

Educational (1912) Department.

ORDINARY MS.

G.O., No. 79

DATED 31-1-12-

[Despatch Abstract.]

Mr. G. N. Dewal.

Recording papers relating
to the correspondence which has passed
between — and the India Office in
regrd to his application for employment
as a weaving expert.

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

[E. & L.]

1,000-17-11-11.

Educational DEPARTMENT.

CURRENT FILE.

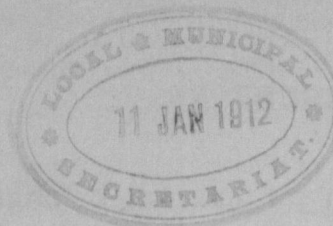
PAPERS PUT UP WITH CURRENT No. _____

Papers of the department to which the current belongs.

Number	Date.	Original (=O.) or spare copy (=S.C.)	Remarks. (In this column such of the papers as have been removed for copying, printing, etc., should be marked with a cross.)	Initials of clerk with date in token of return to Reference department.

Papers of other departments.

Department.	Number.	Date.	Original (= O.) or spare copy (= S.C.).	Initials with date of (1) clerk of the Chief Secretariat department acknowledging returns of the paper concerned or (2) Despatcher to denote the return of the papers to departments outside the Chief Secretariat.



File No 108
Regd 12. 1. 12
No. 7

Department of Education,

(Education)

Calcutta, the 6th Jan 1912
~~December 1911.~~

A copy of the undermentioned papers is forwarded
to the government of Madras for information.

By order,

W. S. S. S.

Joint Secretary to the Govt. of India.

Letter from the India Office no. 4113-J & P.,

dated the 14th November 1911 and enclosures.

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✓
No. J. & P. 4113, dated the 14th November 1911.

From—The Hon'ble Mr. M. C. SUTTON, Secretary, Judicial and Public Department,
India Office, Whitehall, London, S.W.,

To—The Joint Secretary to the Government of India, Department of Education.

From Mr. Dewal to Board of Education, 16th
September, with enclosure.
From Mr. Dewal to Board of Education, 30th
September, with enclosure.
From India Office to Mr. Dewal, 8th November
1911.

I forward, for information, a copy
of correspondence which has passed with
Mr. G. N. Dewal in regard to his appli-
cation for employment as a Weaving
Expert.

As Mr. Dewal appears to have served under the Government of Madras
and to be residing now in Bombay, you will perhaps, if you think fit, cause
a copy of the correspondence to be sent to those Governments.

Gokuldas Dewji's Wadi, Grant Road,
Bombay, 16th September 1911.

To
The Secretary,
Board of Education,
London, S.W.

Honoured Sir,

I beg to ask you if you will kindly inform me whether you have at present
any vacancies to fill for positions as Government Weaving Experts in India.

I understand that several of the Provincial Governments here solicit your
guidance in such matters, and I would kindly ask you to keep my name before
you for reference.

Enclosed, I beg to hand you a résumé of my career, and in perusing same
I would ask your indulgence.

I am,
Yours truly,

G. N. DEWAL.

I joined a spinning and weaving Mill as an apprentice in 1889. I served
my apprenticeship for nearly 3 years. First I studied weaving; then I studied
carding. When I was in the spinning room, a friend of mine advised me to
take one subject only and master that. I decided upon weaving and spent the
remaining period of my apprenticeship in this line. I had to rise step by step.
I was sorry then but I am glad now. I worked as a loom-jobber, sizing-jobber,
finisher, assistant weaving master and lastly as a weaving master. I reached
the last step in 1896. All this time I was connected with power loom weaving;
I did not think of hand loom weaving at all. When all the Mills were stopped
in Bombay on account of plague in the beginning in 1897, I went to Satara.
An acquaintance of mine owned a hand loom factory. He took me there to
get advice from me but I could not give him any. Consequently I immediately
began to initiate myself in this department of weaving. Soon after I was
appointed weaving manager of the Government Jail Factory at Coimbatore.
Here although appointed for power loom weaving I had ample opportunities of
watching hand loom weaving. I watched the weavers in the jail as well as
those in the town. I soon found out that they had great difficulty in getting
well prepared warps. A loom tackler under me used to accompany me. He
thought very lightly of it and said he could easily make wooden machines and
solve the difficulty. When he told me his plan I told him that it was not right.
We would however make it. The result was that he failed. To carry out my
ideas into effect, I prepared some warps on the slader and gave them to the
hand loom weavers in the jail. The result was satisfactory. The weavers

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Frederick

nearly doubled their production, besides this the quality was better than before. I could not prepare any warp for the town weavers because they used very fine warps; however I was sure that they would give the same results. When Sir Francis Nicholson, a member in the Madras Government visited the jail, he asked me about the hand loom weavers' difficulties and ways and means to improve them. I said to him that their first and greatest difficulty was that they did not get well prepared warps. They spent half of their time in weaving and half in putting the ends straight. Improvement in the loom was secondary. The use of jacquard and dobbies for pattern weaving was the third and so on, but I laid emphasis on the first and said if nothing improves but this, weavers will gain much, but if everything else improves and not this weavers will gain very little. He asked me how to improve the warps. I told him to prepare warps for hand looms the same as they did for power looms as this was the only way. But this is not possible unless any rich man invests about Rs15,000 and sells sized warps on beams, and I saw very little chance of it.

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80 no 5095d O
26-7-05
80 no 8188d P
13-12-05

When the Government of India instituted Technical Scholarships, I applied to the Government of Madras through my superiors to give me a scholarship. I mentioned in an interview to the Private Secretary to the Governor all about the difficulties of the hand loom weavers and suggested means as I had suggested to the Hon'ble Mr. Nicholson. I told him that I wished to see and study the improved means of preparing warps in England and the Continent. I asked to go to Germany as I was told that there were more hand looms in Germany than in England. My application was referred to you and you advised the Government that I had no need to go to Germany because I could study everything about the hand loom weaving in the Municipal School of Technology, Manchester. I went accordingly to Manchester in September 1906. As I had a definite object before me and as everything was settled before hand I joined the school at once. I took weaving as my special subject. I had taken 2 years' special school course, but I kept my ideal before me. With the help of the Principal, Mr. Reynolds, I was able to see different systems of preparing warps in several Mills. The Right Honourable the Secretary of State for India allowed me ample opportunities to see what was done elsewhere in that direction. I went to Ireland in the first summer vacation, and to Scotland in the second. I requested Government to give me an extension for one year more to make a special study of jacquard weaving as in Madras Presidency a great deal of pattern work is done in the primitive way. I wanted to introduce jacquard instead. After the completion of this period (three years) I was allowed to travel on the continent to see as much as I could of the hand loom industry. The travels benefited me a great deal. Thus I was fully equipped for my future work. Before leaving for India, Government of Madras offered me a post as a weaving expert for six months till the scheme they had sent to the Right Honourable the Secretary of State for India for sanction was approved. I got another extension for six months as the scheme was not sanctioned till then.

80 no 22851a B
19-8-09

Mr. Chatterton, who is the head of the department, was on leave in England before I returned to India to take up my duties with the Madras Government. As he was not to return for a year after I left I went to see him and wished to discuss the future programme. He wished to see my professor and discuss with him the machines, etc., so I was glad. One thing he told me then was that Government had engaged me but that I should have no liberty at all. I must do only what he dictated to me. I must not make any experiment unless I explain to him, convince him and get his sanction. I was not willing to be in such a position. I said to him that he could give me general directions as the head of the department and leave the details to me to work out, but he did not agree. I hoped to change his views when we discussed with Professor Fox, but it turned out to be worse. There was no discussion. He asked Professor Fox which was the best sizing machine for hand loom, and Professor Fox recommended the dressing machine and arranged for us to see the machine working in a Mill. After we saw that I told Mr. Chatterton that that was an ideal machine, no doubt but it was not

suitable for India, at least to begin with. I told him to introduce ball sizing machine and Yorkshire dressing first, we may try slasher second and then if necessary introduce dressing machine. I told him the advantages and disadvantages of the machine he desired and tried to prove how it was not suitable. I found afterwards that it was no use arguing with him because he knew very little about weaving. I wished to show him other systems but he would not consent. Professor Fox having recommended that particular machine Mr. Chatterton would have none other. I am sorry that our discussion did not take place before Professor Fox. He was quite ignorant of my objections—also of the condition and the ways and means of the weavers here. On the night previous to my departure from London I saw Mr. Chatterton, and we spoke again about the sizing machine and about my position, also. I told him I would ask the Madras Government to define my position, but he advised me not to make any fuss but to go and join quietly. I should say nothing till at least he came back; I agreed and came away. I did not know the inner motive of it then but I know it now. When he recommended the dressing machine to the Madras Government for purchase that matter came to me for opinion, and I repeated the same objection as I had told Mr. Chatterton. When the reply was sent only a few quotations here and there from my letter were copied which could be construed any way. For instance, speaking about the simplicity of the ball sizing, its parts are so simple that any village carpenter would repair or make new. When the whole thing was referred to Professor Fox he of course did not like his pupil to contradict him. The machine he recommended was the ideal machine and how could I contradict him. He wrote strongly in favour of his machine and criticised portions of my letter. He wrote—the village carpenter was not the person to make sizing machine for sixties and eighties count and to say so was absurd. He did not know I was speaking about the ball sizing machine. After I saw the criticism I wrote him a long private letter but got no reply. I have enclosed a copy of it for your inspection. When the scheme was sanctioned with few modifications and sent back I learnt that they have asked for a weaving expert on Rs400 only. I applied to the Government through Mr. Chatterton to pay me Rs500—same as was paid by the Bombay Government to their expert. Mr. Chatterton recommended that I should not continue after my temporary period was over. On my part I was not willing to continue under him after the talk I had with him when he returned. Afterwards I came to Bombay and saw Mr. Pomphret. He was Principal of the Technical Institute at Darwen. He is chief of the Textile Department in the Victoria Jubilee Technical Institute, Bombay, and has been appointed by the Bombay Government their adviser on hand loom industries. He agrees with me entirely. He is in favour of ball sizing. In fact he gets ball warps and puts them on weavers' beams by the Yorkshire dresser. By the way I must tell you that our weavers make raw (unfinished) warps on the Mill warper. That is one of the reasons why I proposed ball sizing. Our weavers are poor and conservative. They will not take up anything which means a radical change.

80 no 3836a R
3-12-10

I have written the above at length to show you that I was using the best of my knowledge received in England for the Madras Government. Government is an abstract term. The head of the department is really the Government. He carries everything in his own way, whether right or wrong. I had to leave because I did not agree with Mr. Chatterton, and I may say very few agree with him. The Madras Government have not found any other man yet. It is of no use my going there again. Provincial Governments in India are continually asking you, Honourable Sir, to select weaving experts, and I shall feel obliged if you will consider my claims. I am a native of India and as such possess the advantage of knowing the language which is most essential. I can speak with them freely and thus understand their difficulties better than a Briton. I have passed all the examinations held in the Manchester school of Technology, also cotton weaving examinations of the city and Guilds of London. As for the work done outside and on the continent I request you to refer to Principal Reynolds of Manchester. I went through Mills on his recommendation, and while I was travelling on the continent I sent him one letter every

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week giving full details of all I saw. You can also find some record about me from Professor Arnold, Educational Adviser to India Office.

Since I left Madras I have worked in power looms factories. My English studies have helped me a good deal in this line also, but I wish to revolutionise the hand industry if I could get the chance. It is a work that is not to be accomplished in a year or two.

I know it will take many persevering years, and Government intends to supply the funds, and I should like to be the means to the end. I do not know if the post for the United Provinces of Agra and Oudh is filled up, and I should be glad if you will reply me regarding this position, and whether you could recommend me for the position if same is not already filled.

Gokuldas Dewaji's Wadi, Grant Road,
Bombay, 30th September 1911.

To
The Secretary,
Board of Education,
London, S.W.

Dear Sir,

As promised in my letter of the 16th instant, I enclose herewith a copy of the letter addressed to Professor Fox.

I am, &c.,

G. N. DEWAL.

Copy.

Prof. T. W. Fox., M. Sc. (Tech.),
Textile Department, Municipal School of Technology,
Manchester.

Dear Sir,

I beg to submit the following with reference to your note to the Director General of Stores, India Office.

Your note is perfect, and I agree with you entirely. I held the same views even before I went to England, and instructions under you have confirmed them. I have expressed these views to the Madras Government, and I believe my scholarship is mostly due to them.

Good machines are required to get good results and also properly skilled men are necessary, as you have pointed out, to work them successfully. And it is of equal importance that good material capable of sustaining the strain of passing through these machines should be obtained. Reeled yarn that is imported here has very little twist, and as our weavers have no tension anywhere in their machines, they reject yarn having even the ordinary twist. They prefer yarn which will not twist or curl when slack. In order that it should pass through the process of winding, warping and sizing, etc., they wet the hanks, or sometimes add a little size to the water to strengthen the yarn. It is fit to work only after this and not otherwise. I have seen some yarn of low quality, 5 or 6 threads of which can be rent as under like cotton without the least "tick or clink." Government will of course buy the best quality available here, but this yarn owing to the slight twist will not work properly, and the production of winding and warping will be very little. When it comes to the dressing, it will play havoc. I proposed therefore to Mr. Chatterton to buy yarn in twist cops, but he totally disagreed with me and declined to do it. He did not like to change the form of yarns imported. I told him when we use machines, we change everything; there is nothing common with the old weavers, ways. Then why not change the form of yarn also. He did not like the idea of employing dresser also at first when I first spoke to him, but he changed his

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views subsequently, perhaps after you spoke about it. Of course your word has weight and very likely you put before him the advantages better than I could, but he had not changed his views about buying yarn in hanks so far as I know.

I told Mr. Chatterton that you taught us that the dresser was the ideal machine although it was a costly machine and that if he thought Government would not sanction so much expenditure, we may try ball sizing first. In England they size 32s, 36s and 40s on these machines. It is wound on 'weavers' beams by the Yorkshire dressing machine and worked by power-looms. If this yarn could stand the strain of power looms it would surely stand the strain of hand looms. This is the machine which I have said a village carpenter can copy and repair, except a few parts which could be done in larger towns or cities. I was told by ball sizers that they have sized 50s and 60s on that machine, but that is not so common as 32s and 40s. Surely this machine does not require the skill of a dresser.

There is another side of the question which the Acting Director put strongly before me and which must be considered. It is that the Chamber of Commerce and others are bitterly complaining that the Government are interfering in the private industry. No doubt Government are doing a praiseworthy act to resuscitate a decaying industry of India, and private people must take it up soon after Government demonstrate it. The question is "will private people take it up?" So far as the Acting Director could see, and I agreed with him, there is no chance of people taking it up in the near future. Government can introduce or resuscitate the industry by showing how to work it, but they cannot be merchants or traders. I am sorry to say joint stock companies have failed for want of mutual confidence. We are in a state of transition and no two men agree; many hand loom factories (they cannot be called factories proper) mostly have a dozen or two looms, have been closed because the directors did not agree.

Mr. Chatterton proposed to have a plant for preparing warp, but as there was no likelihood, he said, of weavers buying the warp, Government should put 150 fly shuttle hand looms to use up the yarn. When they make the cloth, they must sell it. This will make them compete with hand loom weavers. Instead of raising them, Government will put them into more difficulties. Poor weavers! They have no voice, but their case may be taken up by the Chambers of Commerce or by some private bodies.

My object was to use a sizing plant which the weavers or present sizers will take up quickly. Many weavers have given up making warps on pegs fitted to a small board. They are using a horizontal mill warper taking leases, in most cases automatically every 2 or 3 feet. These leases are necessary for their present way of sizing. They take this warp out in an untwisted rope form with leases in. It is opened out but not to the full width, and stretched in some open space. Afterwards size is applied by hand, squeezed by hand, and brushed by hand. Our climate is so warm that the yarn dries when it is brushed about 5 or 6 times both ways face and back. They send this yarn in balls to the weavers. The Government factory containing about 2 dozen looms buys all its warp from 40s to 100s prepared outside in this way by the hand loom weavers. Eighty and 100s work better than 40s and 60s. After they get the yarn they put it in a comb in half beers and wind on a weaver's beam. Occasionally they wind as is done on Yorkshire dressing. The sizers size the yarn beautifully. We want by the introduction of machinery to facilitate work and thus to reduce the cost. Labour saving is not at all the object because we have plenty of comparatively chief labour. We want to cheapen the production as well as keep the quality. I shall be glad if Government will introduce the dressing first. The difficulty, as represented to me is that Government cannot work it long and private people won't take it up soon. I like the dressing machine and have discussed with Messrs. Robert Hall of Bury about all the ideal preparatory machinery and also asked him to send out a man to work the dressing machine as Mr. Chatterton suggested. I still believe, though I am open to conviction, that the dressing machine will not be a success even with a skilled dresser if the yarn is not good. This and previously mentioned reasons kept me from giving my approval to the introduction of dressing machine.

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Circumstances alter cases, although a dressing machine is good it is not good for us at present. I should like to try as follows under the circumstances.

First try ball sizing. Take the warp from the Mill warper as it is prepared now in chain. I believe it will satisfy many weavers who chiefly work 40s. Try 50s and 60s if possible. If not leave this machine for 40s and lower counts. This warp will be brushed as usual by hand after passing through the machine. For higher counts I propose to keep to their own method with little modification. Make the warp as they do now, open and stretch also as they do, then wind it on roller with full number of ends. Pass these ends in sow-box having emersion, squeezing and sizing rollers. Leave space between this and beam winding 2 or 3 times or even more than is required for the drying cylinder. There will be supports for the yarn. Run the machine slowly and brush while the warp passes in this space that it may get dry. Later on use beam warper. This is only a make shift, I admit, but it is intended to prepare the weaver for higher and better things. If after this Government will introduce dressing machine, I believe people will take it up quickly.

My object in getting the experiment done in England was that Mr. Chatterton will see that the hanked yarn breaks very often, produces very little and therefore not suitable for our purpose.

(2) I suggested the ball warp to be sent because the ends were so many and because Messrs. John Hall, Ltd., would not be able to prepare the number. Besides I did not like to inconvenience them unnecessarily. They could size any number of ends according to their own convenience. After 3 years' training in your school, I should know I think that as warps leave the dressing machine every thread is in its appointed position upon the beam in the best condition for weaving. The calculations are worked on 50" to 54" wide cloth which is very common here. There is no machine at Nargreaves to take up this width of beam. So I thought they might size any number of ends convenient to them. We can wind here the required number of ends on our beams. As for length I thought 100 or 150 yards will be too little for a dressing machine. I had intended to make a warp of only 80 or 100 yards.

I am of opinion that factory system will not work here for some time to come at least. Weavers revolt at factory hours and restrictions. It is very hot here. In their homes, the weavers work during the cool hours, say from 4 A.M. to 9 or 10 A.M., and from 4 P.M. to 8 or 9 P.M. This is not quite possible in a factory. I however believe that places will be established to prepare warps which will supply well prepared warps or beams to the weavers who will only weave and the weaver's wife will wind the pirns. He will not buy pirns whilst his wife remains idle at home.

J. & P. 4113.

India Office,
Whitehall, S.W.,
8th November 1911.

Sir,

I am directed by the Secretary of State for India to inform you that your letters of the 16th and 30th September to the Board of Education have been transferred to this office. In reply I am to say that any application for appointment to Government service from candidates who are in India, or who have previously served Government in India, could only be considered by His Lordship if submitted through the local Government under which they served and the Government of India.

I am, etc.,
R. RITCHIE.

G. N. Dewal, Esq.,
Gokuldas Dewaji's Wadi,
Grant Road,
Bombay.

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1,000—4-8-11.

NOTES.

Correspondence which has passed with
Mr G. A. Dewar in regard to his application
for employing as a weaving expert

REVENUE DEPARTMENT.

C. No. 170D/12 From the Educat Dept, No. 1084, dated 20.1.12

To the Revenue Dept for perusal.

Ints M. S. M

20.1.12

To Under Secy

Submitted that the correspondence
may be perused and the file returned to the
Educational Dept faith thanks.

SRL
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P.P.
23.1.12.

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Dr (tues)
29.1.12.
Rev No 170D/12-1
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[To No 79 this d 31-1-12]

[Pl. 33.]
1,200-20-1-11.

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Educational
LOCAL AND MUNICIPAL DEPARTMENT

Papers to be read in Proceedings:—

Again G.O., No. , dated 19
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Current No. 108 of 1912, dated 6-1-12, from the Govt of I. no 7.
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To The Revenue Dept for perusal.
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