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M.O. 1-1140-37-11-37

MADRAS RECORD OFFICE.

Government of Madras.

Public Works
Construction
Department

DEPARTMENT.

G.O. No. 357	Press Mis.
6-17	
Dated 24 2 1857.	

Not to be folded or roughly handled

Fort Saint George, Public Works Consultation of 24th February 1857.

No. 66. Read the following Extract from the Minutes of Consultation in the Military Department, dated 20th January 1857, No. 237.

Read the following letter, from the Military Board ; to Colonel C. A. BROWNE, Secretary to Government, Military Department, dated 9th January 1857, No. 282.

SIR,

1. We have the honor to acknowledge the receipt of Minutes of Consultation, No. 3064 of 24th November 1856, forwarding copy of the Honorable Court's Despatch of 1st October 1856, No. 100, containing remarks on the demand for supplies in the Annual Indent of January 1856, and in connection with the Honorable Court's remarks in the 1st para. we can only assure Government that the office copy of the Indent will shew how fully [and we hope how carefully] the remarks are entered in the proper column explanatory of the demands, and that necessarily these are not only brief for want of space, but brief under injunction from the Honorable Court, and that the columns of the Indent afford, in a great degree, all the essential information requisite.

2. In reference to the explanation called for in the Honorable Court's remarks in paras. 9 and 10 respecting the demands made by the Public Works Department for supplies of Instruments by including some in the Stationery Indent and some in the Annual Military Indent, we beg to submit to Government that as this was the first year under the organization of the Department of Public Works on the new system when such articles were indented for, we venture to hope that the really important measure of entering such articles in two documents intended for the one controlling authority might be overlooked, and some consideration allowed for the mode of making known such demand, so fully however was this defect noticed that every effort has been made to guard against the repetition of the like mode of making this year's demands, long before the receipt of this Despatch, censuring the arrangements ; we venture to hope that the whole of the Instruments alluded to in paras. 9 and 10 will be sent out whether applied for in the Arsenal or Stationery Indents, as Government in the different branches can bear testimony to the urgent applications from various Departments for instruments.

3. In reference to para. 34 of the Honorable Court's Despatch about the use of Congo wood for Fuzes, we have, with regret, to state to Government, that we fear we have persevered too long in our endeavour to carry out the Honorable Court's wishes by continuing the use of this wood, for there is an essential oil in the wood which appears so seriously to affect the Fuze composition as to render all Fuzes made up with this wood after 2 or 3 years storing in a very questionable state as to efficiency, and so doubtful are we respecting the efficiency of these Fuzes, that by Circular Order No. 34, dated 30th May 1856, we have called for a special examination of all the Fuzes in Store, and we therefore earnestly request Government to advise the Honorable Court not to risk efficiency by forcing Congo wood into use for Fuzes, by withholding supplies of Beech wood, before we can properly ensure its efficiency, and we therefore earnestly request that Beech clefts may be sent out as entered in our Indent.

4. The Honorable Court may rely on our assurance that if any kinds of woods can be discovered in this country which will answer for Fuzes, it will be a great relief, and satisfaction to us to bring them into use in preference to being dependent on England for our supplies, but the question has also been reported upon fully by the Bengal Select Committee and in their proceedings No. 98 of 5th August 1853, a Statement is allowed to appear in their proceedings that "no wood in India will be found equal to English Beech, the Committee have been experimentalizing for the last 10 years without success" and the Madras Committee has also failed of success.

5. With respect to the remarks in paras. 4, 5 and 6, we have the honor to explain that the principle has been fairly tried, of limiting the operations of the Arsenal, as at one time contemplated ; but all experience has shewn that this limitation is not for the good of the public interests—Government are well aware that we have given the Gun Carriage Manufactory work without stint and with all the means required and yet there is more work on hand than can be done, the new machinery lately supplied may allow of some changes to be introduced, and we shall not fail in our duty to the State in adapting our arrangements accordingly ; but we apprehend that the Honorable Court are not alive to the extensive requirements now made on the Government Establish-

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ment and as these requirements do not promote our personal advantage or present ease, we can have no object in our proposals except that which should be the highest consideration for a servant to feel, the good of the State; the Honorable Court by admitting that a separate workshop is requisite, thereby recognize the necessity of our demands for machinery, but only blame us for applying for it for a particular Establishment.

6. As there is a Manufacturing Committee sitting on the Manufactures of India under the Honorable Court's orders, we recommend that the important questions in paras. 4, 5, and 6 of Despatch No. 100 be sent for the consideration and report of that Committee; but as the Honorable Court admit the necessity of a workshop being somewhere established and as we are quite confident the working means applied for for the Grand Arsenal are necessary for some workshop, whether in the Arsenal or elsewhere, we request that the machines indented for may be sent out for that workshop when established, and we promise Government that we shall cordially join in aiding the Government to form such a workshop whenever it can be decided upon as advisable.

7. With reference to paras. 13, 14, and 15, we trust that Government will state to the Honorable Court that there are 38,305 Percussion Muskets in use with the Army and these have been in use from 10 to 12 years and consequent on the great exposure to which our arms are liable from the great extent of jungle work which the Madras Troops take and as there are only 46,826 Percussion Muskets in store, it will be well to be prepared at an early date with reserves. Moreover, the instant the superiority of the Rifle musket is known, there will be an urgent demand on Government for the supplies of this piece and it will be difficult to gainsay the demand if any service is going on.

8. We also hope that the Commander-in-Chief's early decision may be obtained about the Equipment of the Cavalry referred to in para. 15: we can only supply a limited number of Carabines, and all the Pistols in use and in store are unserviceable.

9. With respect to the prohibition in para. 15 about Musketoons and Blunderbusses, we beg to notice that a demand for these weapons came from Army Head Quarters for service in Pegu, but after sending over a supply from this Arsenal, the Officer Commanding the Forces in Pegu received some excellent Percussion Musketoons from Bengal, and on bringing the question before the Honorable Court they replied as follows.

"The change now taking place in Arms by the introduction of the Minie principle will involve a modification in the patterns of the different descriptions now in use—when wall pieces of the description now referred to have been sanctioned by Her Majesty's Government, we shall be prepared to make a trial of them in our service."

10. With respect to pieces of this kind being obsolete in Her Majesty's service, we may remark that we understand a heavy 4 oz. Rifle is in use in substitution, and we think that for many services in the East, especially in Pegu a few large and efficient pieces of this kind carrying a 4 oz. Spherical Ball or about 6 or 7 oz. Conoidal shaped Projectile would be valuable, we recommend the sending out of a few 4 oz. Rifles for special service, the pieces to be rifled and breech loading if one can be obtained efficient.

11. We regret to see the decision of the Honorable Court in paras. 17 and 32 respecting Ordnance and Projectiles. The recent order No. 527 of 17th July

42 Pounder	7.
32 "	38.
24 "	38.
18 "	83.
12 "	81.
9 "	79.
6 "	11.

1856, from the Government of India limiting the enlargement of the bores of iron Ordnance to 0.5 of an inch throws a very great number of pieces out of the serviceable into the unserviceable columns and in our Report No. 256, dated 19th December 1856, we shewed that the 337 pieces of iron Ordnance as per margin have already been reported by

the Principal Commissary of Ordnance to be unserviceable, leaving us still uncertain as to the numbers unserviceable at out stations but for which we have called for returns.

12. The constant occupation of Lascars has delayed the gauging of our Projectiles, and we shall find many, we fear, in an unserviceable state as already partially ascertained as far as the examination extends; and our remarks in the Indent shew the great necessity of the Projectiles applied for. We therefore hope that the Honorable Court will also bear in mind that they stat-

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ed, vide Despatch No. 56, dated 21st May 1856, that 33-68 pounders of 95 cwt. was to be the allotment of this calibre and since then the Chief Engineer has fixed on 10-68 pounders for arming Clive's Battery, numbering in all 43-68 pounders and as yet only 22-68 pounders of 95 cwt.

have been received or are in course of landing from the vessels as per margin. But there is not one solid round shot for this calibre in store the 5,000 proposed to be sent in para. 32 being the first supply are insufficient as we think, even for the Singapore Batteries. The Mortars we applied for were intended to replace those sent to Singapore and the other calibres in the Indent are far below the numbers, since found unserviceable.

13. The powder barrels referred to in para. 19 were 40 in number and merely intended for special service to convey the Madras powder for test to Bengal and Bombay and not for general use, those being in number about 20,000 or 25,000 and necessarily must be made up in India, the barrels we applied for, were few in number, easily obtained from Woolwich and were for a special purpose of much importance.

14. We think that refusal to supply sheet iron and a machine for cutting it, as stated in para. 25 is a matter to be regretted. We believe that economy would have resulted but most certainly efficiency and dispatch had this machine been supplied.

15. The pendulums referred to in para. 31 and ordered to be made up in India can be so done, but as these are in use at Home a number might be supplied, more readily than we can at present make them up, there were only 10 asked for and we stated we had only 1 in the General Arsenal.

16. In the 16th para. the Honorable Court stated that the established proportion of Swords for Native Officers and Staff Serjeants being complete "none will be provided," now our Indent shewed that 3,041 is our allotment, that 111 were in store, 1,700 due is previously indented for and we asked for 1,200 now these only appear to us to complete our allotment.

17. In para. 18, the Honorable Court allude to the supply of Fields, we earnestly hope that we may not be stinted in the supply of this kind of tool, the work in our Workshops having greatly increased the expenditure of fields has kept pace, and whilst the demands in our Indent are really trifling, the Honorable Court little know the labour we have to undergo from not being well supplied with fields, we can only meet this demand by increasing our allotment and which we shall do in our next Annual Indent.

18. In para. 22, the Honorable Court again state that slips of copper for powder barrels will be sent out, instead of sheet copper, we must as servants of the Government obey the orders we receive, but we hope we may be excused for expressing an opinion in favor of sheet copper instead of slips with a simple machine for cutting out slips as needed.

19. The Honorable Court in para. 25 leaves us in doubt about the quantity of iron to be sent out, we can assure Government that our Indent shows a very limited quantity indented for, so much so that we did not anticipate the slightest remark, indeed we are far below our proper quantity and only about ten weeks since we purchased 100 tons in the market, we shall therefore increase our allotments in our next Annual Indents.

20. In para. 26, the Honorable Court refuse to send out 10 feet Lathes because we put in our column of remarks "that the 8 and 6 feet Lathes have not been found long enough," but this remark taken in its proper meaning also implied that 10 feet Lathes were requisite and more of the 8 feet Lathes but not as understood at Home that all Lathes were unnecessary we shall increase our allotment of 10 and 12 feet Lathes in our next Annual Indent.

21. In para. 28, the Honorable Court modify our application for a Press for cutting out bottoms of Cannister; we strongly recommend attention to the remarks in our Annual Indents as well deserving consideration; the Press already sent out has been found very useful; but the modifications in the form we recommended should be adopted—we doubt the power of the Press to cut iron more than 5 of an inch thick.

22. The Court of Directors are also under a misapprehension as to our object in applying for another Punching machine, separate from a Shearing machine, the Press already sent out combines both in one machine, moved by the same motion, but the Shears are only capable of

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cutting slips $4\frac{3}{4}$ inches broad, and we require one to cut up to 10 inches in breadth, and of a thickness of $\frac{1}{8}$ of an inch: the Shearing machine to be moved by a Fly wheel and Band and to be separate from the Punching machine.

23. The Punching machine now in use is capable of punching 8 inch Tops but not larger, but we require one to stamp 10 inches in diameter and $\frac{1}{8}$ of an inch in thickness. At present it will only cut *Bottoms* for the 12 Pounder and all Calibres below, this Punching machine should also be moved by Fly wheel and Band.

24. We shall comply with the Honorable Court's suggestion in para. 33 and increase the allotment of Tools in our next Annual Indent.

25. We suggest that the remarks in paras. 1, 2, 7, 8, 21, 39, 40, and 41 should be sent to the Department of Public Works for such observation as may be requisite.

(Signed) A. SHIRREFF, Brigadier,
Commandant of Artillery.

(Signed) G. BALFOUR, Lieut.-Col.,
Stipendiary Member.

Ordered to be communicated to the Court of Directors and that their special attention be requested to the want of Projectiles noticed in paras. 11 and 12.

2. Ordered further that para. 6 of the foregoing letter, together with paras. 4 at 6 of the Honorable Court's Despatch of 1st October 1856, No. 100, on the subject of the Establishment of a Manufactory for operations of a general nature, be referred for the consideration and report of the Committee on Manufactures.

3. Paras. 1, 2, 21, 39, 40 & 41 of the same Despatch together with paras. 25 of the Military Board's letter, will be referred to the Dept. Public Works, to which Dept. paras. 7 and 8 of the Court's despatch have been already communicated in M. C. 24th November 1856, No. 3064.

4. The attention of the Conservator of Forests will be requested to the want of an efficient substitute for Beech wood for Fuzes.

(True Extract & Copy.)

(Signed) C. A. BROWNE, Colonel,
Secretary to Government.

Extract from a Despatch from the Honorable the Court of Directors in the Military Department, dated 1st October 1856, No. 100.

Letter from No. 23, dated 11th February 1856, Forwarding the Annual Indent No. 59, for Military Stores to be shipped from England in the Season 1856-57.

Para. 1. We have received your Annual Military Indent, No. 59, dated the 9th February 1856, which has called for our serious consideration, not only on account of the unprecedented extent and varied nature of its demands, but from the absence of all explanation on many important points, which, it might have been expected, would have been given. The few observations in the columns of remarks, are too vague

to afford any assistance in arriving at a satisfactory conclusion, on the provision to be made to meet present exigencies, and the expected wants of the service.

2. The Memorandum by the Deputy Chief Engineer, forwarded with your Military letter of 11th March 1856, No. 35, (a month later than that accompanying the Indent) must, to a certain extent, be excepted from the foregoing observations; but even this document considering the magnitude and importance of the matter of which it treats, is not all that could have been desired.

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21. Twenty sets of very complete apparatus sufficient for all purposes of ascertaining the nature of sub-soils, having been forwarded last year no more will be now supplied. Boring operations upon a large scale, have already been tried at the several Presidencies, and have resulted in failure as admitted in the Reports received.

39. As regards Portable steam Engines for the same Department we would call attention to the observation of Major Lawford Civil Engineer, 6th Division "that it would be dangerous if not impossible to employ steam power in our ordinary works, without having good Mechanics, and trained workmen, at command."

5 Portable steam Engines of 4 Horse Power. 6 do.
10 " " " with Pumps of 4 Horse Power. 6 do.
2 " " " 6 do.
3 " " " 6 do.

Allowing progress to have been made since that date, (May 1854) it may be safely assumed that by limiting the present supply to the quantity

stated in the margin no inconvenience will be experienced.

40. This important article of demand is still under our consideration.

41. Independent of a large quantity in the body of the Indent, there is a further very extensive demand, under the present head, for the Department of Public Works. Some special explanation should be afforded in support of these requisitions before they can be supplied to a greater extent than in the Indent for last year.

Axes Pick,
Crow Bars,
Mamooties.

ORDER THEREON, No. 356; dated 24th February 1857.
No. 67. Ordered that para. 3 of the Resolution in the Military Department together with the Extract therein referred to from the Honorable Court's Despatch and Military Board's letter be forwarded to the Chief Engineer with reference to Extract Minutes of Consultation in the Public Works Department, dated 28th January 1857, No. 218.

(Signed) H. FORBES,
Acting Secretary to Government.

No. 237.

Extract from the Minutes of Consultation, 20th January 1857.

Read the following letter,

No. 282.

From

The Military Board,

To

The Secretary to Government, Military Department.

Sir,

1. We have the honor to acknowledge the receipt of Minutes of Consultation, No. 3064 of 24th November 1856, forwarding copy of the Honorable Court's despatch of 1st October 1856, No. 100 containing remarks on the demand for supplies in the Annual Indent of January 1856, and in connection with the Honorable Court's remarks in the 1st Para. we can only assure Government that the Office Copy of the Indent will shew how fully [and we hope how carefully] the remarks are entered in the proper column explanatory of the demands, and that necessarily these are not only brief for want of space, but brief under injunction from the Honorable Court, and that the columns of the Indent afford, in a great degree, all the essential information requisite.

2. In reference to the explanations called for in the Honorable Court's remarks in Paras. 9 and 10 respecting the demands made by the Public Works Department for supplies of Instruments by including some in the Stationery Indent and some in the Annual Military Indent, we beg to submit to Government that as this was the first year under the organization of the Department of Public Works on the new system when such articles were indented for, we venture to hope that the really important measure of entering such articles in two documents intended for the one controlling authority might be overlooked, and some consideration allowed for the mode of making known such demands, so fully however was this defect noticed that every effort has been made to guard against the repetition of the like mode of making this year's demands, long before the receipt of this despatch. censuring the arrangement;—We venture to hope that the whole of the Instruments alluded to in paras. 9 and 10 will be sent out whether applied for in the Arsenal or Stationery Indents, as Government in the different branches can bear testimony to the urgent applications from various Departments for instruments.

3. In reference to para. 34 of the Honorable Court's despatch about the use of Congo Wood for Fuzes, we have, with regret to state to Government, that we fear we have persevered too long in our endeavour to carry out the Honorable Court's wishes by continuing the use of this wood, for there is an essential oil in the wood which appears so seriously to affect the Fuze composition as to render all Fuzes made up with this wood after 2 or 3 years storing in a very questionable state as to efficiency, and so doubtful are we respecting the efficiency of these Fuzes, that by Circular Order No. 34 dated 30th May 1856, we have called for a special examination of all the Fuzes in Store, and we therefore earnestly request Government to advise the Honorable Court not to risk efficiency by forcing Congo Wood into use for Fuzes, by withholding supplies of Beech wood, before we can properly ensure its efficiency and we therefore earnestly request that Beech clefts may be sent out as entered in our Indent.

4. The Honorable Court may rely on our assurance that if any kinds of woods can be discovered in this country which will answer for Fuzes, it will be a great relief, and satisfaction to us to bring them into use in preference to being dependent on England for our supplies, but the question has also been reported upon fully by the Bengal Select Committee and in their proceedings No. 98 of 5th August 1853, a Statement is allowed to appear in their proceedings that "no wood in India will be found equal to English Beech, the Committee have been experimentalizing for the last 10 years without success" and the Madras Committee has also failed of success.

5. With respect to the remarks in Paras. 4, 5 and 6, we have the honor to explain that the principle has been fairly tried, of limiting the operations of the Arsenal, as at one time contemplated; but all experience has shewn that this limitation is not for the good of the public interests—Government are well aware that we have given the Gun Carriage Manufactory work without stint and with all the means required and yet there is more work on hand than can be done, the new machinery lately supplied may allow of some changes to be introduced, and we shall not fail

in our duty to the State in adapting our arrangements accordingly; but we apprehend that the Honorable Court are not alive to the extensive requirements now made on the Government Establishment and as these requirements do not promote our personal advantage or present ease, we cannot have no object in our proposals except that which should be the highest consideration for a servant to feel, the good of the State;—The Honorable Court by admitting that a separate workshop is requisite, thereby recognize the necessity of our demands for machinery, but only blame us for applying for it for a particular Establishment.

6. As there is a Manufacturing Committee sitting on the Manufactures of India under the Honorable Court's orders, we recommend that the important questions in paras. 4, 5, and 6 of despatch No. 100 be sent for the consideration and report of that Committee: but as the Honorable Court admit the necessity of a workshop being somewhere established and as we are quite confident the working means applied for for the Grand Arsenal are necessary for some workshop, whether in the Arsenal or elsewhere, we request that the machines indented for may be sent out for that workshop when established and we promise Government that we shall cordially join in aiding the Government to form such a workshop whenever it can be decided upon as advisable.

7. With reference to paras. 13, 14, and 15, we trust that Government will state to the Honorable Court that there are 38,305 Percussion Muskets in use with the Army and these have been in use from 10 to 12 years and consequent on the great exposure to which our arms are liable from the great extent of jungle work which the Madras Troops take and as there are only 46,826 Percussion Muskets in store it will be well to be prepared at an early date with reserves—Moreover the instant the superiority of the Rifle musket is known there will be an urgent demand on Government for the supplies of this piece and it will be difficult to gainsay the demand if any service is going on.

8. We also hope that the Commander-in-Chief's early decision may be obtained about the Equipment of the Cavalry referred to in para. 15: we can only supply a limited number of Carbines, and all the Pistols in use and in store are unserviceable.

9. With respect to the prohibition in para. 15 about musketoons and Blunderbusses, we beg to notice that a demand for these Weapons came from Army Head Quarters for service in Pegu, but after sending over a supply from this Arsenal, the Officer Commanding the Forces in Pegu received some excellent Percussion musketoons from Bengal and on bringing the question before the Honorable Court they replied as follows.

"The change now taking place in Arms by the introduction of the Minie principle will involve a modification in the patterns of the different descriptions now in use—when wall pieces of the description now referred to have been sanctioned by Her Majesty's Government, we shall be prepared to make a trial of them in our service".

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11. We regret to see the decision of the Honorable Court in paras. 17 and 32 respecting Ordnance and Projectiles. The recent order No. 527 of 17th July 1856 from the Government of India limiting the enlargement of the bores of iron Ordnance to 0.5 of an inch throws a very great number of pieces out of the serviceable into the unserviceable columns and in our report No. 256 dated 19th December 1856 we shewed that the 337 pieces of iron Ordnance as per margin have already been reported by the Principal Commissary of Ordnance to be unserviceable, leaving us still uncertain as to the numbers unserviceable at our stations but for which we have called for returns.

12. The constant occupation of Lascars has delayed the gauging of our Projectiles and we shall find many, we fear, in an unserviceable state as already partially ascertained as far as the examination extends; and our remarks in the Indent shew the great necessity of the Projectiles applied for. We therefore hope that the Honorable Court will also bear in mind that they stated, vide despatch No. 56 dated 21st May 1856, that 33-68 pounders of 95 cwt. was to be the allotment of this calibre and since then the Chief Engineer has fixed on 10-68 pounders for arm-

ing Clive's Battery, numbering in all 43-68 pounders and as yet only 22-68 pounders of 95 cwt. have been received or are in course of landing from the vessels as per margin. But there is not one solid round shot for this calibre in store, the Sea Park 10. gin. 5000 proposed to be sent in para. 32 being the first supply are insufficient as we think, even for the Singapore Batteries. The Mortars we applied for were intended to replace those sent to Singapore and the other calibres in the indent are far below the numbers since found unserviceable.

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17. In para. 18 the Honorable Court allude to the supply of Files, we earnestly hope that we may not be stinted in the supply of this kind of tool—the work in our Workshops having greatly increased the expenditure of files has kept pace, and whilst the demands in our Indent are really trifling, the Honorable Court little know the labor we have to undergo from not being well supplied with files, we can only meet this demand by increasing our allotment and which we shall do in our next Annual Indent.

18. In para. 22 the Honorable Court again state that slips of copper for powder barrels will be sent out, instead of sheet copper, we must as servants of the Government obey the orders we receive, but we hope we may be excused for expressing an opinion in favor of sheet copper instead of slips with a simple machine for cutting out slips as needed.

19. The Honorable Court in para. 25 leaves us in doubt about the quantity of iron to be sent out, we can assure Government that our indent shows a very limited quantity indented for, so much so that we did not anticipate the slightest remark, indeed we are far below our proper quantity and only about ten weeks since we purchased 100 tons in the market, we shall therefore increase our allotments in our next Annual Indents.

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21. In para. 28, the Honorable Court modify our application for a Press for cutting out bottoms of Cannister—we strongly recommend attention to the remarks in our Annual Indents as well deserving consideration—the Press already sent out has been found very useful; but the modifications in the form we recommended should be adopted—we doubt the power of the Press to cut Iron more than 5 of an inch thick.

22. The Court of Directors are also under a misapprehension as to our object in applying for another Punching machine—separate from a Shearing machine—the Press already sent out combines both in one machine, moved by the same motion, but the Shears are only capable of cutting slips 4 1/2 inches broad, and we require one to cut up to 10 inches in breadth, and of a thickness of 1 1/2 of an inch: the Shearing machine to be moved by a Fly wheel and Band and to be separate from the Punching machine.

23. The Punching Machine now in use is capable of punching 8 inch Tops but not larger, but we require one to stamp 10 inches in diameter and 1 1/2 of an inch in thickness. At pre-

sent it will only cut *Bottoms* for the 12 Pounder and all Calibres below, this Punching machine should also be moved by Fly wheel and Band.

24. We shall comply with the Honorable Court's suggestion in para. 35 and increase the allotment of Tools in our next Annual Indent.

25. We suggest that the remarks in paras. 1, 2, 7, 8, 21, 39, 40, and 41 should be sent to the Department of Public Works for such observations as may be requisite.

MILITARY BOARD OFFICE,
FORT SAINT GEORGE,
9th January 1857.

We have &c.,
(Signed) A. SHIRREFF, Brigadier,
Commandant of Artillery.
(Signed) G. BALFOUR, Lieut. Col.
Stipendiary Member.

Ordered to be communicated to the Court of Directors—and that their special attention be requested to the want of projectiles noticed in paras. 11 & 12.

2. Ordered further that para. 6 of the foregoing letter, together with paras. 4 at 6 of the Honorable Court's despatch of 1st October 1856, No. 100, on the subject of the Establishment of a Manufactory for operations of a general nature, be referred for the consideration and report of the Committee on Manufactures.

3. Paras. 1, 2, 21, 39, 40 & 41 of the same despatch together with paras. 25 of the Military Board's letter, will be referred to the Dept. Public Works, to which Dept. paras. 7 & 8 of the Court's despatch have been already communicated in M. C. 24th November 1856, No. 3064.

4. The attention of the Conservator of Forests will be requested to the want of an efficient substitute for beech wood for fuzes.

(True Extract & Copy.)

[Signature]
Secretary to Government.

To the Military Board.

„ Committee on Manufactures.

„ Dept. of Public Works. *With Court's letter No 100 of 1856*

„ Conservator of Forests. *To be returned.*

211. *W. 1857* *Deloit*

Alb. Hall 1857 Def. 7.
 vol. 2, 11th September.

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With me order

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Ordered that June 3rd 1861

The resolutions in the following

September 1864
Dear Sir
I have the honor to acknowledge the receipt of your letter of the 11th inst. in relation to the above named matter. I have the honor to inform you that the same has been forwarded to the proper authorities for their consideration. I am, Sir, very respectfully,
Yours, very truly,
J. M. Smith

Could I separate with Anthony

Board's letter before mentioned
Chief Engineer with reference to

Extract of Minutes of Conventions in

the Public Works Department was
204 January 1857 A.D. 218.

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1877

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to the Rev. Mr. Brown

the name of the P. v. C. v. C. v. C.

