section, and any conditions so made by the Secretary of State as last aforesaid, shall be deemed to be general rules under this Act relating to the magazine and store respectively, and the breach of them shall be punished accordingly.

The following general rules shall apply as if the said workshop were a danger building, that is to say, if the adaptation or preparation carried on is of gunpowder only, the general rules with respect to a factory in Part One of this Act, and in any other case the prescribed general rules; and the breach of such general rules shall be punished in like manner as the breach of general rules with respect to a factory.

Order—dated 8th August 1894, No. 140 R., Judicial.

Recorded.

(True Extract.)

(Signed) F. D. BIRD,
for Chief Secretary.

G.O, dated 2nd July 1895, Nos. 193, 194, Marine.

Read—the following papers:—

G.O., dated 14th May 1895, No. 1013, Judicial.

Read—Letter from J. P. HEWETT, Esq., C.I.E., Officiating Secretary to the Government of India, Home Department (Public), to the Chief Secretary to the Government of Madras, dated Calcutta, 28th March 1895, No. 4-Public—520.

ABSTRACT.—Requesting to be favoured with the opinion of His Excellency the Governor in Council on certain suggestions of the committee appointed to propose amendments of the rules under the Explosives Act.

Order—dated 14th May 1895, No. 1013, Judicial.

* * * * *

4. The following proposed changes in the Port rules will be referred to the Marine Department for remarks:—

The Chief Inspector of Explosives has pointed out that dynamite and other high explosives, when they are made up (as they frequently are) into cartridges or charges for blasting, fall under class 6 and not under any other class of explosives mentioned in rule 1. Certain provisions relating to ammunition in the rules for the transport and importation of explosives in the port of Madras, published under the Madras Government Order, No. 232, Marine, dated 16th June 1894, appear not to be intended to apply to consignments of dynamite and high explosives; but under the present wording they would apply to them if they are in cartridges or cases. The committee's recommendation would be carried out by adding in rules (*c*) and (*h*) of the Port rules of June 1894, before the words "Class 6, Ammunition class," the words "the 1st division of". "Division I, Class 6" would also be specified in the parenthesis at the beginning of rule (*i*).

(True Extract.)

(Signed) J. F. PRICE,
Chief Secretary.

To the Marine Department.

No. 1114.

Referred to the Chairman, Harbour Trust Board, for remarks with advertence to paragraph 4 of the order.

(By order.)

(Signed) C. G. TODHUNTER,
Ag. Assistant Secretary.

OOTACAMUND,
23*rd May* 1895.

From W. J. H. LE FANU, Esq., I.C.S., Chairman, Harbour Trust Board, Madras, to the Chief Secretary to Government, dated 31st May 1895, No. 900.

I have the honour to acknowledge the receipt of G.O., Judicial, No. 1013, dated May 14th—current No. 367, Marine Department, herewith returned—forwarded under endorsement, No. 1114, dated 23rd idem, for remarks with reference to paragraph 4.

2. It is noted that, in the opinion of the Chief Inspector of Explosives, dynamite, when made up into charges for blasting, falls under class 6, the Ammunition class, and he suggests that an addition to rule (*c*) should be made compelling vessels carrying "Division 2—Ammunition class" to anchor one mile north of the harbour as provided in that rule.

3. When these rules were framed the Trustees of this Harbour objected to gunpowder being landed or shipped inside the harbour and to dynamite and allied explosives entering it at all.

4. The objection to dynamite still continues; but, consequent upon a correspondence with the Right Honorable the Secretary of State regarding the exclusion from the harbour of the S.S. *Rewa* in December 1891, the objection to gunpowder has been withdrawn.

5. It is now customary to permit gunpowder to be landed and shipped inside the harbour under the provisions of rules (*j*) and (*k*), though doing so is in direct opposition to rule (*c*), which precludes this being done inside the harbour.

6. Under these circumstances, and as the proposed alteration in the rules would still exclude gunpowder from being landed or shipped inside the harbour under rule (*c*), while allowable under (*j*) and (*k*), I submit a revised draft of rule (*c*), intended to bring that rule into harmony with the existing practice. This rule, as amended, now provides that any explosives, other than Classes 2, 3, 4, 5 and Division I of Class 7, or Class 6 charged with or containing explosives of Classes 2, 3, 4 or 5, may be landed and shipped inside the harbour. In other words, gunpowder, the properties of which are perfectly well known, ammunition of all kinds, unless charged with or containing explosives of Classes 2, 3, 4 or 5, and manufactured fireworks may be admitted to and landed or shipped inside the harbour. All other classes of explosives are excluded.

7. To bring rule (*h*) into harmony with (*c*) a slight alteration, as noted in italics, has been made, which has also the advantage of simplifying the rule.

8. With regard to rule (*i*), the Trustees are of opinion that the whole of "Class 6—Ammunition class" may be excluded from the operation of this rule; as, although dynamite in charges for blasting is ruled as coming under that class, this does not necessitate smoking being prohibited and all fires extinguished on board on that account. Rule (*i*) might therefore remain unaltered.

9. The Trustees would take this opportunity of requesting that rule (*g*) may be modified. When a large quantity of dynamite is being landed between the old and new stone revetments, serious delay occurs if only one boat is permitted to approach the beach at a time: two boats are now therefore allowed to beach simultaneously, and as, when once the cases come to the shore, the more expeditiously they are removed the better, permission might be granted for the two which are allowed to beach together also to unload at the same time.

ENCLOSURE.

EXTRACT of Proceedings of the Trustees of the Harbour of Madras, at a meeting held at the offices of the Board on Friday, the 31st day of May 1895.

* * * * *

5. Read Endorsement, No. 1114, dated 23rd May 1895, from the Chief Secretary to Government, forwarding G.O., No. 1013, Judicial, dated 14th idem, for remarks, with reference to paragraph 4, regarding suggested alterations in the rules for the landing and shipment of explosives at the port of Madras.

Read draft reply.

Resolution.—Approved.

* * * * *

(True Extract.)

(Signed) C. PINSENT,
Secretary, Harbour Trust Board.

Order—dated 2nd July 1895, No. 193, Marine.

The following notification will be published in the *Fort St. George Gazette*:—

NOTIFICATION.

In accordance with section 18 (1) and (3) of Act IV of 1884 (The Indian Explosives Act), the following proposed amendments in the rules to regulate the transport and importation of explosives in the port of Madras, which were promulgated for guidance with the *Fort St. George*

Gazette of the 26th June 1894, are published for the information of persons likely to be affected thereby, and notice is hereby given that these amendments will be taken into consideration at or after the 15th day of August 1895:—

For rules (*c*), (*g*) and (*h*) substitute the following:—

Rule (*c*).—Every vessel entering the port of Madras, having on board explosives of Classes 2, 3, 4 or 5, or Division 1 of Class 7 (as defined under the rules made by the Governor-General in Council under section 5 of the Indian Explosives Act, 1884), or having on board explosives of "Class 6—Ammunition class" charged with or containing explosives of Classes 2, 3, 4 or 5 in excess of 100 lb. in weight, shall, on arrival at the port, proceed to a distance of not less than one mile north of the north arm and half-a-mile off-shore outside the harbour, and shall not be permitted to enter the harbour until all such explosives have been discharged; after which, provided the requirements of rule (*e*) as regards the security of explosives remaining on board have been met, the vessel may be permitted to enter the harbour and to discharge or ship therein other explosives not being of Classes 2, 3, 4 or 5, or ammunition containing or charged with explosives of Classes 2, 3, 4 and 5, or fireworks composition, Class 7, Division 1. Whilst any explosives shall remain on board, such vessel shall have a red flag kept flying at the foremast head between sunrise and sunset and one red light at the ensign staff or peak in addition to the usual anchor light between sunset and sunrise, and the master or chief officer shall remain on board of her until the explosives intended for the port of Madras shall have been discharged.

Rule (*g*).—All barges, lighters and boats having any explosives on board shall remain off-shore until orders are received from the officer directing the landing to approach the beach. Not more than two such barges, lighters or boats shall be permitted to unload at a time, and such unloading shall take place either between the old and new stone revetments protecting the fore-shore beyond Rayapuram and Casimode or at the north end of the new revetment according to the state of wind and current.

Rule (*h*.—With the sanction of the Chairman of the Harbour Trust Board, which will be accorded only on production of the required special permit from the Collector of Sea Customs, explosives not prohibited under rule (*c*) if properly packed as required by rule 2 of the rules issued by the Governor-General in Council under section 5 of the Indian Explosives Act, 1884, may be shipped on board, or landed from, a vessel lying at the ordinary moorings within the harbour. Shipment of any such explosives shall be effected under the precautions and conditions mentioned and contained in these rules, and such explosives must be taken on board the vessel for which they are intended immediately after the boat by which such explosives are taken off to such vessel has come alongside the same, and no cargo-boat or other vessel having fire on board shall be allowed to lie near such vessel during the time that any explosives are being shipped on board the same.

(True Extract.)

(Signed) J. F. PRICE,
Chief Secretary.

Letter—to the Secretary to the Government of India, Home Department, dated Ootacamund, 2nd July 1895, No. 194, Marine.

G.O., dated 2nd July 1895, No. 193.

With reference to section 5 (1) of Act IV of 1884 (The Indian Explosives Act), I am directed to forward, for sanction, a draft of proposed amendments in the rules to regulate the transport and importation of explosives in the port of Madras which were approved in Mr. Lyall's letter, No. 1552 of the 31st May 1892.

2. I am to request that, should there be no objection, the sanction applied for may reach this Government before the 15th August next.

(Signed) J. F. PRICE,
Chief Secretary.

G.O., dated 3rd September 1895, No. 269, Marine.

Read—again the following paper:—

G.O., dated 2nd July 1895, No. 193, Marine.

ABSTRACT.—Directing the publication in the *Fort St. George Gazette* of a notification relating to certain amendments in the rules to regulate the transport and importation of explosives in the port of Madras; and forwarding to the Government of India, for sanction, a draft of the amendments.

Read—also the following paper:—

From L. M. THORNTON, Esq., Deputy Secretary to the Government of India, Home Department (Public), to the Chief Secretary to the Government of Madras, dated Simla, the 19th August 1895, No. 1207.

In reply to your letter, No. 194, dated the 2nd ultimo, I am directed to say that the Governor-General in Council sanctions, under section 5 (1) of the Indian Explosives Act, IV of 1884, the revised draft rules therewith submitted in substitution for rules (*c*), (*g*) and (*h*) of the rules for regulating the transport and importation of explosives in the port of Madras which were sanctioned in Home Department letter, dated the 31st May 1892, No. 1552.

* * * * *

Order—dated 3rd September 1895, No. 269, Marine.

The following notification will be published in the *Fort St. George Gazette*:—

NOTIFICATION.

In exercise of the power conferred by section 5 of the Indian Explosives Act, IV of 1884, the Governor of Madras in Council is pleased, with the previous sanction of the Governor-General in Council, to make the following alterations in the rules to regulate the transport and importation of explosives in the port of Madras, which were promulgated for guidance in the *Fort St. George Gazette* of the 26th June 1894:—

For rules (*c*), (*g*) and (*h*) substitute the following:—

Rule (*c*).—Every vessel entering the port of Madras having on board explosives of Classes 2, 3, 4 or 5, or Division I of Class 7 (as defined under the rules made by the Governor-General in Council under section 5 of the Indian Explosives Act, 1884), or having on board explosives of "Class 6—Ammunition class" charged with or containing explosives of Classes 2, 3, 4 or 5 in excess of 100 lb. in weight, shall, on arrival at the port, proceed to a distance of not less than one mile north of the north arm and half-a-mile off-shore outside the harbour, and shall not be permitted to enter the harbour until all such explosives have been discharged; after which, provided the requirements of rule (*e*) as regards the security of explosives remaining on board have been met, the vessel may be permitted to enter the harbour and to discharge or ship therein other explosives not being of Classes 2, 3, 4 or 5, or ammunition containing or charged with explosives of Classes 2, 3, 4 and 5, or fireworks composition, Class 7, Division I. Whilst any explosives shall remain on board, such vessel shall have a red flag kept flying at the foremast head between sunrise and sunset and one red light at the ensign staff or peak in addition to the usual anchor light between sunset and sunrise, and the master or chief officer shall remain on board of her until the explosives intended for the port of Madras shall have been discharged.

Rule (*g*).—All barges, lighters and boats having any explosives on board shall remain off-shore until orders are received from the officer directing the landing to approach the beach. Not more than two such barges, lighters or boats shall be permitted to unload at a time, and such unloading shall take place either between the old and new stone revetments protecting the fore-shore beyond Ráyapuram and Casimode or at the north and of the new revetment according to the state of wind and current.

Rule (*h*).—With the sanction of the Chairman of the Harbour Trust Board, which will be accorded only on production of the required special permit from the Collector of Sea Customs, explosives not prohibited under rule (*c*), if properly packed as required by rule 2 of the rules issued by the Governor-General in Council under section 5 of the Indian Explosives Act, 1884, may be shipped on board, or landed from, a vessel lying at the ordinary moorings within the harbour. Shipment of any such explosives shall be effected under the precautions and conditions mentioned and contained in these rules, and such explosives must be taken on board the vessel for which they are intended immediately after the boat by which such explosives are taken off to such vessel has come alongside the same, and no cargo-boat or other vessel having fire on board shall be allowed to lie near such vessel during the time that any explosives are being shipped on board the same.

(True Extract.)

(Signed) J. F. PRICE,
Chief Secretary.

G.O., No. 540, Marine, dated 27th June 1898:—

Read—the following papers:—

From J. THOMSON, Esq., I.C.S., Chairman, Harbour Trust Board, Madras, to the Secretary to Government, Marine Department, dated 5th November 1897, No. 3505.

I have the honour to submit, for the information and for favour of the orders of Government, copy of resolution carried at the Board's last meeting regarding the landing and shipping of gunpowder inside the harbour.

2. Under present regulations any quantity may be admitted, and the Trustees agree with the Deputy Conservator that a limit should be fixed.

3. It is only Government powder on board British India home line steamers that is imported in any considerable quantity; these vessels may also have more on board intended for Calcutta.

The magazines are, it is understood, passed by the Board of Trade before the gunpowder is shipped in the Thames.

ENCLOSURES.

From Commander W. AVES, R.I.M., Acting Deputy Conservator of the Port of Madras, to the Chairman, Harbour Trust Board, Madras, dated 10th September 1897, No. 15 H.

I have the honour to request that the attention of the Board may be directed to the rules under which at present any quantity of gunpowder can be landed here or taken on board a vessel inside the harbour, as it seems to me that in case of an explosion, there is every likelihood of the harbour and vessels therein, as also all buildings in the vicinity being seriously damaged, if not, entirely wrecked, and I consider, therefore, that the rules to which I have referred require reconstruction.

EXTRACT of Proceedings of the Trustees of the Harbour of Madras, at a meeting held at the offices of the Board on Friday, the 1st day of October 1897.

* * * * *

7. Read letter from the Deputy Port Conservator, No. 15 H., dated 10th September, regarding the landing and shipping of gunpowder inside the harbour.

Read minutes by trustees.

Resolved that the Deputy Conservator be requested to inform the Board in what respect he considers the present rules and arrangements to be dangerous or to require revision.

* * * * *

From Commander W. AVES, R.I.M., Deputy Conservator of the Port of Madras, to the Secretary, Harbour Trust Board, Madras, dated 20th October 1897, No. 67 H.

In compliance with the Board's resolution No. 7, dated 1st October 1897, forwarded with your No. 268 C., dated 6th idem, I have the honour to state that the reason, I consider the regulations regarding the admission of gunpowder inside the harbour as dangerous, is because no limit has been fixed as to the quantity which may be so brought inside, either by a vessel which has to discharge or load it or otherwise, and I consider that a limit should be given unless the magazines in which it is stowed are fitted so as to be easily flooded at a moment's notice, which is not the case at present. Moreover, they are generally situated on the tween decks on the foreside of the hatch, and should fire occur in that hold the only way of emptying the magazine is through the hatch itself, which would be impossible if the fire were of any extent. It may be suggested that a hole could be cut in the upper deck and the hose played into the magazine, but I would point out that, in the first place, such hole would have to be cut through an iron deck of about $\frac{1}{2}$ to $\frac{3}{4}$ inch thick, and when this was accomplished, only a portion of the barrels of powder could be reached by the water. The magazines not being water-tight, they could never be filled so as to immerse the powder.

EXTRACT of Proceedings of the Trustees of the Harbour of Madras, at a meeting held at the offices of the Board on Friday, the 29th day of October 1897.

* * * * *

2. Read letter from the Deputy Port Conservator, No. 67 H., dated 20th October 1897, replying to Board's resolution, No. 7 of 1st idem, regarding the landing and shipping of gunpowder inside the harbour.

Read minutes by trustees.

Read and discussed previous papers in connection with the exclusion of the S.S. *Rewa* from the harbour in December 1891 and despatch from the Right Honourable the Secretary of State, No. 2, Financial (Stores), dated 18th February 1892.

Proposed by Captain Street, R.I.M., that Government should be addressed on the subject, and informed that there is no limit to the amount of gunpowder that may be brought into the harbour and discharged, nor in the amount to be taken on board inside the harbour, and that all vessels importing or taking on board over 100 lb. of gunpowder should do so outside the harbour in the place set apart for dealing with other explosives.

Seconded by Mr. Wilson.

Carried.

* * * * *

Memo. No. 751 E.

It is observed that, under existing regulations,* gunpowder in any quantity can be brought into the harbour for landing or shipment, provided it is "secured † in a properly constructed magazine to be approved of by the Deputy Conservator of the Port or other officer deputed by him to inspect it."

* G.O., No. 269, Marine, dated 3rd September 1895.

† Rule (*e*) in G.O., No. 232, Marine, dated 16th June 1894.

2. The Harbour Trust Board now proposes that the rules should be altered so as to provide that all vessels importing or taking on board over 100 lb. of gunpowder should do so outside the harbour, in the place set apart for dealing with other explosives.

3. Vessels with gunpowder in quantities of over 100 lb. intended for *other ports* would still be free to enter and lie in the harbour.

4. It is thus, apparently, assumed by the Harbour Trust Board that, so long as the magazine is not opened to land or ship explosives, there is practically no risk in a vessel with explosives on board lying in the harbour. The opening of the magazine being thus the source of danger, it would follow that *no* landing or shipping inside the harbour should be allowed, even of quantities less than 100 lb. The proposal of the Harbour Trust Board would, therefore, not go far enough.

5. The undersigned is directed to request an expression of opinion from the point of view set out above.

15th December 1897. (Signed) W. B. DEWINTON,
Ag. Secretary to Government.

From the Chairman, Harbour Trust Board, Madras, dated 2nd February 1898, No. 4727.

From J. N. ATKINSON, Esq., I.C.S., Chairman, Harbour Trust Board, to the Secretary to Government, Marine Department, dated Madras, 4th February 1898, No. 4753.

Replying to memorandum No. 751 E., dated 15th December 1897, I have the honour to say that the Harbour Trust Board has very fully considered the proposal to restrict the quantity of gunpowder that may be landed or shipped within the limits of the harbour, and while recognizing that, as pointed out by Government, the strictly logical conclusion would be to prohibit all landing or shipping, or the opening of magazines within those limits, the Board is unwilling to advocate a restriction which might produce very great inconvenience to vessels both of the Royal Indian Marine and Mercantile Marine, the more so that the restriction proposed is calculated to ensure not absolute immunity, but only the diminution of a somewhat remote risk of accident.

2. It has been ascertained that at Colombo there are no restrictions on the opening of magazines or landing or shipping of gunpowder; the only regulation being that ships carrying more than 5 cwt. of explosives shall not enter the harbour unless the same

be properly stored in a magazine. This, however, does not settle the question so far as Madras is concerned, and the trustees, while anxious to interfere with trade as little as possible, yet having regard to the magnitude of the interests concerned and to the many disasters that have occurred elsewhere from lack of timely precautions, have thought it right to go as far as possible in the direction of keeping explosives safely shut up. The measure of risk is, of course, increased in proportion to the time the magazine is left open, and therefore the limit of 100 lb. was adopted as so small a quantity could be moved in a few minutes.

3. The trustees observe that Government itself is the principal importer of gunpowder in large quantities, and the proposed restriction will therefore, in only exceptional cases, affect the public or the mercantile community. Under these circumstances the trustees adhere to their opinion already expressed in their resolution No. 2, of 29th October 1897, the limit, however, being raised from 100 lb. to 5 cwt.

4. The Board observes that any limit is arbitrary, and 5 cwt. seems as convenient as another and is to some extent in conformity with the Colombo rule. It is suggested that three months' notice of the introduction of the rule might be given.

Memo. No. 99 E.

The undersigned is directed to request that the Chairman, Harbour Trust Board, will be so good as to embody in a draft notification the proposal made in his letter, No. 4753, dated 4th February 1898, and carry the requisite amendments through the existing rules.

16th February 1898. (Signed) W. B. DEWINTON,
Ag. Secretary to Government.

From J. N. ATKINSON, Esq., I.C.S., Chairman, Harbour Trust Board, to the Secretary to Government, Marine Department, dated Madras, 2nd June 1898, No. 1031.

Referring to memorandum No. 99 E., Marine, dated 16th February 1898, I have the honour to submit herewith, for approval and publication in the *Fort St. George Gazette*, a draft notification carrying the proposed alterations for the landing and shipping of explosives through the existing rules.

The alterations are shown in italics.

2. Advantage has been taken of this opportunity to correct the rules where found imperfect otherwise than with regard to the quantity of gunpowder to be handled inside the harbour dealt with in rule (*c*).

3. In Rule (*f*) it was provided that any boat, barge or lighter having explosives on board should not lie closer than half a mile from any of the shipping. This is impracticable, and the distance has therefore been now fixed at "one cable's length or 200 yards." This rule also provided that no lights are allowed on any boat containing explosives, but also directed that all should carry a red light between sunset and sunrise, which was contradictory; an exception has therefore been made in favour of the red light in the case of all boats as well as the properly decked barges which do not exist at this port.

4. Rule (*g*) referred to explosives for discharge outside the harbour, but it did not say so; the omission has now been supplied.

5. Rule (*h*). The definite distance of one cable's length has been inserted in this rule instead of the indefinite expression "near."

6. Rule (*k*). According to this rule it has been necessary to obtain the personal sanction of the Chairman to open a ship's magazine inside the harbour when containing explosives. It has been found necessary to depute this authority on more than one occasion to the Board's Secretary, who is authorised to act in every other case under bye-law No. 21. The omission in the rule is now supplied, which will prevent any difficulty arising during the temporary absence of the Chairman from Madras on casual leave or during public holidays.

Order—No. 540, Marine, dated 27th June 1898.

The amended draft notification submitted by the Chairman, Harbour Trust Board, with his last letter read above, is, with the addition shown below, approved, and will be forwarded for the sanction of the Government of India with reference to section 5 (1) of Act IV of 1884.

2. Seeing that the opening of the magazine while the ship is in harbour constitutes the principal risk, further precautions should, in the opinion of His Excellency the Governor in Council, be provided in Rule *K*. The following addition to the rule will accordingly be made :—

"Such magazine shall remain open only for the time required to remove or load explosives, and that operation shall always be performed in the presence of an officer of the ship."

3. The following notification will be published in the *Fort St. George Gazette* :—

NOTIFICATION.

In accordance with section 18 (1) and (3) of Act IV of 1884 (the Indian Explosives Act), the following proposed amendments in the rules to regulate the transport and importation of explosives in the port of Madras, issued in the *Fort St. George Gazette* of the 26th June 1894 and 10th September 1895, are published for the information of persons likely to be affected thereby, and notice is hereby given that these amendments will be taken into consideration on or after the 1st August 1898.

For Rule (*c*) substitute the following :—

Rule (*c*).—Every vessel entering the port of Madras having on board explosives of classes 2, 3, 4 or 5, or division I of class 7 (as defined under the rules made by the Governor-General in Council under section 5 of the Indian Explosives Act, 1884), or having on board explosives of "class 6—Ammunition class" charged with or containing explosives of classes 2, 3, 4 or 5 in excess of 100 lb. in weight *or having on board, to be discharged, explosives of class* 1—*Gunpowder class—in excess of* 560 *lb. in weight*, shall, on arrival at the port, proceed to a distance of not less than one mile north of the north arm and half a mile off shore outside the harbour and shall not be permitted to enter the harbour until all such explosives have been discharged; after which, provided the requirements of Rule (*e*) as regards the security of explosives remaining on board have been met, the vessel may be permitted to enter the harbour and to discharge or ship therein *explosives of class I—Gunpowder class—not exceeding* 560 *lb. in weight*, or other explosives not being of classes 2, 3, 4 or 5, or ammunition containing, or charged with, explosives of classes 2, 3, 4 and 5, or fireworks composition, class 7, division I. Whilst any explosives shall remain on board, such vessel shall have a red flag kept flying at the foremast head between sunrise and sunset and one red light at the ensign staff or peak, in addition to the usual anchor light between sunset and sunrise, and the Master or chief officer shall remain on board of her until the explosives intended for the port of Madras shall have been discharged.

For Rule (*f*) substitute the following :—

Rule (*f*).—Barges, lighters and boats in the port of Madras having on board any explosives shall be kept scrupulously clean and free from loose explosives and shall not, when at anchor, lie closer than *1 cable's length or 200 yards* from any of the shipping in the port or from any public landing place, and all cases of explosives in any such barges, lighters or boats shall be securely covered with tarpaulins. Whilst any such explosives shall remain on board, there shall be kept a red flag flying on every such barge, lighter or boat between sunrise and sunset and a red light in an elevated position shall be shown from any such barge, lighter or boat between sunset and sunrise. No fires, smoking or matches, shall be allowed on board any such barge, lighter or boat, nor any light of any kind *except the red light mentioned above and except in the case of* properly decked barges on the deck of which may be allowed one lantern of good pattern. *Kerosine or other explosive oil is not to be used for the above-mentioned lights.* The tindal and at least half of the crew of every such barge, lighter or boat shall remain on board thereof until all the explosives are discharged therefrom.

For Rule (*g*) substitute the following :—

Rule (*g*).—All barges, lighters and boats having any explosives on board *to be landed outside of the harbour*, shall remain off shore until orders are received from the officer directing the landing to approach the beach. Not more than two such barges, lighters or boats shall be permitted to unload at a time, and such unloading shall take place either at the bay in the revetment at Cassimode or at the north end of the revetment according to the state of wind and current.

For Rule (*h*) substitute the following :—

Rule (*h*).—With the sanction of the Chairman of the Harbour Trust Board, which will be accorded only on production of the required special permit from the Collector of Sea Customs, explosives not prohibited under Rule (*c*) if properly packed as required by rule 2 of the rules issued by the Governor-General in Council under section 5 of the Indian Explosives Act, 1884,

may be shipped on board, or landed from a vessel lying at the ordinary moorings within the harbour. Shipment of any such explosives shall be effected under the precautions and conditions mentioned and contained in these rules, and such explosives must be taken on board the vessel for which they are intended, immediately after the boat by which such explosives are taken off to such vessel has come alongside the same, and no cargo boat or other vessel having fire on board shall be allowed to lie *nearer than 1 cable's length or 200 yards of* such vessel during the time that any explosives are being shipped on board the same.

For Rule (*k*) substitute the following :—

Rule (*k*).—No magazine on board any vessel containing explosives other than safety fuzes, cartridges and caps shall be opened while such ship is inside the Madras harbour without the permission of the Chairman of the Harbour Trust Board *or other person he may depute to act for him*, except in cases of emergency, and in case, in the opinion of the Chairman of the Harbour Trust Board, the emergency was not such as to justify the Master of such vessel in opening or allowing to be opened such magazine, he shall be deemed to have contravened this rule. *Such magazine shall remain open only for the time required to remove or load explosives, and that operation shall always be performed in the presence of an officer of the ship.*

[Here enter No. 541, Marine, dated 27th June 1898.]

(True Extract.)

(Signed) W. B. DEWINTON,
Secretary to Government.

Letter—to the Secretary to the Government of India, Home Department, dated Ootacamund, 27th June 1898, No. 541, Marine.

With reference to section 5 (1) of Act IV of 1884 (the Indian Explosives Act), I am directed to forward, for the sanction of the Government of India, a draft of proposed amendments in the rules to regulate the transport and importation of explosives in the port of Madras which were approved in Home Department letters Nos. 1552 and 1207, dated, respectively, 31st May 1892 and 19th August 1895.

2. It will be seen from the correspondence printed with the accompanying copy of Proceedings of this Government, No. 540, Marine, dated 27th June 1898, that the proposed amendments originated in the necessity for prescribing some limit to the quantity of gunpowder to be admitted inside the Madras harbour. Under the existing regulations, gunpowder in any quantity can be brought into the harbour for landing or shipment, provided it is "* secured in a properly constructed magazine to be approved of by the Deputy Conservator of the Port or other officer deputed by him to inspect it."

* Rule (*e*) of the rules approved in Home Department letter No. 1552, dated 31st May 1892.

3. The Harbour Trust Board now proposes that the rule should be altered so as to provide that all vessels importing or shipping gunpowder in excess of † 560 lb. in weight should do so outside the harbour in the place set apart for dealing with other explosives. Vessels with gunpowder in any quantity intended for *other ports* would still be free to enter and lie in the harbour.

† 5 cwt.

4. As pointed out by the trustees, the Government is itself the principal importer of gunpowder in large quantities, and the proposed restriction will therefore not affect the public or the mercantile community in any but exceptional cases. The limit of 5 cwt. has been fixed in conformity with the rule in force in Colombo, and seems a convenient one.

5. The present opportunity of the revision of the rules has been taken to correct some imperfections. All alterations are shown in italics, and the reasons in detail are given in the Chairman's letter No. 1031, dated 2nd June 1898, so far as regards questions other than that of the quantity of gunpowder to be handled inside the harbour.

G.O., No. 623, Marine, dated 18th July 1898.

Read—the following papers :—

From Colonel F. J. MORTIMER, R.A., Inspector-General of Ordnance, Madras Command, to the Secretary to Government, Marine Department, dated Ootacamund, 29th June 1898, No. 4524-A.

I have the honour to forward, for perusal, copies of correspondence, as per margin, that has taken place between the Madras Harbour Trust Board and myself on the subject of landing and shipping Government safety cartridges, loaded with cordite, inside the Madras Harbour.

No. A.—3378, dated 8th June 1898, to the Secretary, Harbour Trust Board, Madras.
No. 1335, dated 13th June 1898, from the Secretary, Harbour Trust Board, Madras.

2. It will be seen that, in accordance with draft notification attached and marked "N", the alterations proposed for rule (*c*) that every vessel entering the port of Madras having on board explosives of class 6—"Ammunition class" charged with explosives of classes 2, 3, 4 or 5 in excess of 100 lb. in weight shall proceed to a distance of not less than 1 mile north of the north arm and half a mile off shore outside the harbour, and shall not be permitted to enter the harbour until all such explosives have been discharged.

3. "Cordite" belongs to class 3, division 2, and with it all safety small arms cartridges for the use of British troops are charged; and 20 small arms ammunition boxes of such cartridges would contain the 100 lb. of cordite prohibited from being brought inside the harbour by the draft notification, rule (*c*).

4. In rules under the Explosives Act, 1884, published under Judicial Department Notification No. 290, dated 5th August 1897, under class 6—Ammunition class, the expression "safety cartridges" is correctly and clearly defined, and the small arm cartridges, cordite, are among those defined in italics as what may be accepted as "safety."

5. To prevent the very serious inconvenience which might be caused to the State by the refusal of the Harbour Trust Board to permit a vessel having Government small arm cartridges in excess of 20 boxes charged with cordite on board from entering the Madras Harbour, or refusing to permit such safety cartridges to be loaded in a vessel in the harbour, I venture to urge the necessity for the issue of such instructions as may prevent such a possibility.

6. I would add that it is unusual for a consignment of Government small arms ammunition not to greatly exceed 20 boxes.

7. The prohibition that is proposed by the draft notification (marked "N") to impose on Government safety cartridges loaded with cordite appears to me quite unnecessary with any regard for public safety.

ENCLOSURES.

From the Inspector-General of Ordnance, Madras Command, to the Secretary, Harbour Trust Board, dated Ootacamund, 8th June 1898, No. A.—3378.

With reference to your No. 1018, dated 3rd instant, I have the honour to inquire if rule (*c*) of the draft notification includes Government safety small arm cartridges loaded with cordite when packed, as is usual in a tin case hermetically closed and having an outer wooden casing, and each box containing 5 lb. of cordite, when the total number of boxes exceeds 20.

From the Secretary, Harbour Trust Board, to the Inspector-General of Ordnance, Madras Command, dated Madras, 13th June 1898, No. 1335.

I have the honour to acknowledge the receipt of your letter, dated 8th June, and to inform you, in reply, that the draft notification (copy enclosed) submitted to Government with the Board's resolution No. 6, dated 27th May, regarding the landing and shipping of gunpowder at this port, has not in any way altered the rules for the landing and shipment of ammunition.

2. You will observe that the proposed alterations (printed in italics) in rule (*c*) refer only to gunpowder; that portion of the rule relating to ammunition is unchanged, and explosives of "class 6—Ammunition class" can be landed and shipped inside the harbour in any quantity, if not charged with explosives of classes 2, 3, or 4 or 5, or division I, of class 7 (as defined under

the rules made by the Governor-General in Council under section 5 of the Indian Explosives Act, 1884). For these rules, see page 762, Part I of the *Fort St. George Gazette*, dated 26th June 1894.

3. Cordite is not mentioned amongst any of these classes: and if you are in any uncertainty as to its exemption from the operation of rule (*c*), I am directed to suggest that you should refer the matter to Government, who could alter rule (*c*) as now submitted by the Board, for approval in such a way as to prevent ammunition charged with cordite being excluded from the harbour; and I am to add that no question has ever been raised regarding the admission of ammunition, and that no objection would be taken to the amendment of rule (*c*) to the effect that ammunition, the property of Government, may be landed and shipped inside the harbour in any quantity, no matter what explosive it may be charged with.

DRAFT NOTIFICATION.

In exercise of the power conferred by section 5 of the Indian Explosives Act, IV of 1884, the Governor of Madras in Council is pleased, with the previous sanction of the Governor-General in Council, to make the following alterations in the rules to regulate the transport and importation of explosives in the port of Madras, which were promulgated for guidance, in the *Fort St. George Gazette* of the 26th June 1894 and 10th September 1895.

For Rule (*c*), substitute the following :—

Rule (*c*).—Every vessel entering the port of Madras having on board explosives of classes 2, 3, 4 or 5, or division I of class 7 (as defined under the rules made by the Governor-General in Council under section 5 of the Indian Explosives Act, 1884), or having on board explosives of "class 6—Ammunition class" charged with or containing explosives of classes 2, 3, 4 or 5 in excess of 100 lb in weight *or having on board, to be discharged, explosives of class* 1—*Gunpowder class—in excess of* 560 *lb. in weight*, shall, on arrival at the port, proceed to a distance of not less than one mile north of the north arm and half a mile off shore outside the harbour and shall not be permitted to enter the harbour until all such explosives have been discharged; after which, provided the requirements of rule (*e*) as regards the security of explosives remaining on board have been met, the vessel may be permitted to enter the harbour and to discharge or ship therein *explosives of class* 1—*Gunpowder class—not exceeding* 560 *lb. in weight*, or other explosives not being of classes 2, 3, 4 or 5, or ammunition containing, or charged with, explosives of classes 2, 3, 4 and 5, or fireworks composition, class 7, division I. Whilst any explosives shall remain on board, such vessel shall have a red flag kept flying at the foremast head between sunrise and sunset and one red light at the ensign staff or peak, in addition to the usual anchor light between sunset and sunrise, and the master or chief officer shall remain on board of her until the explosives intended for the port of Madras shall have been discharged.

* * * * *

From Colonel F. J. MORTIMER, R.A., Inspector-General of Ordnance, Madras Command, to the Secretary to Government, Marine Department, dated Ootacamund, 30th June 1898, No. 4595 A.

I have the honour to forward copy of a letter* received from the Chairman, Harbour Trust Board, Madras, received since the despatch of my No. 4524-A., dated 29th June 1898, and to state that, if rule (*c*) of the draft notification is amended in the terms of paragraph 3 of the Chairman's letter, it will meet the case of all Government safety cartridges.

* No. 1359, dated 27th June 1898.

ENCLOSURE.

From J. N. ATKINSON, Esq., I.C.S., Chairman, Harbour Trust Board, to the Inspector-General of Ordnance, Madras Command, dated Madras, 27th June 1898, No. 1359.

I have the honour to acknowledge the receipt of your letter, dated 23rd June, No. A.—4205, regarding rule (*c*) of the draft notification embodying alterations in the quantity of gunpowder which may be landed or shipped inside the harbour, and to refer you to the Secretary's letter No. 1335, dated 13th June, despatched 25th idem.

2. It was impossible to send you a reply sooner as the matter had to be referred to the Trustees, and was only disposed of at the meeting of the Board held on the 24th June.

3. You will observe from the Secretary's reply that no question has ever been raised regarding the landing or shipping of ammunition, and that if the rule as it stands excludes cordite, respecting which the Trustees have no information, no objection would be taken to the amendment of rule (*c*) to the effect that ammunition, the property of Government, may be landed and shipped inside the harbour in any quantity, no matter what explosive it may be charged with.

Order—No. 623, Marine, dated 18th July 1898.

The amendment proposed by the Inspector-General of Ordnance is approved, and the sanction of the Government of India will, with reference to section 5 (1) of Act IV of 1884 (The Indian Explosives Act), be requested to the requisite alteration of rule (*c*) as notified in the *Fort St. George Gazette* of the 26th July 1898, Part I, pages 722 and 723.

2. Ordered that the following notification be published in the *Fort St. George Gazette*:—

NOTIFICATION.

In accordance with section 18 (1) and (3) of Act IV, 1884 (The Indian Explosives Act), the following proposed amendment in the rules to regulate the transport and importation of explosives in the port of Madras, notified in the *Fort St. George Gazette* of the 26th July 1898, is published for the information of persons likely to be affected thereby, and notice is hereby given that the amendment will be taken into consideration on or after the first day of September 1898.

For Rule (*c*), substitute the following:—

Rule (*c*).—Every vessel entering the port of Madras having on board explosives of classes 2, 3, 4 or 5, or division 1 of class 7 (as defined under the rules made by the Governor-General in Council under section 5 of the Indian Explosives Act, 1884), or having on board explosives of "class 6—Ammunition class" charged with or containing explosives of classes 2, 3, 4 or 5 in excess of 100 lb. in weight, or having on board, to be discharged, explosives of class 1—Gunpowder class in excess of 560 lb in weight, shall, on arrival at the port, proceed to a distance of not less than one mile north of the north arm and half a mile off shore outside the harbour and shall not be permitted to enter the harbour until all such explosives have been discharged; after which, provided the requirements of rule (*e*) as regards the security of explosives remaining on board have been met, the vessel may be permitted to enter the harbour and to discharge or ship therein explosives of class 1—Gunpowder class, not exceeding 560 lb. in weight or other explosives not being of classes 2, 3, 4 or 5, or ammunition containing, or charged with, explosives of classes 2, 3, 4 and 5 or fireworks composition, class 7, division 1: provided that nothing in this rule shall prevent the landing and shipment, inside the harbour, in any quantity, of small arm safety cartridges, when properly packed in tin cases hermetically closed. Whilst any explosives shall remain on board, such vessel shall have a red flag kept flying at the foremast head between sunrise and sunset and one red light at the ensign staff or peak, in addition to the usual anchor light between sunset and sunrise, and the master or chief officer shall remain on board of her until the explosives intended for the port of Madras shall have been discharged.

[Here enter No. 624, Marine, dated 18th July 1898.]

(True Extract.)

(Signed) W. B. DE WINTON,
Secretary to Government.

Letter—to the Secretary to the Government of India, Home Department, dated Ootacamund, 18th July 1898, No. 624, Marine.

In continuation of my letter No. 541, Marine, dated 27th June 1898, and with reference to section 5 (1) of Act IV of 1884 (The Indian Explosives Act), I am directed to forward, for the sanction of the Government of India, the draft of an amendment proposed in the rules to regulate the transport and importation of explosives in the port of Madras which accompanied my letter referred to above.

2. This amendment is proposed on the motion of the Inspector-General of Ordnance, who represents that serious inconvenience is likely to be caused by the existing rule which limits the amount of Government safety small arm cartridges which can be landed and shipped inside the Madras Harbour to 100 lb. in weight. It is believed that there is little or no risk of explosion with cartridges of this character, and there thus seems no reason why the quantity should be restricted in the manner contemplated by the rule now in force.

3. The correspondence on the subject is recorded with G.O., No. 623, Marine, dated 18th July 1898, a copy of which I am to attach for the information of the Government of India.

Papers to be read in Proceedings:—

Again G.O., dated 189 , No.

Again G.O., dated 189 , No.

Current No. 1090 of 1898, dated 29th August , from the Secy. of State.

" " 1137 " 1898, " 6th Sep. , " the Ch. H. T. Board.

Telegram to the Ch. H. T. B. 27th Sept. 1898

" " 1144 " 1898, " 8th -do- , " - do - Telegram

" " 1155 " 1898 " 12th Sep. , " - do -

" " 1226 " 1898 " 30th Sep. , " - do -

" " 1233 " 1898 " 27-9-98 , " the Col. Secy., Colombo.

ORDER.

Despatch

No: 993 dated 29.11.98.

The correspondence read above relates to the question of the admission into the Madras harbour of certain classes of explosives which are now excluded.

2. The Government of India has divided explosives into the following seven classes:-

Calss 1. Gunpowder.

" 2. Nitrate-mixture.

" 3. Nitro-compound.

" 4. Chlorate-mixture.

" 5. Fulminate.

" 6. Ammunition.

" 7. Firework.

3. Under Rule(c) on page 7 of G.O. 106 Marine dated 1st April 1892, it was prescribed that explosives falling under division 2 of classes 6 and 7, i.e., Ammunition and Firework classes, should be allowed to be

landed

[P. W. 4. 500—17-6-98.]

landed inside the harbour in any quantities, but that all other explosives in excess of 100 lbs. in weight should be unloaded outside the harbour.

4. There was no prohibition against vessels entering the harbour with explosives in any quantity, if intended for other ports, and secured in a properly constructed magazine.

5. There was also no prohibition against explosives of all kinds being landed inside the harbour, provided the quantity was not in excess of 100 lbs. in weight.

6. In his despatch printed with G.O. 118 Marine dated 16th April 1892, the Secretary of State forwarded a complaint from the home agents of the British India Steam Navigation Company to the effect that the Steamship "Rewa" was excluded from the harbour because she had on board gunpowder in excess of 100 lbs. in weight, such gunpowder being intended for Calcutta. It was explained in reply that this exclusion was ordered for special reasons, and a copy of the rules promulgated with G.O. 106 Marine dated 1st April 1892 was forwarded to the Secretary of

State

Class 1.

State for information. In his despatch recorded with G.O. 289 Marine dated 10th August 1892, the Secretary of State accepted the Madras Government rules as obviating the difficulties previously supposed to exist.

7. In para 3 of their letter recorded with G.O. 217 Marine dated 18th June 1892, the Harbour Trust Board proposed that explosives of classes 2 to 5 should be "absolutely excluded from the harbour". This suggestion was at first disallowed by Government. But on a representation by the Chamber of Commerce, it was subsequently admitted. Vide para 1 of G.O. 380 Marine dated 24th October 1893. The rules embodying this absolute exclusion were finally approved in G.O 232 Marine dated 16th June 1894. These rules have been in force from 1894 up to the present time.

8. In 1895 the rules were modified so as to admit of the landing and shipment of gunpowder inside the ~~Bombay~~ harbour in any quantity, but the entrance of Ammunition charged with or containing explosives of classes 2 to 5 in excess of 100 lbs. in weight was prohibited. The following further modifications of the

rules

rules have recently been suggested to the Government of India, but have not yet been adopted.

(1) Gunpowder (which is now landed or shipped inside the harbour in any quantity) to be limited to 560 lbs. in weight.

(2) Small arm safety cartridges (now restricted to 100 lbs.) to be landed or shipped in any quantity.

9. The Secretary of State with his despatch No.7 Financial (stores) dated 28th July 1898 recorded abve, now forwards copies of communications received from the home agents of the British India Steam Navigation Company, and of a Memorandum by the Director General of Stores on the subject of the rules governing the discharge of explosives at Madras. The correspondence has arisen in connection with the exclusion from the harbour, in May last, of a vessel which carried explosives of a class prohibited from entering under the existing rules.

10. The restrictions as to entry into the harbour of explosives of classes 2 to 5 and of class 6 charged with or containing explosives of classes 2 to 5 now complained of by the home agents of the British India Steam Navigation Company are not

not, it is observed, of recent date, but were imposed in 1894. The home agents of the British India lines do not, however, seem to have been acquainted with the change of rules, though their local agents, Messrs. Binny & Co., were informed of the alteration, G.O. 232 Marine dated 16th June 1894 having been duly communicated to them. What the British India steamship agents apparently require is the reintroduction of the rules of 1892 promulgated with G.O. 106 Mar dated 1st April 1892.

11. The Chairman, Harbour Trust Board has also forwarded a representation from certain Calcutta firms interested in the importation of explosives, in which they object to the rules which require that vessels shall, before entering the Madras harbour, discharge their cargoes of explosives though they may be intended for another port.

12. As regards the proposed restriction of gunpowder landed inside the harbour to 560 lbs., the Chairman, Harbour Trust Board, now brings to notice that this limit will practically exclude all gunpowder intended for Madras, as almost all consignments are in excess of this quantity.

13. As the effect of the rules does not

not seem to have been clearly apprehended by importers, and where understood is objected to in some quarters, it seems desirable that the whole question should be fully discussed and carefully considered by a representative committee. His Excellency the Governor in Council accordingly resolves that such a committee shall be formed, and that the Chamber of Commerce, Madras, and local and Calcutta importing firms interested in the matter be invited to nominate representatives to sit on the committee. The official members will be the following:- The Chairman, Harbour Trust Board, who will be President

The Presidency Port Officer.

The Inspector General of Ordnance with the permission of the Lt. General Comanding the Division, and

~~The Chairman, Harbour Trust Board who will be the President.~~ The President will take the requisite steps to form the committee in accordance with the present orders of Government.

14. ~~The following points are suggested~~ for the consideration of the committee.

(1) If explosives of classes 2 to 5 and of class 6 charged with or containing explosives of classes 2 to 5, with the exception of "safety cartridges", are on board, the magazines containing them should,

C.A.W.

When formed the Committee will consider and report upon ~~The matter subject to be considered & reported on by the Committee to~~ the procedure to be adopted on the arrival at the port of Madras of a vessel laden with any or all of the seven classes of explosives (1) enumerated in Madras (2) enumerated in Calcutta, & in connection therewith.

should, it is thought, be kept closed while the vessel is in the harbour.

(2) A vessel containing such explosives consigned both to Madras and Calcutta would then have to land so much as was intended for Madras outside the harbour, and close the magazine before such vessel could enter the harbour.

(3). It is observed that at Colombo explosives of all classes and in any quantity are admitted inside the harbour provided they are secured in properly constructed magazines.

15. The Secretary of State will meanwhile be made acquainted with the steps taken in the matter.

29/P

L.S.

11-11-92

W.S. 14-11-92

To the Cn. H. T. Board with a reprint of the following papers.

G.O. 106 Mar.	dated 1st April 1892.	
,, 118 Mar.	16th - do-	
Des. No. 5 Mar.	,, 23rd - do-	
G.O. 217 Mar.	18th June 1892	
,, 289 Mar.	,, 10th Aug. 1892	
,, 380 Mar.	,, 24th Oct. 1893	
,, 232 Mar.	16th June 1894	
,, 250 Mar	27th June 1894.	
,, 1794 Jud.	20th July 1894.	
,, 193-94 Mar.	2nd July 1895	
,, 269 Mar.	,, 3rd Sep. 1895.	
,, 540-41 Mar.	,, 27th Jun 1898	
,, 623-24 Mar.	,, 18th July 1898.	

I to limits explosives and appendix to this Dist. 9/1898

,, Presy. Port Officer
,, ~~Judicial Dept.~~ Madras Command
Copy to the Dy. Adjutant General for the information of the Lt. General Comdg. the ~~Division.~~ Forces.

H.E

not seem to have been clearly appre-

H.E. Despatch No. Marine, dated

To

The Right Honourable the Secretary of State for India.

My Lord,

We have the honour to acknowledge the receipt of Your Lordship's Despatch No. 7, Financial (stores) dated 28th July 1898 with which are forwarded copies of communications on the subject of certain new rules governing the discharge of explosives at the port of Madras. Your Lordship requests to be informed as to the actual regulations on the subject now in force at Madras in respect to Government explosives for Calcutta or for other ports, when conveyed in duly approved magazines, and as to the steps it is proposed to take to obviate inconvenience and possible danger to the service.

2. In reply we have the honour to forward for your Lordship's information the accompanying copy of our Proceedings No. 993 Marine dated 29th November 1898, from paras 7 and 10 of which it will be observed that the rules to which exception is now taken by the agents in England of the B.I.S.N. Co. have been in force, with slight modifications, since 1894. The change in rules was,

it

it will be seen, from para 10 of our Proceedings, duly communicated to the local agents of the B.I.S.N. Co., but was not, it is regretted, communicated at the time for the information of the Home Government.

3. It will be further observed from our present Proceedings that there is cause to believe that the effect of the existing rules on the import trade of explosives has never been clearly apprehended by the local mercantile community. We have accordingly resolved that the whole matter shall be fully discussed and considered by a representative committee to be formed at Madras. The report of this committee with our Proceedings thereon will be duly communicated to your Lordship before final rules are promulgated.

We have &c.

Enclosures to P.P. Marine
of
(2) Reprints of previous papers.

not seem to have been clearly appre-

Marine DEPARTMENT.

18

C. No. 1137 of 1898
C. No. 1155 of 1898.
1226 of ,,
1233 of ,,.

(3) His Excellency the Governor.
~~HIS EXCELLENCY THE GOVERNOR.~~

(1) THE HON'BLE SIR HENRY BLISS, K.C.I.E.
(2) The Hon. Mr. Arundel
THE HON'BLE MR. GROSE, C.I.E.

SUBJECT.

Explosives (Rules).

FOR ORDERS.

× Flag Y

It seems desirable that if we are to have a Cmte to consider the rules under which explosives may be landed & (or admitted into the harbour) at Madras we should first determine the general principles which should guide the Cmte & the limits within which its recommendations must be confined. In the note in the linked file (on C No. 1090) we have decided that we ought not to admit explosives of Classes 2–5 into the harbour at all – & we ought to maintain this (the existing) rule? I think we should do so. That is the safest course – but it may be unduly restrictive of trade. If so, the best we can do is to provide that if explosives of classes 2–5 are on board, the magazines containing them shall be kept closed while the vessel is in the harbour. A vessel containing such explosives & consigned both to Madras & Calcutta would then have to land so much as was intended for Madras outside the harbour, and close her magazine, before she could enter the harbour.

As to explosives other than those of classes 2–5, it seems true that the danger consists not so much in the quantity to be landed, as in the fact of al- lowing

[P. W. 43. / 500—27-1-98.]

& Flag L

(1) 4-10-98 15-10-98 R 21.10.98 #2.22/98

In his letter No. 2216 × dated 8th September the Chairman Harbour Trust Board expresses some doubt as to whether the exclusion from the harbour of explosives other -- than gunpowder may not lead to -- further protest from the firms importing such articles, and as it -- would appear that importers generally are not well acquainted with the effect of the rules, he proposes the appointment of a representative -- committee to reconsider them.

2. As regards the limit of 560 pounds imposed on the landing of -- gunpowder inside the harbour, he points out that this limit will -- practically exclude all gunpowder intended for Madras, as almost all consignments are in excess of this quantity.

3. The telegram sent to Ceylon on the 8th instant inquiring the practice

practice at Colombo in regard to the admission of explosives inside the harbour has not yet been replied to.

4- Since the above was written, a further communication has been received from the Chairman, Harbour Trust Board, in which he says that the proposed amendment of Rule (c) has been the means of inducing the British India Company to again accept freight "for sporting explosives for Calcutta". The amendment in question makes it clear that gunpowder in any quantity intended for ports other than Madras, i.e. including Calcutta, will be admitted into the harbour; the understanding being that the magazine is kept closed.

5- It may be noted that the question of the exclusion from the harbour of explosives of the dangerous classes is not affected. Under the Madras Rules, therefore, such explosives are still prohibited absolutely from entering.

6- A reply has also since come from Ceylon from which it will be seen that at Colombo there is no restriction on the admission into the harbour of explosives of all classes, provided that they are lodged in a properly constructed magazine.

7- The general question of the amendment of the rules is noted on in the linked file-Despatch from the Secretary of State No.7 Financial(Stores) dated 28th July 1898. The proof copy of the proposed rules will be found in the file. It will be noted that the insertion of the words 'for discharge at Madras' in rule (c), has, latterly coming to succeeded in deceiving the Calcutta merchants in spite of the fact that classes 2 to 5 are still wrongly excluded. It will also be noted that no restriction whatever is placed upon the introduction of explosives into the much more crowded harbour of Colombo &c. that the rule is treading a somewhat dangerous ground. The simplest view may be taken of the question is a general one, but the rule against any restrictive rules, numerous & restrictive rules, & it is a question for consideration whether we are to rest satisfied with the temporary calm and

the magazine of the vessel inside the harbour. I think therefore, the only really safe course will be to require the choice of the ammunition intended

vide 2437 of 27 Sept 1898.

Flag B

for Madras, except "safety cartridges", to be landed outside.

Flag E

Shall we enquire on such points, where what will be the view of the Committee? None, I think.

I am not much impressed, I may say, by the greater safety allowed at Colombo. If the people there like to run the risk of a catastrophe such as occurred at that Spanish port (Santander, I think), that is no reason why we should do so; and in this view the Chamber of Commerce which is presumably aware of the practice at Colombo, seems to concur.

RS
18/10/98

Letter d/27th Sept. 1898.

Flag M

I agree to the restrictions proposed by my Hon. Colleague for explosives at A — A — but apart from

xC 9a 1090

this I would let the matter be discussed by a represent. Committee as proposed. In most the matter is threshed out the better.

AH 21.10.98

I am in agreement with the Hon. M. Found at that the matter should be gone into by a representative Committee. The interests of the and views of the Director. General of Stores as well as those of the Calcutta merchants would, I suppose, be represented on this Committee.

A.H 1.11.98

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...ot seem to have been clearly appre-

Attached, to reconsider the whole matter, before issuing the rules in the aid of the Committee hopeless the Chairman & I recommend R.T.B. the latter course.

R Beal
4.10.98

Marine (1898) Department.

CURRENT No. 1090

Urgent

From
The Rt. Hon. the Secretary of State for India

Order

No. 7. Financial (Stores)

Dated 28-7-98.

Received 29 JUL 98

Registered

Enclosures one Set of printed correspondence

Spare copies -

SUBJECT.

Explosives

Requesting to be informed what are the actual regulations now in force at Madras on the subject of the landing of ——— for Calcutta or other ports when conveyed in duly approved Magazines & what steps are proposed to be taken to obviate inconvenience & possible danger to the service.

...ot seem to have been clearly appre-

BACK PAPERS.

No.	Date.
G.O 62, 3 Marine	18.7.98
	file.
540-41 Mar,	27.6.98
537 mar	24.6.98
397 mar	17.5.98
349 mar	7.7.98
1107 Mar	5.8.97
539 mar,	5.8.96
269 Mar,	3.9.95 Sc
193-94	24.7.95
320 Ma,	11.8.94
R No. 1402,	8.8.94
258 M	28.6.94 (Sc)
250 M	27.6.94 (..
232 Ma	16.6.94 ..
171 M,	10.5.94 ..
416 M,	27.11.93 ..
350 M	24.00.93 ..
285 M	10.8.92 ..
283 M	4.8.92
243 M	8.7.92
R No. 246,	30.6.92
217 M,	28.6.92 (Sc)
Despatches M	23.4.92. (Sc)
118 M	16.4.92 (Sc)
106-7 M	1.4.92. ..
459 M	17.10.91 ..

FURTHER PAPERS.

No.	Date.

2 28

ENCLOSURES.

No. 1.

23, Great Winchester Street, London, E.C.,
2nd June 1898.

Sir,

We have by this mail advice that the Madras Harbour Trust will not permit vessels, having on board any explosives for a further port, to come inside the harbour to discharge her general cargo at Madras until she has first discharged outside the explosives which she may have on board.

This would necessarily cause considerable delay, and it may be serious risks, and, as your Department are by far the largest shippers by the Company of goods of this character, we lay the matter before you to show what the difficulties are in the carriage of cargo of this description, and to express our regret we will be unable to take further consignments meantime.

We have, &c.,
GRAY, DAWES, & Co.,
Agents, British India Steam Lines.

The Under Secretary of State
for India.

No. 2.

S. 6022.
India Office,
7th June 1898.

Gentlemen,

With reference to your letter of the 2nd June 1898, I have to inform you that in April 1892, when a similar complaint had been made by the British India Steam Navigation Company, the Secretary of State was informed by the Government of Madras that provision had been made for vessels entering the Madras Harbour with explosives on board for other ports, provided such explosives were stored in a magazine which met with the approval of the Deputy Conservator or other officer deputed by him to inspect it, and it was understood that all difficulty of the kind to which you refer was thus avoided.

If you have advice of any fresh regulations I shall be obliged by your furnishing me with full particulars thereof, and intimation as to any case in which difficulty has occurred on this account. Inquiry can then be made of the Government of Madras as to the regulations.

I am, &c.,
E. GRANT BURLS,
Director-General of Stores.

Messrs. Gray, Dawes, & Co.

No. 3.

23, Great Winchester Street, London, E.C.,
15th June 1898.

Sir,

We have the honour to acknowledge receipt of your communication, S. 6022, of 7th instant, relative to the recent regulations enacted by the Madras Harbour Board in connection with steamers with explosives on board.

For your information we give you extracts from the Company's Madras Agents' letters on the subject:—

Letter of 6th May.

"We regret to bring to your notice that the 'City of Dublin,' which arrived to-day, was not permitted to come inside the harbour to discharge her general cargo until she had at first discharged outside the 135 packages explosives which she had on board for this port.

"Under the present rule explosives for any other port besides Madras must be landed outside before the vessel can enter."

Letter of 26th May.

"We enclose herein a draft notification relating to the transport and importation of explosives.

"The proposed rules are virtually in force now, as the Chairman of the Harbour Trust has decided to act on them in anticipation of them being passed into law."

We are, &c.,
GRAY, DAWES, & Co.,
Agents, British India Steam Lines.

The Director-General of Stores,
India Office.

No. 4.

No. 6022.

India Office,
16th June 1898.

Gentlemen,

With reference to your letter of 15th June 1898, I shall be obliged by your forwarding me a copy of the "draft notification relating to the transport and importation of explosives" referred to in the British India Steam Navigation Company's Madras Agent, letter of the 26th May, as it is essential that in writing to the Government of India on the subject, I should be fully informed as to any steps that have been taken.

I am, &c.,
E. GRANT BURLS,
Director-General of Stores.

Messrs. Gray, Dawes, & Co.

No. 5.

23, Great Winchester Street, London,
17th June 1898.

Sir,

We have the honour to acknowledge your S. 6022 of 16th inst. requesting us to forward you a copy of the draft notification relating to the transport and importation of explosives referred to in the Company's Madras Agents' letters.

We now enclose a print of the proposed rules, which we would like returned.

We have, &c.,
GRAY, DAWES, & Co.,
Agents, British India Steam Lines.

The Director-General of Stores,
India Office.

Enclosure in No. 5.

Draft Notification.

In exercise of the power conferred by Section 5 of the Indian Explosives Act IV. of 1884, the Governor of Madras in Council is pleased, with the previous sanction of the Governor-General in Council, to make the following alterations in the rules to regulate the transport and importation of explosives in the port of Madras, which were promulgated for guidance, in the Fort St. George Gazette of the 26th June 1894 and 10th September 1895.

For Rule (*e*) substitute the following:—

Rule (*e*).—Every vessel entering the port of Madras having on board explosives of Classes 2, 3, 4, or 5, or Division I. of Class 7 (as defined under the rules made by the Governor-General in Council under Section 5 of the Indian Explosives Act, 1884), or having on board explosives of "Class 6, Ammunition class" charged with or containing explosives of Classes 2, 3, 4, or 5 in excess of 100 lb. in weight, or having on board, to be discharged, explosives of Class 1—Gunpowder Class—in excess of 560 lb. in weight, shall, on arrival at the port, proceed to a distance of not less than one mile north of the north arm and half a mile off shore outside the harbour and shall not be permitted to enter the harbour until all such explosives have been discharged; after which, provided the requirements of rule (*e*) as regards the security of explosives remaining on board have been met, the vessel may be permitted to enter the harbour and to discharge or ship therein explosives of Class 1—Gunpowder Class—not exceeding 560 lb. in weight, or other explosives not being of Classes 2, 3, 4, or 5, or ammunition containing, or charged with, explosives of Classes 2, 3, 4, and 5, or fireworks composition, Class 7, Division I. Whilst any explosives shall remain on board, such vessel shall have a red flag kept flying at the foremast head between sunrise and sunset and one red light at the ensign staff or peak, in addition to the usual anchor light, between sunset and sunrise, and the master or chief officer shall remain on board of her until the explosives intended for the port of Madras shall have been discharged.

For Rule (*f*) substitute the following:—

Rule (*f*).—Barges, lighters and boats in the port of Madras having on board any explosives shall be kept scrupulously clean and free from loose explosives and shall not, when at anchor, lie closer than one cable's length or 200 yards from any of the shipping in the port or from any public landing-place, and all cases of explosives in any such barges, lighters or boats shall be securely covered with tarpaulins. Whilst any such explosives shall remain on board, there shall be kept a red flag flying on every such barge, lighter or boat between sunrise and sunset and a red light in an elevated position shall be shown from any such barge, lighter or boat between sunset and sunrise. No fires, smoking or matches, shall be allowed on board any such barge, lighter or boat, nor any light of any kind except the red light mentioned above and except in the case of properly decked barges on the deck of which may be allowed one lantern of good pattern. Kerosine or other explosive oil is not to be used for the above-mentioned lights. The tindal and at least half of the crew of every such barge, lighter or boat, shall remain on board thereof until all the explosives are discharged therefrom.

For Rule (*g*) substitute the following:—

Rule (*g*).—All barges, lighters and boats having any explosives on board to be landed outside of the harbour, shall remain off shore until orders are received from the officer directing the landing to approach the beach. Not more than two such barges, lighters or boats shall be permitted to unload at a time, and such unloading shall take place

either at the bay in the revetment at Cassimode, or at the north end of the revetment according to the state of wind and current.

For Rule (*h*) substitute the following :--

Rule (*h*).--With the sanction of the Chairman of the Harbour Trust Board, which will be accorded only on production of the required special permit from the collector of Sea Customs, explosives not prohibited under Rule (*c*) if properly packed as required by Rule 2 of the rules issued by the Governor-General in Council under Section 5 of the Indian Explosives Act, 1884, may be shipped on board, or landed from a vessel lying at the ordinary moorings within the harbour. Shipment of any such explosives shall be effected under the precautions and conditions mentioned and contained in these rules, and such explosives must be taken on board the vessel for which they are intended immediately after the boat by which such explosives are taken off to such vessel has come alongside the same, and no cargo boat or other vessel having fire on board shall be allowed to lie nearer than one cable's length or 200 yards of such vessel during the time that any explosives are being shipped on board the same.

For Rule (*k*) substitute the following :—

Rule (*k*).--No magazine on board any vessel containing explosives other than safety fuzes, cartridges and caps shall be opened while such ship is inside the Madras harbour without the permission of the Chairman of the Harbour Trust Board or other person he may depute to act for him, except in cases of emergency, and in case, in the opinion of the Chairman of the Harbour Trust Board, the emergency was not such as to justify the master of such vessel in opening or allowing to be opened such magazine, he shall be deemed to have contravened this rule.

No. 6.

S. 6637. India Office,
Gentlemen, 25th June 1898.

With reference to your letter of the 17th June 1898, I shall be glad if a representative of your firm can call and see me on Tuesday about 3 p.m., as the draft notification forwarded by you does not appear to me to confirm the contention in your letter of the 15th June that "explosives for any other port besides Madras must be landed outside "before the vessel can enter."

I am, &c.,
E. GRANT BURLS,
Director-General of Stores.

Messrs. Gray, Dawes, & Co.

No. 7.

23, Great Winchester Street, London, E.C.,
Sir, 24th June 1898.

Referring to our letter of 17th instant, our Madras Agents have now sent us by this mail extract of proceedings of the Trustees of the Harbour Trust Board regarding the landing of explosives at their port held at the offices of the Board on the 27th May last, as follows :—

"Draft Notification embodying the alterations in the rules for landing and shipping explosives, prepared under instructions from Government in Memorandum No. 99 E., dated 16th February, having been printed and circulated with letter from the Inspector-General of Ordnance, No. 2519 A., dated 19th May 1898, requesting that Government gunpowder might be exempted was discussed, and it was resolved that the draft notification is approved, and the Inspector-General of Ordnance will be informed that the Board does not consider that any exception should be made in favour of Government powder."

We have, &c.,
GRAY, DAWES, & Co.,
Agents, British India Steam Lines.

The Director-General of Stores,
India Office.

No. 8.

23, Great Winchester Street, London, E.C.,
Sir, 28th June 1898.

Referring to your letter No. S. 6637, of 25th instant, and to our representative's interview with you this afternoon, we now append, for your information, as desired, copy of the letter from the Madras Harbour Trust to the Company's Madras Agents, dated 3rd ultimo.

We have, &c.,
GRAY, DAWES, & Co.,
Agents, British India Steam Lines.

The Director-General of Stores,
India Office.

Enclosure in No. 8.

Madras Harbour Trust, Secretary's Office,
Gentlemen, 3rd May 1898.

I have the honour to acknowledge the receipt of your letter, dated this day, and to inform you in reply that the five packages, "smokeless powder" (nitro compound), must be landed outside the harbour, and the steamer must discharge all such explosives on board, whether for this port or for Calcutta, &c., before entering the harbour.

You will also have to arrange for the storage of such packages, as they will not be received into the merchants' magazine.

I have, &c.,
C. PINCENT,
Secretary, Harbour Trust Board.

Messrs. Binney & Co.

No. 9.

Memorandum by Director-General of Stores.

In Financial (Stores) Despatch to the Government of Madras, No. 2, dated 18th February 1892, attention was drawn to a complaint received from Messrs. Gellatly & Co., the brokers of the British India Steam Navigation Company, as to certain new regulations stated by them to have been enforced at Madras, which seriously affected vessels carrying explosives to ports beyond.

In reply, the Government of Madras stated in Marine Letter No. 5, dated 23rd April 1892, that provision had been made for vessels entering the harbour with explosives on board for other ports, provided

such explosives were stored in a magazine which met the approval of the Deputy Conservator or other officer deputed by him to inspect it, and a hope was expressed that these rules would obviate any future difficulty of the nature referred to in the above quoted Despatch. These rules appear to have worked satisfactorily for the past five or six years, as no complaint in regard to their operation has, during that period, been received in this Office. Messrs. Gray, Dawes, & Co., on behalf of the British India Steam Navigation Company, have invited attention to a draft notification of certain proposed alterations of the existing rules which they state are now being enforced.

The new rules are not very clear and seem to be capable of more than one interpretation, but under them the Harbour Trust Board has ruled that a steamer must discharge all explosives, such as smokeless powder, whether for Madras or for ports beyond (Calcutta, &c.), before entering the Madras Harbour, and has refused any exemption in favour of Government powder.

As Government explosives for Calcutta are almost invariably shipped by steamers of the British India Line which always call at Madras, the adoption of the new rules, if confirmed, will make it a matter of extreme difficulty and expense to get such stores to Calcutta at all. Moreover, landing and reshipping explosives outside a port like Madras is attended with serious risk of loss or damage.

The Peninsular and Oriental Steam Navigation Company are precluded by the terms of the postal contract from carrying dangerous cargo, and it is very rarely that a steamer other than those of the British India Company can be found to carry ammunition, gun cotton, &c. to Calcutta.

It need hardly be pointed out that any serious difficulty in supplying Calcutta with explosives might in certain contingencies become disastrous.

India Office,
London, 28th July 1898.

Financial (Stores),
No. 7.

To His Excellency The Honourable The Governor in Council, Fort St. George.

Regulations for transport, &c., of Explosives at Madras.

SIR,

With reference to Lord Cross' Despatch No. 8, Financial (Stores), dated 14th July 1892, on the subject of the regulations for the transport and importation of explosives at Madras, I enclose, for your Excellency's consideration, a copy of communications received from Messrs. Gray, Dawes, & Co., the Agents of the British India Steam Navigation Company, and of a Memorandum by the Director-General of Stores, on the subject of certain new rules governing the discharge of explosives at Madras.

2. From these papers it appears that the regulations referred to in your Marine Letter, No. 5, dated 23rd April 1892, paragraph 3, have been superseded, and that vessels conveying Government explosives for Calcutta will now have to discharge them outside the port of Madras before being allowed to enter.

3. The difficulties arising from any such regulations were fully explained in Financial (Stores) Despatch to your Government, No. 2, dated 18th February 1892; and, in view of the grave importance of the question, I request that I may be informed what are the actual regulations on the subject now in force at Madras in respect to Government explosives for Calcutta or other ports, when conveyed in duly approved magazines, and what steps you propose to take to obviate inconvenience and possible danger to the service.

I have the honour to be,
Sir,
Your most obedient humble Servant,

George Hamilton

urgent

No. 8.

Financial (Stores)

28th July 1898.

The

Letter to Fort St. George,

No. 7, and enclosures.

Marine DEPARTMENT.

C. No. 1090 of 1898.

Lieutenant Chs 898.

SUBJECT.

HIS EXCELLENCY THE GOVERNOR.

THE HON'BLE SIR HENRY BLISS, K.C.I.E.

THE HON'BLE MR. GROSE, C.I.E.

Rules for the landing and shipment of explosives in the port of Madras.

FOR ORDERS.

In his despatch read above (current No.1090) the Secretary of State forwards copies of communications received from the home agents of the British India Steam Navigation Co. and of a Memorandum by the Director General of Stores on the subject of the rules governing the discharge of explosives at Madras. The correspondence has arisen in connection with the exclusion from the harbour of the "City of Dublin" (in May last) which carried explosives of a class prohibited from entering the harbour under the existing rules The matter is dealt with in G.O. 549 Marine dated 7th May 1898.

2. The Government of India has divided explosives into the following seven classes. ~~Vide G.O. 195 Mar. dated 1st April 1892, page 8.~~

Class

Flag O.

Flag G.

[P. W. 43. 500-27-1-98.]

Class 1. Gunpowder.
,, 2. Nitrate-mixture.
,, 3. Nitro-compound.
,, 4. Chlorate-mixture.
,, 5. Fulminate.
,, 6. Ammunition.
,, 7. Firework.

3. Under Rule (c) on page 7 of this G.O. it was prescribed that vessels having on board explosives to be landed at the port of Madras, in excess of 100 lbs. in weight, should unload outside the harbour. Explosives falling under division 2 of classes 6 and 7 i.e. Ammunition and Firework classes, were allowed to be landed inside the harbour in any quantities.

Note (a) There was no prohibition against vessels entering, with explosives of all kinds, in any quantity, if intended for other ports, the magazines being, it is presumed, kept closed.

Note (b) There was also no prohibition against explosives of all kinds being landed inside the harbour provided the quantity was not in excess of 100 lbs. in weight.

4. In his despatch printed with G.O. 118 Marine dated 16th April 1892, the Secretary of State forwarded a complaint from the home agents of the

Flag H.

Class 1.

Flag G.

Flag E.

Flag I.

Page 4 of G.O. 380 Mar. dated 24th October 1893. Flag D.

Flag A.

Vide G.O. 269 Mar. d/3rd Sep. '95.

3

the British India Steam Navigation Company to the effect that the steamship "Rewa" was excluded from the harbour because she had on board gun powder in excess of 100 lbs. in weight, such gunpowder being intended for Calcutta. It was explained in reply that this exclusion was ordered for special reasons, and a copy of the rules printed with G.O. 106 Marine dated 1st April 1892 was forwarded to the Secretary of State for information.

In his despatch recorded with G.O. 289 Marine dated 10th August 1892, the Secretary of State accepted the Madras Government rules as obviating the difficulties previously supposed to exist.

5. In para 3 of their letter recorded with G.O. 217 Marine dated 18th June 1892, the Harbour Trust Board proposed that explosives of classes 2 to 5 should be "absolutely excluded from the harbour". This suggestion was at first disallowed by Government. But on a representation by the Chamber of Commerce, it was subsequently approved. Vide para 1 of G.O. 380 Marine dated 24th October 1893. The rules embodying this absolute exclusion were finally approved in G.O. 232 Marine dated 16th June 1894. They have been in force from 1894 up to the [illegible]

In 1895 the rule[illegible]

so as to admit of the landing and shipment of gunpowder inside the harbour in any quantity, and the following further modifications have recently been suggested to the Government of India, but have not yet been approved.

(1) Gunpowder (which is now landed or shipped inside the harbour in any quantity) to be limited to 560 lbs. in weight.

G.O.540 Mar. dated 27th Jun. 98 Falg. X.

(2) Small arm safety cartridges (now restricted to 100 lbs) to be landed or shipped in any quantity.

G.O.623 Mar. dated 18th Jul. 98.

The restrictions as to entry into the harbour of explosives of classes 2 to 5 now complained of by the Home agents of the B.I.S.N.Co. are not, it will be seen, of recent date, but were imposed in 1894. But the Home agents of the British India lines do not seem to have been acquainted with the change of rules, though their local agents, Messrs. Binny & Co., were duly apprised of the alteration. The modified rules should also perhaps have been communicated to the Secretary of State, seeing that the previous rules were sent to the Home Government for information. What the British India steamship agents apparently require is the reintroduction of the rules of 1892, as modified, perhaps by the proposed changes of 1898.

× Vide communication at the bottom of G.O. 232 Mar. d/16th Jun. '94. Page 14. Flag A.

The Secretary of State requests to be informed as to the actual regulations now

Q. 4(b)

Enl 1

5

now in force at Madras in respect to Government explosives for Calcutta or for other ports when conveyed in duly approved magazines, and what steps it is proposed to take to obviate inconvenience and possible danger to the service.-

Home Store only right that Explosives of classes 2–5 shd be kept out of the harbour altogether as at present. Subject to this condition either 2 or 3 would suit Madras & might be adopted at the option of the Shipowners. Under 3 Govt. of Calcutta would then have to send to Madras direct only classes 2–5–

The Chamber & H.T.B. may be consulted as suggested on these proposals.

KBS 5.9.98.

Agreed. But, in addition to the Chamber of Commerce and the H.T.B., I suggest that the Inspector Genl. of Ordnance who is concerned in the importation of these explosives, on behalf of Govt., – should also be consulted.

A.H 5.9.98

With regard to this latter portion there seem to be 3 courses open.

1. The Secy of State to arrange for shipment of explosives for Calcutta by direct steamer

2. To order that all contents of the magazine destined for Madras shall be discharged outside the Harbour, & the magazine closed before entry & kept closed during the vessel's stay in Harbour

3. To have two separate magazines on board one for Madras & one for Calcutta. In the former the vessel during the vessel's stay in Madras Harbour. such vessel to be admitted without restriction.

The first alternative is the simplest - and the same occurs several times among the papers in this

vile that it should present
no difficulty - I think the
Secy of State might be asked
to arrange for it if possible.
The second alternative would
be Calcutta. Sacrifice made
to make strenuous opposal
by the Harbour Trust Board
& Chamber of Commerce who
have been consistent in their
hostility to the introduction
into the Harbours of explosives
of Classes 2 to 6 inclusive.
It would be also apparently
the I.G. of Customs, who
has just received Memorials
to land safety cartridges
within the Harbours.
I think it would be unfair
to Madras to adopt it -
The third alternative would
limit the convenience of all
Harbours and reduce risk.
but it would certainly be
opposed by the H.T. Board &
Chamber of Commerce as
introducing explosives of Class
5 to 6. especially as there
might be in freight vessels
of inferior stability -
I think, however, that these bodies
might be asked if they would
accept this alternative provided

that the explosives were of recognised
quality and standard & shipped in
British vessels & conveyed to Port in
to terms of standing in Madras.

W. Beach
2.5.08

Letter Despatch
Customs acceptance

3/9/08

n.98

.98.

the
ar.
14.

C. also

Will he do me the
favor at 3 pm
today to discuss
any papers requiring
it - meanwhile please
Mch send any up here.

2. I think, in connection
with the question of
admitting explosives
into Madras harbours
the last letter from
the Mst they direct
Colombo, where all
ships in Madras &
Calcutta call.
Please send for any
Colombo
telegrams to
authorities.

What precautions are
taken against vessels
entering Colombo harbour
with explosives on
board, first when
magazine is closed

Marine department

in harbour, secondly when
it is kept closed"

13-3-18

Marine department

No. A 72 E 4 d/ 8th September 1918

Telegram

From Secretary, Marine

To

Colonial Secretary

Colombo.

Secret & Sep.

"What precautions are taken against vessels entering Colombo harbour with explosives on board first when magazine is opened in harbour Secondly when it is kept closed"

C.S.

C. No. 1090

Await reply to
telegram of the 8th
Inst. addressed to the
Ceylon Govt.

R.S.

9. 5. 90

Rec'd
4 Oct 90

Marine (1897) Department.

CURRENT No. 1137

Order

From
The Chairman,
Harbour Trust Board,
Madras.

No. 2102

Dated 3rd Sept.
Despatched
Received 6-9-98
Enclosures (three)
Spare copies

SUBJECT.

Importation of Explosives at Calcutta.

Submitting for approval of Govt. proposed alteration to rule c of Explosive Rules relating to the —

BACK PAPERS.

G. O.	No.	Department.	Date.

FURTHER PAPERS.

G. O.	No.	Department.	Date.

Rec'd 2.30 P.M.

CALCUTTA 24TH AUGUST, 1898.

To the CHAIRMAN,
Harbour Trust Board,
M a d r a s.

CHAIRMAN
MADRAS 24 AUG 98
HARBOUR TRUST

Circular

Sir,

This letter will be handed to you by Mr. A. Farquhar who has been specially deputed by the undersigned, Agents in Calcutta for the Manufacturers, and Importers of Explosives, to interview you on the subject of the rules which have recently been issued by the Trustees of the Harbour regarding Explosives brought out by sea to Madras.

We understand that explosives forming part of the Calcutta consigned cargo of steamers from Europe are to be unloaded into Lighters before entering the harbour and taken up after leaving, and we desire to bring to your notice the immense risk which would attend the carrying out of this order, for if the cases were safely loaded into boats they are almost sure to get damaged either by rain or sea-water (especially in the South-Western Monsoons) during the period the vessel was in the harbour, which we believe extends from 12 to 36 hours.

The rule if enforced will prove a great hardship to Importers of Explosives in Calcutta and will for some time dislocate the trade in these goods, already the effects are being felt and it is feared Contracts which have been made, cannot be fulfilled to time; we learn that large consignments of explosives are awaiting shipment in London owing to the British India and other Lines declining to accept the

cargo as the new rules would cause inconvenience and delay at your Port.

You are ofcourse aware that the greatest precautions are taken with goods of the class named; vessels are compelled to build special magazines, so that the explosives are kept separate from the general cargo; the packing is also subjected to the most stringent rules under the English Explosives Act, so that the danger is reduced to a minimum- and it is not, as far as we are aware, considered necessary by the Authorities of any other Port to make any such restrictions as the new rules impose at Madras: vessels carrying cargo of the description named are permitted to call, en route, at the several ports, such as Naples, or Malta, Aden, Colombo, and Tuticorin, and no exceptional rules are enforced during their passage through the Suez Canal.

As it is most difficult to find a steamer leaving London which does not make Madras a port of Call, and as the question of obtaining stocks of explosives for the approaching Season is of the utmost urgency, we decided to send a Representative to place the matter before you, and we trust you will be good enough (in consultation with the Trustees of the Harbour) to give the question your very earliest attention; if it is considered undesirable to rescind the order, we beg that it may be held in abeyance for a period of say, six months, during which time Shippers may possibly be able to make other arrangements. As matters now stand we fear the greatest inconvenience and loss will be entailed on Importers in the near future, and we hope that the conclusion arrived at by the Trustees will enable you to authorise our Representative to telegraph to England on an early date

1244

to the effect that the rules have been rescinded or at least held in abeyance for a time.

Mr. Farquhar can explain any further details touching the question.

We have the honor to be,
S i r,
Your Most Obedient Servants,

Per Pro KING HAMILTON & Co.

1321

EXTRACT of Proceedings of the TRUSTEES OF THE HARBOUR OF MADRAS, at a Meeting held at the Offices of the Board on Friday **the** 2nd **day of** September **189** .

5. Read letter from various firms in Calcutta interested in the importation of explosives at that port regarding the new rules now under consideration of Government.

Read minutes by Trustees.

Resolved that the firms concerned be informed that the proposed alteration in rule C places no limit on the quantity of gunpowder for Calcutta that may be brought into the Harbour at Madras under rule E.

As it would appear that the proposed alteration in rule C is not quite clear, and has been misunderstood, the Board recommend, the following alteration: for "to be discharged" read "for discharge at Madras"

x7 by Σ

(True Extract)

HARBOUR TRUST
MADRAS-3.SEP.98
SECRETARY'S OFFICE

Secretary,
Harbour Trust Board.

Madras Harbour Trust,

3rd September 1898.

No. 2091

From

J.N.Atkinson Esq I.C.S.,
Chairman, Harbour Trust Board,
MADRAS.

To

Archibald Farquhar Esq,

Sir,

I have the honour to acknowledge the receipt of letter dated 24th August from Messrs Gillanders Arbuthnot & Co and fifteen other firms interested in the importation of explosives at Calcutta, handed to me by you on Wednesday 31st August, protesting against the alteration in the rules for the landing and shipping of explosives at this port lately submitted to Government by the Harbour Trustees.

2. The rule you alluded to is presumably rule (c) to which has recently been added a clause excluding gunpowder from the Harbour when more than 560 lbs is intended for discharge at Madras, and a proviso has been added that nothing in that rule shall apply to small arm safety cartridges when properly packed in tin cases and hermetically sealed.

3. This representation was considered by the Harbour Trust Board at its meeting last evening, and I hand you herewith copy of resolution then passed, from which you will observe that in the opinion of the Trustees the proposed alteration in rule (c) places no limit on the quantity of gunpowder for Calcutta which may be brought into the Harbour; but as it would appear that the proposed alteration is not quite clear, and has been misunderstood the words "for discharge at Madras" have been substituted for "to be discharged".

4.

This alteration removes, it is understood, the difficulty with the British India Company.

I have &c,

Signed J.N.Atkinson,

Chairman,

Harbour Trust Board.

HARBOUR TRUST
MADRAS-3.SEP.98
SECRETARY'S OFFICE

(True Copy)

Secretary,

Harbour Trust Board.

Mar Genl 3/1137(5)

Harbour Trust Office,

MADRAS, 3rd September 1898.

No. 2102

From

J.N.Atkinson Esq I.C.S.,

Chairman, Harbour Trust Board,

MADRAS.

To

W.B.deWinton Esq,

Secretary to Government,

Marine Department.

Sir,

Referring to G/O Marine No.623 dated 18th July directing publication in the Fort St George Gazette of a notification intimating that proposed alterations in rule (C) of the Explosive Rules will be taken into consideration on or after the first day of September 1898, I have the honour to report that a letter was received by me from Calcutta last Wednesday 31st August, having been sent by special delegate from Messrs Gillanders Arbuthnot & Co and fifteen other firms interested in the importation of explosives at Calcutta.

2. This letter is submitted herewith in original for the information of Government together with copy of a resolution passed upon it at the meeting of the Harbour Board last evening, also copy of my reply to Mr Farquhar, the representative of the Calcutta firms.

3. Should Government approve of the proposed alteration I request that the suggested amendment of the para in rule (C) referring to gunpowder may be worded as follows:-

"or having onboard, for discharge at Madras, explosives of "class I -gunpowder class- in excess of 560 pounds in "weight"

This

GP

This it is understood will overcome the difficulty so far as Calcutta is concerned with the British India Company, who at present decline to carry explosives beyond Colombo, and will make it clear that gunpowder intended for Calcutta may remain onboard inside the Harbour under the provisions of rule (e) as provided for in rule (c) itself.

I have the honour to be,

Sir,

Your Obedient Servant,

J. W. Atkinson.

Chairman,

Harbour Trust Board.

P.

Secy.

Marine Department
C. No 1137.

Note for W.

It does not seem quite clear that the Harbour Trust Board has properly apprehended the objection raised to the rules. The merchants talk of the exclusion of ~~the~~ "Explosives", and not of gunpowder only. They point out that vessels carrying these "explosives" are, under proper precautions, permitted to enter the several ports en route, such as, Naples, Malta, Aden, Colombo and Intercoirn, and that no Exceptional rules are enforced during their passage through the Suez Canal. There is nothing in their letter to show that they refer to gunpowder only.

It

No of course it has not. The Calcutta men mean all explosives. The Committee object to the rule complained of has been in force for 4 years, & he, I suppose, [illegible] + explosives Lend the Ashburton wright

WLD 7-5-90

+ Probably it has never been enforced or there would have been a protest before Ed. T.

It seems necessary therefore that this point should be cleared up. A draft telegram to the Chairman H. T. B^d is accordingly submitted. The previous file on the subject is now in circulation with H. E.

R. P.
1.9.

Marine Dept
C. N— 1137.

H.E. 471 Eg 7 September 1898.

Telegram (Ordinary) urgent.

From Madras Marine
Ootacamund

To Chairman, H. T. B^d
Madras.

Your letter 2102 d/ 3rd September 1898. Subject Explosives. Do it certain that the objection to Madras rules refers to Gunpowder only. Merchants would seem to require admission to harbour of all dangerous explosives intended for Calcutta.

R. P.

J. S. 8/9

Tel. despd by 7/9/98. 2/20 pm

End. dft

End. dft

Marine (1898) Department.

CURRENT No. 1144

Order

Telegram

From

The Chairman
Harbour Trust Board

No. –

Dated 4th September 1898

Received 8-9-98

Enclosures –

Spare copies –

SUBJECT.

Stating that the alteration proposed by the Harbour Trust Board to which Calcutta firms objected affected Gunpowder only and that the procedure regarding other explosives remains unchanged but that he is not confident whether objections will not be raised and that it may perhaps be advisable to consult Calcutta firms prior to notification.

M. 4.
500—14-5-97.

BACK PAPERS.

No.	Date.

FURTHER PAPERS.

No.	Date.

INDIAN TELEGRAPHS.

Code Class. 20 Monthly Number.

To (Office) Octacamund From (Office) Madras

Words 53 Day 7 Hour. 16 Minute. 89 Official Instructions Urgent

To (Person) Madras Marine

From (Person) Alariman Harbour Trust Board

Your telegram enclosing Rules & the alterations proposed by Harbour Board to which Calcutta Firms objected only objected Rumpowder & Procedure regarding other explosives remains unchanged but am not sure further objections will not be raised & perhaps advisable consult Calcutta Firms Draft to notification & letter follows

64 Word Form.

Recd. from I.N. Sent to I.N.

At Hrs. Mts. by At Hrs. Mts.

OOTACAMUND 7-9-98

S Mason Telegraph Master.

G & P—No. 983 T—13 9 97—4000000

Marine

Order

No 11444

11

From this reply it would appear that the Harbour Trust Board had not come to a clear understanding with the delegate from Calcutta.

The promised letter might, perhaps, be awaited.

A.S.

8 Sept 98

Yes. I hope the telegram has sent to Colombo

8 Sept 98

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Marine (1897) Department.

CURRENT No. 1555

Order

From
The Chairman,
Harbour Trust Board,
Madras.

No. 2216

Dated 8—9—'98

Despatched 9—"—"

Received 12—9—98

Enclosures 2—

Spare copies

SUBJECT.

Explosive Rules

Suggesting the advisability of a representative Committee being convened for the purpose of thoroughly revising the——

BACK PAPERS.

G. O.	No.	Department.	Date.
	472/A		8-9-98
R	540-1		27-6-98
	623-4		18-7-98

FURTHER PAPERS.

G. O.	No.	Department.	Date.
	1226		

From,

The Chairman,

Harbour Trust Board,

M A D R A S.

1982

To,

Madras,

Marine.

Your telegram Explosive rules.The alteration proposed by Harbour Board to which Calcutta firms objected only affected gunpowder. Procedure regarding other explosives remains unchanged but am not confident further objections will not be raised.Perhaps advisable consult Calcutta firms prior to notification.Letter follows.

Signed J.N.Atkinson,

Chairman,

7-9-98.

HARBOUR TRUST
MADRAS-9 SEP 98
SECRETARY'S OFFICE

(True Copy)

Secretary,

Harbour Trust Board.

Proof Copy

HARBOUR TRUST
MADRAS-9 SEP 98
SECRETARY'S OFFICE

EXPLOSIVE RULES.

Rules 1, 2, 3, 4, 5 and 7 to regulate the transport of explosives, made by the Governor-General in Council and published under Government of India Notification, No. 1417, dated the 24th June 1887, and printed as an appendix hereto, shall, subject to the following rules, apply to the transport of explosives within the limits of the port of Madras.

Rule (*a*).—The master of any vessel arriving at the port of Madras with explosives exceeding 100 lb. in weight on board as cargo shall give notice thereof to the pilot or harbour master, who shall come on board such vessel, immediately on his boarding.

Rule (*b*).—The agents of any vessel expected to arrive at the port of Madras and known to have explosives exceeding 100 lb. in weight on board as cargo, and the consignee or consignees of, and other person or persons interested in, such explosives so expected to arrive by any vessel at the port, shall give notice of the fact of such explosives being on board such vessel to the Chairman of the Harbour Trust Board not less than 48 hours before the arrival of such vessel, and the agents or consignor or consignors or other person or persons interested in any explosives exceeding 100 lb. in weight intended to be shipped as cargo on board any vessel in the port of Madras shall give a like notice of their or his intention to ship such explosives by such vessel 48 hours before any such explosives shall be shipped. Every such notice shall be in writing and shall contain a statement showing the quantities and nature of the explosives to be landed at, or shipped from, Madras, and of those intended for other ports or, as the case may be, of the port or ports for which any such explosives may be shipped. Upon receipt of any such notice, the Chairman of the Harbour Trust Board shall depute an officer to remain on board the vessel in charge of such explosives in cases where the same or to be landed and until the same shall have been removed from the Board's premises for deposit in the magazine on shore appointed for that purpose, or in cases where explosives are to be shipped until the same shall have been shipped on board the vessel named in such notice.

Rule (*c*).—Every vessel entering the port of Madras having on board explosives of classes 2, 3, 4 or 5, or division 1 of class 7 (as defined under the rules made by the Governor-General in Council under section 5 of the Indian Explosives Act, 1884), or having on board explosives of

CLASS 6.—*Ammunition Class.*

* * * *

The Ammunition class has three divisions:—
Division 1 comprises exclusively—
Safety cartridges.
Safety fuzes for blasting.
Railway fog signals.
Percussion caps.
Division 2 comprises any ammunition, as before defined, which does not contain its own means of ignition and is not included in Division 1, such as—
Cartridges for small arms, which are not safety cartridges,

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by the Calcutta firms, and he immediately returned to Calcutta. In my letter No. 2091 dated 3rd September, I had explained the purport of the rules to him but he did not acknowledge receipt of this letter, therefore I am without positive assurance that no further objection will be raised. On the other hand Mr Farquhar had stated in conversation that the explosive rules are altogether antiquated, impose unnecessary restrictions on certain classes of explosives such as Schultz's powder and differ materially from corresponding rules in European countries. The rules hitherto have been very liberally interpreted, and it is I think the rather closer adherence of late to both their letter and spirit that has attracted the attention of firms interested to

these

CLASS 6.—*Ammunition Class*—cont.

Cartridges and charges for cannon, shells, mines, blasting, or other like purposes,
Shells and torpedoes containing any explosive,
Fuzes for blasting, which are not safety fuzes,
Fuzes for shells,
Tubes for firing explosives,
War rockets,
which do not contain their own means of ignition.

Division 3 comprises any ammunition, as before defined, which contains its own means of ignition and is not included in Division 1, such as—

Detonators,
Cartridges for small arms which are not safety cartridges,
Fuzes for blasting, which are not safety fuzes,
Fuzes for shells,
Tubes for firing explosives,
which do contain their own means of ignition.

By ammunition containing its own means of ignition is meant ammunition having an arrangement, whether attached to it or forming part of it, which is adapted to explode or fire the same by friction or percussion.

CLASS 7.—*Firework Class.*

The term "firework" comprises firework composition and manufactured fireworks.

Division 1.— * * * * *

Division 2.—The term "manufactured firework" means any explosive of the foregoing classes and any firework composition, when such explosive or composition is enclosed in any case or contrivance, or is otherwise manufactured so as to form a squib, cracker, serpent, rocket (other than a war rocket), maroon, star, lance, wheel, Chinese fire, Roman candle, or other article adapted for the production of pyrotechnic effects or pyrotechnic signals.

"class 6—Ammunition class" charged with or containing explosives of classes 2, 3, 4 or 5 in excess of 100 lb. in weight *or having on board, for discharge, at Madras explosives of class* 1—*Gunpowder class—in excess of* 560 *lb. in weight*, shall, on arrival at the port, proceed to a distance of not less than one mile north of the north arm and half a mile off shore outside the harbour and shall not be permitted to enter the harbour until all such explosives have been discharged; after which, provided the requirements of rule (*e*) as regards the security of explosives remaining on board have been met, the vessel may be permitted to enter the harbour and to discharge or ship therein *explosives of class I—Gunpowder class—not exceeding* 560 *lb. in weight, or other* explosives not being of classes 2, 3, 4 or 5, or ammunition containing, or charged with, explosives of classes 2, 3, 4 and 5, or fireworks composition, class 7, division I. *Provided that nothing in this rule shall prevent the landing and shipment, inside the harbour, in any quantity, of small arm safety cartridges, when properly packed in tin cases hermetically closed.* Whilst any explosives shall remain on board, such vessel shall have a red flag kept flying at the foremast head between sunrise and sunset and one red light at the ensign staff or peak, in addition to the usual anchor light between sunset and sunrise, and the master or chief officer shall remain on board of her until the explosives intended for the port of Madras shall have been discharged.

Rule (*d*).—The master of every vessel receiving or delivering any explosives shall see that the platform in the vessel's hold to be used in receiving or delivering such explosives and the gangways and combings of the hatchways of such vessel are covered with tanned hides or other suitable paddings; that the barrels or boxes containing any such explosives and received on board any such vessel are carefully

stowed therein; that the hatches of such vessel are properly secured and locked, and that the key of the magazine in which any such explosives may be stowed remains in his own possession. In shipping or discharging any explosives, tanned hides or wadmiltilts shall be laid down in those portions of the vessel over which the barrels or boxes containing any such explosives shall pass, and cushions properly stuffed and covered with leather shall be placed in the hold and on the deck of the vessel in the places on to which any such barrels or boxes shall be lowered. All persons concerned in the handling, or in supervising the handling, of any such barrels or boxes of explosives, shall wear suitable shoes without any metal nails or other metal in or upon them or shall wear no shoes.

Rule (*e*).—No vessel having on board explosives exceeding 100 lb. weight shall enter the Madras Harbour unless such explosives are secured in a properly-constructed magazine to be approved of by the Deputy Conservator of the Port or other officer deputed by him to inspect it.

Rule (*f*).—"Barges, lighters and boats in the port of Madras having on board any explosives shall be kept scrupulously clean and free from loose explosives and shall not, when at anchor, lie closer than *1 cable's length or 200 yards* from any of the shipping in the port or from any public landing place, and all cases of explosives in any such barges, lighters or boats shall be securely covered with tarpaulins. Whilst any such explosives shall remain on board, there shall be kept a red flag flying on every such barge, lighter or boat between sunrise and sunset and a red light in an elevated position shall be shown from any such barge, lighter or boat between sunset and sunrise. No fires, smoking or matches, shall be allowed on board any such barge, lighter or boat, nor any light of any kind *except the red light mentioned above and except in the case of* properly decked barges on the deck of which may be allowed one lantern of good pattern. *Kerosine or other explosive oil is not to be used for the aforementioned lights.* The tindal and at least half of the crew of every such barge, lighter or boat shall remain on board thereof until all the explosives are discharged therefrom.

Rule (*g*).—All barges, lighters and boats having any explosives on board *to be landed outside of the harbour*, shall remain off shore until orders are received from the officer directing the landing to approach the beach. Not more than two such barges, lighters or boats shall be permitted to unload at a time, and such unloading shall take place either at the bay in the revetment at Cassimode or at the north end of the revetment according to the state of wind and current.

Rule (*h*).—With the sanction of the Chairman of the Harbour Trust Board, which will be accorded only on production of the required special permit from the Collector of Sea Customs, explosives not prohibited under rule (*c*) if properly packed as required by rule 2 of the rules issued by the Governor-General in Council under section 5 of the Indian Explosives Act, 1884, may be shipped on board, or landed from a vessel lying at the ordinary moorings within the harbour. Shipment of any such explosives shall be effected under the precautions and conditions mentioned and contained in these rules, and such explosives must be taken

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on board the vessel for which they are intended, immediately after the boat by which such explosives are taken off to such vessel has come alongside the same, and no cargo boat or other vessel having fire on board shall be allowed to lie *nearer than 1 cable's length or 200 yards of* such vessel during the time that any explosives are being shipped on board the same.

Rule (*i*).—When explosives (other than those mentioned in Class 6, and Division 2, Class 7, of the rules made by the Governor-General in Council under section 5 of the Indian Explosives Act, 1884) are shipped or landed within the Madras port limits, the smoking of tobacco on board the vessel on which they shall be shipped or from which they shall be landed shall be prohibited, and all fires and lights on board shall be extinguished before the barge, lighter or boat bringing such explosives for shipment or receiving such explosives to be landed shall come alongside of such vessel. In the case of a steamer, should it be necessary that the fires in her engine-room should remain lighted, the barge, lighter or boat so bringing or receiving such explosives shall be placed to the windward of the steamer's funnel, and in the event of the steamer swinging, such explosives are to be covered with tarpaulins until such barge, lighter or boat is removed to a safe and proper position. No explosives other than those mentioned in the above two classes shall be discharged from a ship or shipped from the shore before 6-30 A.M. or after 4 P.M.

Rule (*j*).—The Chairman of the Harbour Trust Board, or any other person he may depute to act on his behalf, may from time to time prohibit the shipping or landing of explosives of any kind whatever within the Madras Harbour or may grant permission to ship or land any explosives within the harbour only on such conditions as may seem expedient.

Rule (*k*).—No magazine on board any vessel containing explosives other than safety fuzes, cartridges and caps shall be opened while such ship is inside the Madras harbour without the permission of the Chairman of the Harbour Trust Board *or other person he may depute to act for him*, except in cases of emergency, and in case, in the opinion of the Chairman of the Harbour Trust Board, the emergency was not such as to justify the master of such vessel in opening or allowing to be opened such magazine, he shall be deemed to have contravened this rule. Such magazine shall remain open only for the time required to remove or load explosives, and that operation shall always be performed in the presence of an officer of the ship.

Rule (*l*).—If any person shall contravene any of the foregoing rules, he shall on conviction be punished with fine which may extend to one thousand rupees.

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APPENDIX.

RULES framed by the Governor-General of India in Council under Section 5 of the Indian Explosives Act, 1884, and published under Government of India Notification, No. 1417, dated the 24th June 1887.

For the purposes of these rules, explosives shall be classified as follows, namely—

Class 1	..	Gunpowder.
„ 2	..	Nitrate-mixture.
„ 3	..	Nitro-compound.
„ 4	..	Chlorate-mixture.
„ 5	..	Fulminate.
„ 6	..	Ammunition.
„ 7	..	Firework.

And when an explosive falls within the description of more than one class, it shall be deemed to belong exclusively to the latest of the classes within the description of which it falls.

CLASS 1.—*Gunpowder Class.*

The term "gunpowder" means exclusively gunpowder ordinarily so called.

CLASS 2.—*Nitrate-mixture Class.*

The term "nitrate-mixture" means any preparation, other than gunpowder ordinarily so called, formed by the mechanical mixture of a nitrate with any form of carbon or with any carbonaceous substance not possessed of explosive properties, whether sulphur be or be not added to such preparation nd whether such preparation be or be not mechanically mixed with any other non-explosive substance.

The nitrate-mixture class comprises such explosives as—

Pyrolithe,
Pudrolithe,
Poudre saxifragine,

and any preparation coming within the above definition.

CLASS 3.—*Nitro-compound Class.*

The term "nitro-compound" means any chemical compound possessed of explosive properties, or capable of combining with metals to form an explosive compound, which is produced by the chemical action of nitric acid (whether mixed or not with sulphuric acid) or of a nitrate mixed with sulphuric acid upon any carbonaceous substance, whether such compound is mechanically mixed with other substances or not.

The nitro-compound class has two divisions:—

Division 1 comprises such explosives as—

Nitro-glycerine,
Dynamite,
Lithofracteur,
Dualine,
Glyoxiline,
Methylic nitrate,

and any chemical compound or mechanically-mixed preparation which consists, either wholly or partly, of nitro-glycerine or of some other liquid nitro-compound.

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Division 2 comprises such explosives as—

Gun-cotton, ordinarily so called,	Schultz's powder,
Gun paper,	Nitro-mannite,
Xyloidine,	Picrates,
Gun sawdust,	Picric powder,
Nitrated gun cotton,	Tonite (or cotton-powder),
Cotton-gunpowder,	

and any nitro-compound, as before defined, which is not comprised in the first division.

CLASS 4.—*Chlorate-mixture Class.*

The term "chlorate-mixture" means any explosive containing a chlorate.

The chlorate-mixture class has two divisions:—

Division 1 comprises such explosives as—

Horsley's blasting powder,	Brain's blasting powder,

and any chlorate preparation which consists partly of nitro-glycerine or of some other liquid nitro-compound.

Division 2 comprises such explosives as—

Horsley's original blasting powder,	Reichen's blasting charges,
Erhardt's powder,	Teutonite,
Reverley's powder,	Chlorated gun-cotton,
Hochstadtor's blasting charges,	

and any chlorate-mixture as before defined, which is not comprised in the first division.

CLASS 5.—*Fulminate Class.*

The term "fulminate" means any chemical compound or mechanical mixture, whether included in the foregoing classes or not, which, from its great susceptibility to detonation, is suitable for employment in percussion caps or any other appliances for developing detonation, or which, from its extreme sensibility to explosion, and from its great instability (that is to say, readiness to undergo decomposition from very slight exciting causes), is especially dangerous.

This class consists of two divisions:—

Division 1 comprises such compounds as the fulminates of silver and of mercury, and preparations of these substances, such as are used in percussion caps, and any preparation consisting of a mixture of a chlorate with phosphorous, or certain descriptions of phosphorous compounds, with or without the addition of carbonaceous matter, and any preparation consisting of a mixture of a chlorate with sulphur, or with a sulphurate, with or without carbonaceous matter.

Division 2 comprises such substances as the chloride and the iodide of nitrogen, fulminating gold and silver, diazobenzol, and the nitrate of diazobenzol.

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CLASS 6.—*Ammunition Class.*

The term "ammunition" means an explosive of any of the foregoing classes when enclosed in any case or contrivance, or otherwise adapted or prepared so as to form a cartridge or charge for small-arms, cannon, or any other weapon, or for blasting, or to form any safety or other fuze for blasting or for shells, or to form any tube for firing explosives, or to form a percussion cap, a detonator, a fog signal, a shell, a torpedo, a war rocket, or other contrivance other than a firework.

The term "percussion cap" does not include a detonator.

The term "detonator" means a capsule or case which is of such strength and construction, and contains an explosive of the fulminate-explosive class in such quantity, that the explosion of one capsule or case will communicate the explosion to other like capsules or cases.

The term "safety fuze" means a fuze for blasting which burns and does not explode, and which does not contain its own means of ignition, and which is of such strength and construction and contains an explosive in such quantity that the burning of such fuze will not communicate laterally with other like fuzes.

The expression "safety cartridges" means cartridges for small-arms of which the case can be extracted from the small-arm after firing, and which are so closed as to prevent any explosion in one cartridge being communicated to other cartridges.

The ammunition class has three divisions:—

Division 1 comprises exclusively—

Safety cartridges.	Railway fog signals.
Safety fuzes for blasting.	Percussion caps.

Division 2 comprises any ammunition, as before defined, which does not contain its own means of ignition and is not included in Division 1, such as—

Cartridges for small-arms, which are not safety cartridges,
Cartridges and charges for cannon, shells, mines, blasting, or other like purposes,
Shells and torpedoes containing any explosive,
Fuzes for blasting, which are not safety fuzes,
Fuzes for shells,
Tubes for firing explosives,
War rockets,

which do not contain their own means of ignition.

Division 3 comprises any ammunition, as before defined, which contains its own means of ignition and is not included in Division 1, such as—

Detonators,
Cartridges for small-arms which are not safety cartridges,
Fuzes for blasting, which are not safety fuzes,
Fuzes for shells,
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By ammunition containing its own means of ignition is meant ammunition having an arrangement, whether attached to it or forming part of it, which is adapted to explode or fire the same by friction or percussion.

CLASS 7.—*Firework Class.*

The term "firework" comprises firework composition and manufactured fireworks

Division 1.—The term "firework composition" means any chemical compound or mechanically-mixed preparation of an explosive or inflammable nature which is used for the purpose of making manufactured fireworks, and is not included in the former classes or explosives, and also any coloured fire composition

Division 2.—The term "manufactured firework" means any explosive of the foregoing classes and any firework composition, when such explosive or composition is enclosed in any case or contrivance, or is otherwise manufactured so as to form a squib, cracker, serpent, rocket (other than a war rocket), maroon, star, lance, wheel, Chinese fire, Roman candle, or other article adapted for the production of pyrotechnic effects or pyrotechnic signals.

TRANSPORT.

(*a*) *Packing.*

2. The following general rules shall be observed with respect to the packing of explosives for conveyance :—

I. Each class of explosive shall be separately packed.

II. An explosive, not being an explosive of the 5th (fulminate) class or of the 2nd and 3rd (divisions of the 6th ammunition) class or of the 1st division of the 7th (firework) class, shall, if not exceeding 5 lb. in quantity, be contained in a substantial case, bag, canister, or other receptacle made and closed so as to prevent the explosive from escaping.

III. An explosive of the first (gunpowder) class, which is intended to be used for blasting purposes, may be carried in barrels covered with waxcloth or gunny.

IV. In every other case the explosive shall be contained in a double package. The inner package shall be a substantial case, bag, canister, or other receptacle, made and closed so as to prevent the explosive from escaping, and the outer package shall be a box, barrel, or case of wood or metal or other solid material, and shall be of such strength, construction and character that will not be broken or accidentally opened, or become defective or insecure whilst being conveyed, and will not allow the explosive to escape. Provided as follows :—

(*a*) If the explosive is explosive of the 1st or gunpowder class, or is explosive of the 2nd (nitrate mixture) class, or is gun-cotton or other explosive of the 2nd division of the 3rd (nitro-compound) class, the quantity of explosive in any one outer package shall not, in the case of explosive of the first two classes, exceed 100 lb., and in the case of the last, 50 lb. ; and if the explosive be gun-cotton, it shall be carried thoroughly saturated with water.

(*b*) If the explosive belongs to the 1st division of the 3rd (nitro-compound) class or to the 4th (chlorate-mixture) class, the inner package shall be without any metal in its construction, and the inner or outer package or both shall be thoroughly waterproof. No one of the inner packages shall contain more than 10 lb., and the aggregate quantity of the explosive in any one outer package shall not exceed 50 lb ;

(*c*) If the explosive belongs to the 5th (fulminate) class, it shall be packed in such manner as the Governor-General in Council may specially direct ;

(*d*) If the explosive belongs to the 1st division of the 6th (ammunition) class or is any explosive of the 2nd division, an outer package shall not be required, but it may be contained in quantity not exceeding 100 lb. in a single package, which shall be a box, barrel, or case not less than $\frac{3}{4}$ of an inch in thickness of such strength, construction and character as will not be broken or accidentally opened or become defective or insecure whilst being conveyed, and will not allow the explosive to escape.

(*e*) If the explosive belongs to the 3rd division of the 6th (ammunition) class, it shall be packed in a double package. The inner package shall not contain more than 2 lb. of such explosive, and no more than 50 lb. shall be contained in the outer package ;

(*f*) If the explosive belongs to the 1st division of the 7th (firework) class, it shall be contained in a double package. The inner package shall be a substantial canister, case, or other receptacle hermetically closed, and containing no more than 1 lb of explosive, and no more than 20 lb. shall be contained in outer package ; and

(*g*) If the explosive belongs to the 2nd division of the 7th (firework) class, it shall be contained in a box, barrel or case of wood, metal or other solid material, and of such strength, construction and character that it will not be broken or accidentally opened, or become defective or insecure whilst being conveyed, and will not allow any explosive to escape, and the quantity of explosive in any one package shall not exceed 100 lb.

V. Whatever be the amount of the explosive, and to whatever class or division of a class it belongs, the following conditions shall be observed :—

(*a*) The interior of every package, whether single or double, shall be kept free from grit and otherwise clean ;

(*b*) Every package, whether single or double, when actually used for the packing of explosive, shall not be used for the packing of any other explosive of the same or any other class or for any other purpose ;

(*c*) There shall not be any iron or steel in the construction of any such single package or inner or outer package unless the same is effectually covered with tin, zinc or other suitable material ;

(*d*) On the outermost package there shall be affixed in conspicuous characters, by means of a brand or securely-attached label or mark, the word "Explosive," followed by the name of the explosive, or other description of the contents, and the name and address of the owners or sender ; and

(*e*) The amount of explosive in any single package, or, if there is a double package, in any one outer package, shall not exceed the amount specified

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in the foregoing rules, except with the consent of, and under conditions to be approved by, an officer appointed by the local Government in this behalf.

3. If any person commits a breach of any of the foregoing rules relating to the packing of explosives for conveyance, he shall be punished with fine which may extend to Rs. 1,000.

(b) Mode of Conveyance.

4. The following general rules shall be observed with respect to the conveyance of explosives :—

I. No explosive shall be conveyed from place to place unless packed in the manner provided for in the foregoing rules.

II. There shall not be conveyed in any carriage or vessel, which is being used for the conveyance of an explosive, any explosive of a different class and division, of whatsoever nature, which contains its own means of ignition, unless it be sufficiently separated therefrom to prevent any fire or explosion which may take place in one such explosive being communicated to another.

III. No explosive shall be loaded or unloaded except between sunrise and sunset.

IV. Whilst the explosive is being loaded on, or unloaded out of, any carriage or vessel, no fire or artificial light, nor any article which is liable to cause or communicate fire or explosion (such as charcoal, lucifer matches, articles for striking a light, petroleum to which the Petroleum Act or any Act repealing or amending the same applies, or any spirit or oil or substance that gives forth an inflammable vapour at a temperature below 100° Fahrenheit), shall be, or shall be allowed to be, brought, had, or used dangerously near to such carriage, ship or boat; and no smoking shall be allowed in, on, or dangerously near to the same, provided that when the use of a light for the purpose of such loading or unloading is unavoidable, a lamp of such construction, position or character as not to cause any danger from fire or explosion may be used; and no person, while handling any explosive (except gunpowder explosive of Division 1, Class 6, or explosive of Class 7, if packed in accordance with the packing rules), shall wear boots or shoes with iron or steel nails, heels, or tips.

V. In loading or unloading any explosive, the casks and packages containing the same shall be passed from hand to hand and not rolled upon the ground; they shall not be thrown or dropped down, but shall be carefully deposited and stored.

VI. The explosive shall not be conveyed except in the interior of a carriage so enclosed on all sides with wood or metal, or in the hold of a ship or boat having a close deck, so closed as effectually to protect the explosive against accident by fire from without. If the explosive cannot be so secured, it shall be completely covered with painted cloth, tarpaulin, or other suitable material so as to effectually protect it against communication of fire.

VII. There shall not be any iron or steel in the interior of the portion of the carriage or vessel with which the case containing the explosive is in contact, unless the same be effectually covered with leather, wood, cloth or other suitable material.

VIII. In the stowing of explosive, due precautions shall be taken by means of a partition or otherwise, and by careful stowing, to secure such explosive from being

brought into contact with, or endangered by, any other article or substance conveyed in such carriage or vessel which is liable to cause fire or explosion; and if the explosive is dangerously affected by water, due precautions shall be taken to exclude water from coming into contact with such explosive.

IX. The amount of explosive conveyed in any one carriage or vessel at any one time shall not exceed 2,000 lb. unless the carriage be so enclosed on all sides with wood or metal, or the vessel have a close deck, so closed as effectually to protect the explosive against accident by fire from without, in which case the amount of explosive conveyed shall not exceed the following :—

	Tons.
In any one carriage on a railway	10
,, ,, other carriage	2
,, ,, vessel	20

NOTE.—This rule must in the case of dynamite conveyed by railway be read subject to paragraph XII of rule 6.

X. Nothing in the foregoing rules (except Rule I) shall apply to any explosive of the 1st division of the 6th (ammunition) class, provided all due precautions are taken for the prevention of accidents.

5. The following rules shall be observed with respect to the conveyance of explosives otherwise than by public railway :—

I. No explosive shall be conveyed in a carriage or boat whilst carrying or plying for public passengers, unless the quantity be less than 5 lb., and notice has been given beforehand to the person in charge of such carriage or boat, provided that there shall not be conveyed in any such carriage or boat any explosive of the 5th (fulminate) class, or any explosive of the 3rd division of the 6th (ammunition) class or of the first division of the 3rd (nitro-compound) class, except—

(i) dynamite, which may be carried in the form of cartridges up to the limit of 5 lb. provided that no detonators are carried in the same compartment; and

(ii) detonators to the number of 200, provided that the amount of fulminate of mercury in the package or packages containing the detonators shall in no case exceed in the aggregate 3 oz. (a certificate to this effect being given by the Agent of the Company by whom the detonators are tendered for transport), provided also that no dynamite is carried in the same compartment.

II. With respect to the conveyance by carriage or vessel of explosive of the 5th (fulminate) class, or of the 3rd division of the 6th (ammunition) class, or of the 1st division of the 7th (firework) class, or of larger quantities than 5 lb. of any other explosive, the following regulations shall be observed :—

(1) The person in charge of the carriage or vessel shall not drive or conduct the same in a dangerous or reckless manner, and shall take all due precautions to avoid fire and explosion, and no person shall do any act or thing in relation to the explosive which tends to cause fire or explosion, and is not reasonably necessary for the conveyance of the explosive or for work immediately connected with such conveyance; and a person

who is intoxicated shall not have charge of any carriage or vessel conveying explosive, and shall not be permitted to be in, or on or, attending, the same.

(2) A person shall not forward to any warehouseman or carrier a consignment of explosive, unless he has given notice to such warehouseman or carrier beforehand stating the name and quantity of the explosive proposed to be conveyed and the name and address of the proposed consignee, and has had an intimation that the warehouseman or carrier is prepared to receive the consignment; and a warehouseman or carrier shall not make such an intimation, nor receive such consignment, unless he is prepared to receive it, and forthwith to despatch the same, or to deposit it in a magazine or at a place at which a person is licensed to possess the same.

(3) The carriage or vessel conveying the explosive shall be in charge of, and constantly attended by, some competent person, or by a sufficient number of competent persons, and such persons shall not, if the amount of explosive conveyed exceed 100 lb., stop or delay for a longer time than may be reasonably necessary, or stop unnecessarily at any place where such stopping would be attended with special public danger.

7. If any person commits a breach of any of the foregoing rules relating to the mode of conveyance of explosives, he shall be punished with a fine which may extend to Rs. 1,000.

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16 Encl 17

Harbour Trust Office,

MADRAS, 8th September 1898.

No. 2216

From

J.N.Atkinson Esq, I.C.S.,

Chairman, Harbour Trust Board,

MADRAS.

To

W.B.deWinton Esq,

Secretary to Government,

Marine Department.

Sir,

I have the honor to acknowledge the receipt of your telegram dated 7th September regarding the proposed alterations in the Explosive rules at this port and the protest received from Calcutta forwarded to you under cover of my letter No. 2102 dated 3rd idem, and I submit herewith copy of my telegram sent in reply yesterday afternoon.

2. Mr Farquhar, the delegate of the Calcutta firms, gave me to understand that the slight alteration proposed by the Harbour Board in rule (c) at its meeting of the 2nd September would meet the particular objection that had been raised by the Calcutta firms, and he immediately returned to Calcutta. In my letter No. 2091 dated 3rd September, I had explained the purport of the rules to him but he did not acknowledge receipt of this letter, therefore I am without positive assurance that no further objection will be raised. On the other hand Mr Farquhar had stated in conversation that the explosive rules are altogether antiquated, impose unnecessary restrictions on certain classes of explosives such as Schultz's powder and differ materially from corresponding rules in European countries. The rules hitherto have been very liberally interpreted, and it is I think the rather closer adherence of late to both their letter and spirit that has attracted the attention of firms interested to

these

these rules, of the existence of which formerly they were almost unaware.

3. I am of opinion that further objections may come from Calcutta regarding rules other than (c), as the alteration suggested in Harbour Trust Board's resolution of 2nd September may merely tide over a temporary difficulty. I also think that the Madras Trades Association is likely to move in the matter, because the alteration in rule (c) proposed by the Harbour Board at its meeting of the 2nd September while allowing Calcutta gunpowder into the Harbour when enclosed in a properly constructed magazine absolutely and very distinctly excludes all intended for discharge at Madras in excess of 560 lbs; and this is said by the representative of the Trades Association who sits on the Harbour Trust Board to be tantamount to total exclusion, since gunpowder is always imported in larger consignments.

As already stated I am inclined to think that the explosive rules have never seriously been studied by the firms interested whether in Madras or Calcutta: and I would respectfully suggest that it might be advisable to have the rules thoroughly revised by a representative Committee.

4. The Explosive rules, with appendix have not yet been published complete with all alterations inserted up to date. I have therefore had them put in type at the Government press, and submit herewith a proof* copy for ready reference.

I have the honour to be,

Sir,

Your Obedient Servant,

J. H. Atkinson

Chairman,

Harbour Trust Board.

C. P.

Secy.

* Printed as an appendix to the present Proceedings.

J. C.

Marine Department

No. 4866 Q 22nd Septr 1898

Telegram

From
Secretary
Marine
To Colacammud
Colonial Secretary
Colombo.

Decbd. 22-Sept 98 Favour of early reply requested my telegram Eighth Subject Explosives.

C.S.

20-S-98

urgent

Marine (1897) Department.

CURRENT No. 1226

Order

From
The Chairman,
Harbour Trust Board,
Madras.

No. 2437

Dated 27—9—98

Despatched 28—" —"

Received 30— " "

Enclosures 1

Spare copies

SUBJECT.

Submitting for the information of Government copy of letter from Mr Farquhar of Calcutta stating that the proposed amendment has been the means of inducing the B.I.Co. to again accept freight of sporting explosives for Calcutta.

BACK PAPERS.

G. O.	No.	Department.	Date.
480	2897-98		
C.P.	1155	98	
472	2897-98		
A			
50	5400	27-6-98	
	5411	27-6-98	
	6240	15-7-98	
	6230	15-7-98	

FURTHER PAPERS.

G. O.	No.	Department.	Date.

13 Old Court House St.

Calcutta,

22nd September 1898.

To,

J.N.Atkinson Esq I.C.S.,

Chairman,

Harbour Trust Board,

M A D R A S.

Sir,

I have the honour to acknowledge receipt of your letter dated 3rd instant, enclosing copy of resolution passed by the Harbour Trustees at their Board's meeting held on 2nd instant.

I am pleased to be able to state that the decision arrived at has been the means of inducing the British India S.N.Coy. to again accept freight for sporting explosives for Calcutta.

Our best thanks are due for the early consideration given to the memorial which I had the honour of handing you.

I have &c,

Signed A.Farquhar,

HARBOUR TRUST
MADRAS 27 SE 98
SECRETARY'S OFFICE

(True Copy)

A Pinnett

Secretary,

Harbour Trust Board.

21
Jaff

Harbour Trust Office,

MADRAS, 27th September 1898.

No. 2437

From

J.M.Atkinson Esq I.C.S.,

Chairman, Harbour Trust Board,

MADRAS.

To

W.B.deWinton Esq.,

Secretary to Government,

Marine Department.

Sir,

Referring to your telegram dated 7th September and my reply of same date confirmed by my letter of the 8th idem No.2816 I have the honour to submit for the information of Government copy of a letter received today from Mr Farquhar dated Calcutta 22nd September wherein he states, as representative of the Calcutta Firms interested in the importation of explosives at that port, that the proposed amendment of rule (c) vide para 3 of my letter No.2102 dated 3rd September, has been the means of inducing the British India Company to again accept freight of sporting explosives for Calcutta.

I have the honour to be,

Sir,

Your Obedient Servant,

J.M. Atkinson

Chairman,

Harbour Trust Board.

Secy.

Marine E. 1/1226/98

Marine (189

Order

C.No 6226

1233

MB

This matter is awaiting reply from the Ceylon Govt, to which several communications have been addressed - the latest being the Telegram of the 22nd Inst.

MB
30-Sep 98

Can they have failed over the different matters the consideration of the most important of which I cannot understand the delay in settling? Have they been addressed correctly?

MB
30.9.98

MB

(1) This seems unquestionable. The correct address has been used, and had the third

Telegrams with been
delivered they owned
have come back to
us from the Telegraph
office. C.S.
30 Sep 98

Sen 1.10 98

Marine (1898) Department.

Urgent CURRENT No. 1233

Order

From

The Colonial Secretary
Colombo

No. —

Dated 27-9-98
Received 3-10-98
Enclosures 3
Spare copies —

SUBJECT.

Explosives

Forwarding copies of reports by the Principal Collector of Customs and the Master Attendant, Colombo on the precautions taken against vessels entering Colombo Harbour with ——— on board.

M 4.
1,000—6-5-96.

BACK PAPERS.

G.O.	No.	Department.	Date.
680	E		22-9-88
790	Mar		13-9-88
427	E.		8-9-88
626	Mar		18-7-88 } 88.
623	"		18-7-88 }
540	Mar		27-6-88 88.

FURTHER PAPERS.

G.O.	No.	Department.	Date.

Print only
Rule 22

[Extract from the "Ceylon Government Gazette," No. 4,840 of January 20, 1888.]

IT is hereby notified that His Excellency the Governor in Executive Council has sanctioned the following regulations for shipping, transhipping, or discharging Gunpowder and other Explosives within the Port of Colombo, and they are published for general information :—

1. No vessel having more than one hundredweight of gunpowder or other explosive to discharge or receive shall commence to discharge or receive until all boats, excepting the boat intended to receive it or to convey it, shall have been removed from alongside to a distance of at least fifty feet from the discharging or receiving vessel ; and no boat excepting the boat aforesaid shall come within fifty feet of any vessel while discharging or receiving any explosive as aforesaid.

2. Any boat engaged in the landing, shipping, or transhipping of any explosive as aforesaid of more than one hunredweight shall, as long as the explosive remains in the boat, keep it covered with double tarpaulins, and shall display at the bow and at the stern a red flag two feet square on a staff not less than six feet above the boat ; and no light or fire shall on any account be permitted within the boat.

3. Any boat engaged in landing, shipping, or transhipping any explosive as aforesaid of more than one hundredweight shall, if she have taken on board any explosive which cannot be landed, shipped, or transhipped, at once be removed to a place of safety appointed by the Master Attendant, and remain there till the time for landing, shipping, or transhipping arrives.

4. Permission to land any explosive shall not be granted until a proper escort is ready for its conveyance to a magazine, and it shall be conveyed only in such carts as the Inspector-General of Police or those acting under his orders may approve.

5. Quantities of any explosive as aforesaid in excess of one hundredweight shall be landed and shipped only at the Prince of Wales' jetty (or at such other jetty as may be appointed by the Principal Collector of Customs) between the hours of 6 and 8 A.M. and 4 and 5 P.M., when all other boats shall have been removed from the jetty ; and no carts or persons shall be allowed on the jetty during the landing or loading of the explosive except those actually engaged in the work.

6. No boats shall be engaged in the landing, shipping, or transhipping of any explosive as aforesaid of more than one hundredweight until three hours' notice shall have been given to the Inspector of Harbour Police, and an officer of the Police Force shall have been appointed by him to occupy the boat and see the regulations carried out.

7. The Police Officer superintending the landing shall refuse to receive gunpowder or other explosive so packed that it would not be received at the Government Powder Magazine.

8. No cargo of any description shall be conveyed in the same boat with powder or other explosive of over one hundredweight.

9. Dynamite and gunpowder shall not be conveyed together in the same boat.

By His Excellency's command,

Colonial Secretary's Office,
Colombo, January 12, 1888.

G. T. M. O'BRIEN,
Acting Colonial Secretary.

the berth appointed for them. Attendant, and shall change their berth, or remove, whenever he requires them to do so.

BACK PAPERS

Print only
Rule 22

IN the Name of Her Majesty VICTORIA, of the United Kingdom of Great Britain and Ireland Queen, Defender of the Faith.

PROCLAMATION.

By His Excellency Sir ARTHUR ELIBANK HAVELOCK, Knight Commander of the Most Distinguished Order of Saint Michael and Saint George, Governor and Commander-in-Chief in and over the Island of Ceylon, with the Dependencies thereof.

A. E. HAVELOCK.

WHEREAS by the 6th section of "The Masters Attendant Ordinance, 1865," it is enacted that the Governor may from time to time, with the advice and consent of the Executive Council, frame and establish such port rules, not inconsistent with the said Ordinance, as he may think necessary for the purposes specified therein, provided that such port rules shall be promulgated by Proclamation in the *Government Gazette* at least one month before the same shall take effect:

And whereas the Port of Colombo was brought within the operation of the said Ordinance by a Proclamation dated 6th January, 1866, on which day the Governor, with the advice and consent of the Executive Council, did also frame and establish certain Port rules for the port of Colombo, and duly promulgate the same by Proclamation in the *Government Gazette* of January 6, 1866:

And whereas new port rules were made and established for the Port of Colombo, for the purposes of the said Ordinance, by Proclamation bearing date the 24th August, 1882:

And whereas by the 1st section of the Ordinance No. 23 of 1884 it is further enacted that whenever by any law or Ordinance of this Colony power is given to "the Governor in Executive Council," or to "the Governor with the advice of the Executive Council," or to "the Governor with the advice and consent of the Executive Council" to make any rules or regulations under such Law or Ordinance, such power shall be deemed to include the power of altering, amending, adding to, or repealing any rules or regulations so made:

And whereas it is expedient to amend the Port rules promulgated by the Proclamation of 24th August, 1882:

Now know Ye that We, the said Governor, with the advice and consent of the Executive Council, do by this Our Proclamation promulgate the following amended port rules for the Port of Colombo as required and directed by the said Ordinance.

Given at Colombo, in the said Island of Ceylon, this Twentieth day of December, in the year of our Lord One thousand Eight hundred and Ninety-four.

By His Excellency's command,

E. NOEL WALKER,
Colonial Secretary.

GOD SAVE THE QUEEN!

RULES RELATING TO THE PORT OF COLOMBO.

Vessels on arrival to be reported at Custom-house and Master Attendant's Office.

1. Commanders of all vessels arriving within the port, or their agents, shall report their vessels without delay at the Custom-house and Master Attendant's Office, and furnish the Master Attendant with a list of their passengers disembarking and embarking, and twelve hours before sailing hoist a Blue-Peter at the fore, and give notice at the Master Attendant's Office of the time of sailing.

Mails to be landed without delay.

2. Commanders of all vessels arriving within the port shall, without delay, deliver to the pilot boat, or other boat sent for the purpose, or land in their own boat, all mail-packets or letters intended for the port.

Vessels to take up the berth appointed for them.

3. All vessels within the port shall take up the berth appointed for them by the Master Attendant, and shall change their berth, or remove, whenever he requires them to do so.

Vessels not to change berth without permission.

4. No vessel within the port shall change her berth, or remove, without permission from the Master Attendant, except in cases of emergency.

No communication to be held until vessel is passed by port surgeon.

5. No person shall leave, and no person except a pilot shall go on board of any vessel arriving within the port that has not a qualified medical officer, until the port surgeon or health officer has given permission to do so.

Vessels carrying a doctor may communicate, provided no sickness on board.

6. Any person may leave or go on board of any vessel arriving within the port having a qualified medical officer, upon a certificate being given by that officer to the pilot that such vessel is at the time of her arrival free from all contagious or infectious disease, and that she has been free from such during the voyage.

Vessels in quarantine to anchor in outer roads.

7. Any vessel arriving within the port liable to be placed in quarantine shall not come within the harbour, but shall cast anchor in the outer roads in the place appointed by the Master Attendant for quarantine anchorage; and any vessel within the harbour placed in quarantine shall immediately be removed to the quarantine anchorage in the outer roads aforesaid; but with the approval of the port surgeon vessels quarantined may come into the harbour and remain there. All vessels in quarantine shall display the following signals: by day the quarantine flag at the fore, and by night a red light over a white light six feet apart hoisted well up where best seen. All vessels arriving within the port that have not a qualified medical officer on board shall display the quarantine signal until the port surgeon has given pratique.

Persons dying on board to be interred on shore.

8. If any person die on board of any vessel within the port, the commander thereof shall cause the body to be brought on shore and interred or otherwise disposed of under directions of the port surgeon.

Infectious cases not to be landed.

9. No person suffering from an infectious disease shall be landed from any vessel within the port without the consent of the port surgeon.

Dead animals not to be thrown overboard.

10. No dead animal shall be thrown overboard from any vessel or boat within the harbour, or within a radius of one mile from the Breakwater head.

Ballast or rubbish not to be thrown overboard.

11. No ballast, ashes, or rubbish shall be thrown overboard from any vessel or boat within the port under a depth of twelve fathoms water.

Vessels to be moored head and stern.

12. All vessels within the harbour shall be moored head and stern as soon as possible after arrival, and shall remain so moored until they are ready to sail.

Spars, &c., to be removed when required.

13. All vessels within the harbour shall keep their jib and spankerbooms rigged in, and shall strike yards and masts, and shall remove any anchor, spar, or any other article projecting from their sides, when required to do so by the Master Attendant.

Warps to be made fast when specified.

14. Warps shall be made fast to any vessel within the port if required for the purpose of assisting any other vessel in mooring or shifting its berth, and shall be kept fast until required to be let go by the officer in charge of the vessel mooring or shifting.

Vessels and boats not to anchor in the channel.

15. No vessel or boat shall anchor in the entrance of the harbour, or in the channel leading to or from any of the mooring buoys within the harbour.

Wharves and jetties to be kept clear.

16. Free passages shall be kept to all piers, jetties, wharves, or landing-places, and all vessels or boats shall move when required to clear such passages.

Particular cargoes to be discharged in particular berths.

17. All vessels taking in, or discharging ballast or any particular kind of cargo within the harbour, shall take up such berth as may be appointed for the purpose by the Master Attendant.

Tarpaulins required when coaling and ballasting.

18. Tarpaulins properly stretched and spread between the side of the ship and the lighter shall be used by all vessels within the harbour in shipping or discharging ballast or coal, so as to prevent any part thereof from falling overboard.

Coal to be discharged in special shoots.

19. All vessels commencing to discharge coal in bulk by open shoots shall use shoots of not less than 4 feet in breadth with sides of 1 foot in depth and of sufficient length to reach down to a point not more than 4 feet above the gunwales of the lighter receiving the coal; but when the vessel shall have been lightened of about half her cargo, an extra length of shoot of from 6 to 8 feet shall be attached to the ends of the shoots in use.

Telescopic shoots of the above breadths and lengths may be used instead of open shoots.

Vessels discharging ballast shall also make use of similar shoots to the above.

Vessels, &c., not to be fast to buoys other than mooring buoys.

20. No vessel, boat, raft, or any other article shall be made fast to any buoy, beacon, or sea-mark within the port, except buoys intended for the purpose.

Pitch, &c., not to be heated on board.

21. No vessel within the harbour shall boil or heat any pitch, tar, resin, dammar, turpentine, oil, or any other such combustible matter on board, but may do so when required in a boat alongside.

Vessels with more than 5 cwt. of explosives on board not to enter harbour.

22. All vessels, except vessels belonging to Her Majesty or any Foreign Power, arriving within the limits of the port, and having on board more than 5 cwt. of gunpowder or any other explosive substance, shall not enter the harbour until the same shall have been discharged from the vessel, unless such gunpowder or other explosive substance is stored securely in a ship's magazine properly constructed.

Vessels requiring to be graved to be removed to a special place.

23. All vessels within the harbour requiring to be graved, breamed, or smoked shall be moved to a berth set apart for that purpose by the Master Attendant.

Customs working hours.

24. No vessel within the port shall land or ship cargo before 6 A.M. or after 4 P.M. without permission from the Collector of Customs.

Sale or supply of spirits prohibited.

25. No person shall sell, supply, or convey any wine or spirituous liquors to any of the crew, or to any other person on board of any vessel within the port, without the consent of the commander of such vessel.

Anchor light.

26. All vessels at anchor within the port shall exhibit between sunset and sunrise, where it can be best seen, but at a height not exceeding 20 ft. above the hull, a white light in globular lantern of 8 in. in diameter, and so constructed as to show a clear, uniform, and unbroken light visible all round the horizon, but at a distance of at least one mile.

Signals.

27. No vessel within the port shall fire guns or rockets or burn blue lights, between the hours of sunset and sunrise, excepting the mail steamers on arrival, which may make such signals as may be arranged with the Master Attendant, and vessels in distress, which should make any of the Board of Trade distress signals.

Rates of pilotage.

28. All vessels over 200 tons entering the port of Colombo shall pay pilotage at the following rates, which shall cover them both inwards and outwards:—

	Rs.
200 tons to 399 tons	15
400 tons to 599 tons	20
600 tons to 799 tons	25
800 tons and upwards	30
Vessels under 200 tons, if they take or apply for a pilot ...	10

Vessels liable to pay pilotage shall, on entering and leaving the port in charge of a pilot between the hours of 6 P.M. and 6 A.M., pay in addition to the above rates an extra fee of Rs. 15, Rs. 10 of which shall go to the pilot and Rs. 5 to the boat's crew.

Pilot signals.

29. Vessels inward bound requiring a pilot should display the Board of Trade pilot signal, and vessels outward bound requiring a pilot should hoist the jack at the fore by day, and by night two red lights 6 ft. apart hoisted well up where best seen.

Boats receiving coal to have special bulwarks.

30. No boat or lighter shall receive loose coal or ballast from shoots from vessels within the harbour without having a temporary bulwark of planks or sheet iron, 2 ft. high by 12 ft. long, shipped on the gunwale of the lighter on the offside whilst being loaded, so as to prevent any part thereof from going overboard from the boat; and no lighter shall be loaded with loose coal heaped up above the gunwales.

Boats to be kept under shoots.

31. The tindal and boatmen of boats or lighters employed in receiving loose coal or ballast from shoots from vessels within the harbour shall keep their boats or lighters fairly under the shoots, whilst being loaded, so as to prevent any part thereof from going overboard.

Boats to have a tindal always on board.

32. No licensed boat or canoe shall land or ship cargo or passengers from or to any vessel within the port without a licensed tindal being in charge.

Boats not to communicate with shore except at authorized jetties.

33. No licensed boat or ship's boat, other than those actually engaged in landing or shipping coal, shall be allowed to communicate with the shore within the limits of the port, except at the authorized jetties within the Customs premises, unless specially authorized by the Master Attendant or the Collector of Customs.

Boats to be moored in special places.

34. All boats and canoes within the harbour when unemployed shall be moored or hauled up in the places appointed for the purpose by the Master Attendant.

Boats not to be beached without permission.

35. No vessel, boat, or canoe shall be hauled up on any part of the beach within the harbour without permission from the Master Attendant.

Boats not to be alongside of jetties.

36. No boat or canoe shall be alongside of any wharf, jetty, or landing-place within the harbour longer than is necessary to land or ship passengers and their luggage or cargo, but shall lie off at a distance so as not to obstruct the approach thereto.

Boats not to go alongside before vessel is moored.

37. No boat or canoe shall go alongside, or within 50 fathoms of any vessel arriving within the port, until such vessel has been moored in her berth.

Boats not to lie alongside of vessels.

38. No boat or canoe shall lie alongside of any vessel within the port longer than is necessary to embark or disembark its passengers and luggage, but shall lie off at a distance of not less than 15 fathoms from the ship's side, so as to leave a clear passage to and from the gangway.

Boats to keep out of the course of vessels under weigh.

39. All boats, canoes, and kattamarams shall keep out of the course of steamers and sailing vessels entering or leaving the harbour, and of the mooring boats employed in passing lines to the buoys, so as not to impede or obstruct their movements.

Notice to be given of withdrawal of boats from work and return to work.

40. No licensed boat or canoe shall be withdrawn from the port or from work without notice being given to the Master Attendant. Notice shall also be given of the return to the port or to work of any boat or canoe that has been withdrawn.

Notice of change of ownership to be given.

41. Notice of transfer of ownership of any licensed boat or canoe shall be given to the Master Attendant, and the transfer endorsed on the license.

Number of persons licensed to carry, and fare, to be painted.

42. The number of persons a boat or canoe is licensed to carry, and the fare, shall be legibly painted on the backboard or some other conspicuous place.

Passenger boats to be employed in rotation.

43. All licensed boats and canoes plying for passengers shall be employed strictly in rotation, and the order of rotation shall be regulated by the tindals appointed for that purpose by the Master Attendant.

A certain number of boats to be kept ready for service at night.

44. A certain number of the licensed boats and canoes plying for passengers, as may be from time to time notified by the Master Attendant, shall be kept ready for service at night, and on Sundays and holidays.

Steam whistles not to be sounded by vessels between 9 P.M. and 6 A.M. except those under weigh.

45. No vessels within the port shall sound any kind of steam whistle for any purpose whatever between the hours of 9 P.M. and 6 A.M., except vessels when under weigh, either in entering or leaving the harbour.

Vessels losing moorings between 9 P.M. and 6 A.M. to burn a blue light at intervals till the pilot boards.

If a vessel between these hours lose her moorings, a blue light should be burnt at intervals till a pilot boards the vessel to re-moor her.

Vessels requiring urgent assistance to fire a rocket in addition to the blue light.

If between these hours a vessel requires urgent assistance, she should fire a rocket in addition to the blue light. As soon as either of the above signals are seen at the flagstaff, a blue light will be burnt in answer from the pilot station.

All persons to be prohibited from descending into holds till purity of air has been tested.

46. All persons shall be prohibited by the commanders of vessels from descending into the holds after removal of the hatches, till the air in the holds has been tested and found respirable. If a naked light lowered into the depths of the hold is not extinguished, the air is pure.

All steam launches, tugs, and steam water boats when under weigh between sunset and sunrise to carry regulation lights for steamers.

47. All steam launches, tugs, and steam water boats shall, when under weigh between sunset and sunrise, carry in the forepart of the vessel, or on or in front of the funnel where it can best be seen, a bright white light so constructed as to show the light from right ahead to two points abaft the beam on each side, and shall also carry the rugulation side lights, green on the starboard side and red on the port; or a combined lantern showing a green light and a red light from right ahead to two points abaft the beam on their respective sides. Such lantern shall be carried below the line of the bright light. Steam launches shall also, between the times specified, proceed at a moderate speed.

All cargo boats and coal boats when under weigh to carry a combined green and red light.

48. All cargo boats and coal boats, whether laden or empty, shall, when under weigh between sunset and sunrise, carry in the forepart of the boat, where it can best be seen, a lantern with a green glass on one side and a red glass on the other, so fitted that the green light shall not be seen on the port side nor the red light on the starboard side.

All passenger rowing boats, canoes, and private rowing boats to have a white light at hand to show in time to prevent collision.

49. All passenger rowing boats and canoes and private rowing boats shall, when under weigh between sunset and sunrise, have ready at hand a lantern showing a white light, which shall be temporarily exhibited in sufficient time to prevent collision.

All sailing vessels to carry regulation side lights when under weigh.

50. All sailing vessels shall, when under weigh within the limits of the port between sunset and sunrise, carry the regulation side lights, green on the starboard side and red on the port side.

Signals to be used by vessels requiring assistance of harbour police.

51. The following signals should be displayed by vessels requiring the assistance of the harbour police: by day the ensign hoisted at the main, and by night two white lights with a red light between them six feet apart, hoisted well up where best seen.

Cargo boats not to lie in tiers of more than four boats abreast.

52. Cargo boats shall not lie alongside of any vessel in the harbour in tiers of more than four boats abreast.

The tindal or person in charge of any boat or boats found lying outside of the fourth boat from the vessel's side shall be liable to prosecution for breach of this rule.

Logs of timber not to be discharged over side of vessel into the water without permission of Master Attendant.

53. No vessel within the port shall discharge logs of timber over the side into the water for the purpose of being floated ashore, unless the special permission of the Master Attendant shall have been obtained therefor, and a guarantee given for the fulfilment of the measures required by him for preventing such timber becoming a source of danger or impediment to the navigation of the harbour.

Commanders or commanding officers and owners or tindals of boats held responsible for any breaches of rules.

54. Commanders or commanding officers of vessels, and owners or tindals of boats, shall be held responsible for any breaches of these rules occurring on board of their vessels or boats, respectively, and accordingly may be prosecuted for the same unless the actual guilty party or parties be delivered up.

J. DONNAN,
Master Attendant.

Encl in Govt Agent's letter 1233/98

Print

2 Sep

Copies of reports referred to.

The Regulations as to shipping, transhipping, and discharging explosives are those dated Jany: 18th 1888 and published in Govt. Gazette No.4840 of 20th January 1888.

No precautions are taken with regard to vessels entering the port with explosives on board by the Customs Department.

The Master Attendant will be in a position to report on the regulations above quoted.

W.H.JACKSON

Actg. P. C. C.

There are no restrictions placed on vessels entering Colomo Harbour with explosives on board, provided the Captain assures the pilot that Port Rule No.22 has been complied with viz:- that the explosives are securely stored in a properly constructed magazine.

Master Attendant's Office
Colombo.16th Sept: 1898.

J.G.O. REYNOLDS

Actg. M. A.

I have little to add to my report on the Telegram on the same subject. In addition to the Regulations of 1888 there is a Port Rule prohibiting the entry into the Harbour of any vessel containing more than 5 cwts of explosives unless secured in a properly constructed Magazine. This provision the Actg. Master Attendant informs me the Pilots see duly enforced. As a matter of fact all vessels carrying large quantities of explosives are I belive specially fitted for the work- Section 23 sub-section (8) of Ordinance No.18 of 1894 further forbids the unloading of explosives other than gunpowder from any ship except to a Person duly licensed

The landing of gunpowder is not restricted to any quantity in Colombo Harbour and as many as 800 kegs (28 lbs. each) have been landed at one time, nor are any vessels with other explosives in properly constructed Magazines prevented from entering the Harbour.

So far we have never had an explosion in Colombo Harbour, and the restrictions in force appear to secure the Public safety.

(Sd.) W.H. JACKSON

Actg. P.C.C.

23rd Sept. 1898.

Urgent

220

RECEIVED SECRETARIES
2- OCT. 1898
GOVERNMENT OF MADRAS

Colonial Secretary's Office,

Colombo, 27 September , 1898.

No. 3

Sir,

In reply to your telegram and letter dated 15th September 1898 enquiring what precautions are taken against vessels entering Colombo Harbour with explosives on board, I am directed to forward to you the enclosed copies of reports thereon by the Principal Collector of Customs and the Master Attendant, Colombo, and of the Rules and Regulations quoted therein

I am, Sir,
Your Obedient Servant,

H W Lee
for Colonial Secretary.

The Hon'ble,
The Chief Secretary to Government,
Fort St. George - MADRAS.
(Marine Department.)

Mar Sur 3
1233/98