C. O.

13

Mr. Flood. 30 5.36.
Mr.
Mr.
Sir C. Parkinson.
Sir G. Tomlinson.
Sir C. Bottomley.
Sir J. Shuckburgh.
Permt. U.S. of S.
Parly. U.S. of S.
Secretary of State.

38159/36. Kenya.

For Mr. Flood's signature.

Downing Street.

June, 1936.

6 JUN 1936

DRAFT.

D. P. WARDLEY, ESQ.,
TREASURY.

A/cs. (enclosure not to be copied) (enclosure in No 5)

Dear Wardley,

Thank you for your letter of the 21st of May No. S.34609/0226/2 concerning Mr. James McCrae and his machinery. McCrae has not told us whether there will be any saving or not over the alteration ~~in machinery~~ between the Hydraulic Engineering Company and Fairbairns, so we are writing to him to ask. With regard to the progress of the experiment up to date, there is (little) nothing to go upon because the factory has not yet been established and the exact type of machinery is still the subject of consideration. At least that is how I understand it, but McCrae seems to be going ahead, and in his letter he explained

FURTHER ACTION.

explained that the development of the machinery was still in its early stage.

I enclose the accounts which McCrae mentioned. They hardly seem worth copying, and I should like to have them back again when you have examined them.

We have not yet concluded a new agreement with McCrae as we were rather waiting for some further stuff, but he has said that he is quite prepared to enter into a new formal agreement when it can be drawn up, so we will go ahead with that and let you have a copy when it is concluded.

Yours sincerely,

(Signed) J. E. W. FLOOD

Telephone No.: WHITEHALL 1234.
In all reply please quote Regd. No.
S.34609/0226/2.

TREASURY CHAMBERS,
WHITEHALL, S.W.1.

21st May, 1936.

Dear Flood,

I do not think that we shall raise objection to the modification of the arrangements in connexion with the advance to Mr. James McCrea proposed in your official letter of May 14th (38159/36); but there are one or two points on which I should be grateful for further informati

You do not say what will be the cost of the combing machinery to be bought instead of the three splitting machines. Is there likely to be any saving on the £3,000 originally allocated to the latter?

Are you satisfied as to the progress of the experiment to date? I should be interested to see a copy of the statement of accounts mentioned in Mr. McCrea's letter of April 16th.

Did you in fact conclude a new agreement with Mr. McCree as suggested in your letter of January 2nd (38159/35)?

Yours sincerely,

D. F. Waddilove

E.W. Flood, Esq.,
Colonial Office.

38159/36.

C. O.

Mr. Grossmith. 19/5
Mr. Parkin 20/5
Mr.
Sir C. Parkinson.
Sir G. Tomlinson.
Sir C. Bottomley.
Sir J. Shuckburgh.
Permt. U.S. of S.
Parly. U.S. of S.
Secretary of State.

(No. 23 ... /35)

DRAFT.

KENYA
CONFIDENTIAL
GOVERNOR

(8)
12 a May 1936
with enclosure.

DOWNING STREET.

26 May, 1936.

Sir,

I have etc. to refer to my predecessor's despatch No.677 of the 31st of August, 1935, regarding the assistance granted from the Colonial Development Fund to Mr. James McCrae in connexion with a scheme for the softening of sisal fibre, and to transmit to you, for information, a copy of a letter from Mr. McCrae in which he states that he has now filed, ~~at the Patent Office~~ a full specification of his invention for the treatment of sisal and allied fibres.

2. ~~[illegible]~~ The specification ~~should be treated as~~ is confidential for the present.

I have, etc.

(Signed) J. H. THOMAS

FURTHER ACTION.

C. O.

38159/36.

10

Mr. Grossmith. 19/5
Mr. Parkin 20/5 P.
Mr.
Sir C. Parkinson.
Sir G. Tomlinson.
Sir C. Bottomley.
Sir J. Shuckburgh.
Permt. U.S. of S.
Parly. U.S. of S.
Secretary of State.

DOWNING STREET.

25 May, 1936.

DRAFT.

THE SECRETARY,

TREASURY.

COPY SENT TO ACCOUNTS DEPARTMENT.

12th May, 1936 (8)
without encl.

Sir,

I am etc. to refer to the letter from this Department of the 14th of May and previous correspondence regarding the loan of £10,500 from the Colonial Development Fund in connexion with the construction of a factory to carry out a new process for the softening of sisal fibre, and to request you to inform the Lords Commissioners of the Treasury that Mr. James McCrae has informed this Department that he has now filed a full specification of his patent for the treatment of sisal and allied fibres. A copy of Mr. McCrae's letter is enclosed, of which a copy has also been sent to the Secty to the Col. Dev. Advisory Committee.

I am, etc.

(Signed) J. E. W. FLOOD

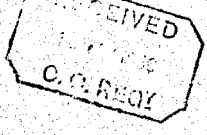
URTHER ACTION.

...opy w/encl ...to Secty C.D.A.C. ...so a copy ...f No 7.

LASIS
(REGISTERED)
FIBRE PRODUCTS

JAMES McCRAE, WELLINGTON FOUNDRY, LEEDS, 1.

12th May 1936.



The Under Secretary of State,
Colonial Office,
London. S.W.1.

Sir,

Reference 38159/35.

When applying for financial assistance to develop my process for treating Sisal fibre, my memorandum stated that provisional protection had been applied for. After registration of provisional protection, a year is allowed within which time a full specification of the patent has to be filed.

This period has now almost elapsed, and I have filed my specification, a copy of which I enclose herewith.

You will observe that in developing my process, I have extended its scope to include extraction of the fibre from the leaf, which operation has been successfully done by the machine which softens the fibre, and at the same time. The results of my investigations are therefore likely to be of greater benefit to the industry than was anticipated at the time of my application to you.

Development of the various machines is proceeding, and when they are in production and bulk quantities of converted fibre available, the results will be tested and reported upon by textile manufacturers, and submitted to you.

I have the honour to be

Sir,

Your obedient servant,

Jas McCrae

This invention relates to the treatment of sisal and allied fibres.

The commercial sisal now on the market comes in the category of hard fibres of relatively low value.

The present invention has a two-fold object; one to cheapen the cost of producing sisal fibre by reducing wastage, transport and extraction costs, as will be detailed later, and at the same time to convert sisal, which is a hard fibre and so restricted in its commercial application, into a fibre of softer and finer texture, thereby making this product suitable for use in trades which at present cannot use sisal, and at a price which those prospective users can pay in competition with the soft fine fibres of high market value which they customarily use, and at the same time yield a legitimate profit to the producer.

In order to make clear the nature of the invention a brief description of the existing methods of sisal production is desirable.

Harvesting. The fibre content of a sisal leaf can, for purposes of this brief summary, be taken as 5% by weight, the balance being pulp and waste matter. This 5% we will divide into 100 equal parts by weight. The standard method of harvesting is to cut the leaf as near to the butt end of the leaf as possible, this butt end remaining on the bole or central part of the plant. This harvested portion contains 100 parts of fibre, leaving 50 parts in the butt portion, not harvested, but lost. Of this 50 parts approximately one half of this fibre is of equal value to the harvested portion, the balance, owing to its thicker and woodier nature and lower strength, is of less value.

Transport The existing methods of operation on sisal estates, after cutting the leaf with the foregoing results, is to transport the leaf to a central factory. This entails the transport of 95 tons of waste matter for each 5 tons of fibre content in the leaf so harvested.

Many attempts have been made in the

successful development of any such system. Decortication by passing the leaf between a series of metal rolls has been experimented with in the past. The present inventor made trials in Africa of a machine in which a series of pairs of metal rolls were employed with a diminishing clearance between succeeding pairs. The rolls had a peripheral speed of 1000 ft./min. or more, and the clearances were so set that the final clearance approximately represented the thickness of a fibre in its original cross-sectional form, roughly a crescent. The pulp of the leaf in which the fibre is imbedded is in intimate contact with the fibre structure and with this method of decortication, as with all existing methods of which the present inventor is aware, a residue of this pulp remains on and in the fibre strand. When this pulp residue becomes dry it hardens, and in actual practice no method has been developed for removing this dry hard residue. For this reason, and also because of the structure of a sisal strand which is normally of crescent shape in cross section, the fibre is hard not only because of the dried pulp, but it is rigid on account of its structure. It is therefore of use only in trades requiring hard fibre.

The present invention is based upon the discovery that the crescent-shaped cross section can be broken down by applying very considerable pressure to the soft or softened sisal between rolls and that the provision of sufficient and suitable surface elasticity between the rolls permits the passage of the deformed or flattened fibres and simultaneously extrudes the pulp, including that in intimate contact with the fibre structure.

This method can be applied to the leaf as harvested or to fibre previously decorticated by ordinary methods, and by controlling the degree of pressure and the number of rollings or squeezings the extent of pulp extrusion and flattening can be determined. The pulp extrusion results in a softer fibre and the flattening of the fibre strand also produces a condition which facilitates a subsequent splitting action. Moreover, in this shape the strand is thinner, wider and more flexible, and can be spun into a denser yarn than raw fibre.

In most cases the pressure rolling will be most conveniently performed upon the green leaf as it is harvested and while the pulp and the fibre is soft, so that softening is not required.

leaf may either be cut, as is usual at present, or plucked entire. The latter operation is cheaper than cutting and the present process is capable of dealing with the whole leaf including the butt portion and recovering practically the whole of the fibre in a softened condition. If a portable machine is used the cost of transport of waste can be saved. The fibre as it comes from the portable machine, is in a damp condition and contains a residue of the juices of the lea and weighs approximately 15% of the original weight of the leaf. It is then transported to a central factory for the final operations of splitting (when required) washing, drying and baling.

The essentials of the rolling process are (1) that the pulp or the residue of pulp must be soft (as when freshly harvested) or softened, for example by hot water or hot water with a proportion of softening emulsion such as is commonly employed in batching. A softening bath containing 10% of softening emulsion and at a temperature of about 130° F. is suitable. (2) A slightly elastic surface must be used to contact with at any rate one side of the sisal, preferably throughout the rolling process, but in any case during the stage in which the more intimately adherent pulp is being removed from the fibre structure. A paper roll as used in the calendering of jute cloth cooperating with a metal roll gives good results, but the paper roll deteriorates rather quickly. A roll surfaced with spun yarn rope, or an interposed web of spun yarn fabric may therefore be preferable. (3) The pressure required is considerable. Satisfactory results have been obtained with pressures of from 1000 to 700 lbs. per inch length of the rolls with from 10 to 20 passes. The idea is to have sufficient surface elasticity to accommodate the flattened fibre while maintaining substantial general contact between the rolls elsewhere so as to extrude the pulp.

Splitting may not be necessary for all purposes. The softened and flattened fibre can be produced in various grades according to the pressure and number of passes or nips employed and a product thus obtained capable of further treatment by standard textile machinery.

... A consid... splitting, at ... ...nated th...
...rand of sisal ... its raw state w...

cross section, can be likened to a strip of wood of rather cross grain. This strand is built up of tiny ultimate fibres, measuring from 1.1/2 to 5 m.m. long. These are interlocked and held together by binding gums or pectines. Along the length of a strand are natural lines of cleavage, bridged at irregular intervals with occasional ultimates. Some of these lines of cleavage run the whole length of the strand, others taper off at points along its length. By severing the bridging strands and sub-dividing the main strand, the result is a finer fibre, and it is possible to split sisal to a fineness approaching that of jute, flax and soft hemps. However, the residue of pulp normally still adhering to the fibre prevents it becoming soft, and so the value of pressure rolling as described herein, becomes obvious. It not only extrudes a controlled amount of the hardening pulp, but it also has the effect of accentuating the natural lines of cleavage as the strands flatten out from their crescent formation. Sisal in this flattened state is therefore more readily split.

The process of splitting is one of combing or hackling, and for this operation to be performed successfully, it is necessary for the fibre to be in a certain condition.

Sisal has the disadvantages of hardness and thickness, but it also has the outstanding quality of great tensile strength. During the processes of flattening and splitting, sisal yields a certain degree of its strength in ratio to the extent to which those operations are carried. The rolling process can be controlled to give the required condition of softening with negligible loss of strength, and in the operation of splitting when carried to a given degree of fineness on suitably designed machinery, the degree of strength retained is more than ample for requirements.

Splitting consists of entering the sharp point of a suitable pin, such as is commonly used in certain textile machinery in which a swift is used with steel wire clothing, into a strand at a point of its natural line of cleavage after this cleavage line has been accentuated by flattening, and drawing the pin along the strand, breaking down the bridging ultimates. The friction set up by the pin has an abrasive action on

remaining in the damp fibre as it comes from the pressure roller provide this lubricant, which is augmented by water or emulsion solutions applied to the fibre as it passes through the splitting machine.

The resultant fibre, both line and tow which is produced by the system herein described, is softer and finer than any sisal fibre which has been placed upon the market, and it retains a degree of strength considerably greater than that of jute, and only slightly inferior to fibres known to the trade as European and Italian hemps, and flax, and can be produced at a cost considerably below the economic cost of any of these fibres.

The flattening process can be carried further if splitting is to be dispensed with. This extrudes still more of the pulp residue and increases the flattening effect. This product, after washing and drying, is in a condition suitable for manufacture into cordage, and also into yarns and fabrics commonly made from jute fibre, and on standard machinery. This fibre is cheap, strong and white, and is capable of absorbing batching fluids to about the same extent as jute.

Sisal fibre in its usual raw state, owing to the lacquer like hardness of the dried pulp film, has a slippery surface. This slippery condition decreases in ratio to the amount of pulp removed, and produces a clinging surface. The combined effect of a clinging surface and batching, permits smaller and finer yarns to be spun, and are qualities readily appreciated by textile manufacturers.

The structural nature of the fibre makes it hydroscopic. This quality is increased by flattening. By carrying still further the flattening process, its hydroscopic quality is increased to a remarkable degree. In this condition it makes a suitable article for cleaning machinery and is more absorbent than cotton waste, usually employed for this purpose. By carrying the flattening process still further its absorbent qualities are still further increased after a suitable form of cording or garnetting. In this condition it makes an absorbent filler suitable, for example, for certain forms of surgical and sanitary dressings and pads and for the manufacture into explosives.

It will be understood that the foregoing description of the invention

(1) decorticates (2) extrudes the pulp and thereby permanently softens the fibre, and (3) flattens to a variable degree according to the purpose in view.

It is also to be particularly noted that the treatment is applied to raw fibre, whether previously decorticated or not, and without the necessity for any other preliminary treatment. Even softening is only necessary if the pulp has been permitted to harden.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:-

1. A method of producing soft fibre from sisal which includes breaking down the crescent-shaped cross section of the raw fibre by applying very considerable pressure between rolls and affording sufficient and suitable surface elasticity to permit the passage of the deformed or flattened fibres and simultaneously extrude the soft or softened pulp.

2. A method of treating sisal which includes passing the green leaf between rolls under very considerable pressure with sufficient surface elasticity to pass the fibre while breaking down its crescent-shaped cross-section so as both to decorticate the leaf and to remove the pulp more intimately attached to the fibre and thereby permanently soften it.

3. A method of treating sisal in which the leaf is plucked whole and treated, while still soft, according to Claim 2.

4. A method of producing split soft sisal in which fibre treated according to any of the preceding claims is split by the use of sharp-pointed pins drawn along the strands.

5. A method of preparing sisal for manufacture into cordage (or into yarns and fabrics commonly made from jute fibre) which includes the method of any of claims 1 to 3 and carrying the flattening process on the raw fibre further until a suitable product results after washing and drying.

6. A method of producing from raw sisal an absorbent fibrous material suitable as a substitute for cotton waste which

is necessary to produce the product produced according to claim 5.

7. A method of producing from raw sisal an absorbent filler which consists in carrying considerably further the process c claims 1 to 3 and carding or garnetting.

8. The several improved treatments of raw sisal fibre substantially as described.

9. In the treatment of sisal, the several new or improve steps or combinations of steps mentioned.

ELWB/P
4/5/38.

33159/36

C. O.

Mr. Grossmith. 11/5

Mr. Packin 11/5

Mr.

Sir C. Parkinson.

Sir G. Tomlinson.

Sir C. Bottomley.

Sir J. Shuckburgh.

Permt. U.S. of S.

Parly. U.S. of S.

Secretary of State.

DRAFT.

THE SECRETARY,
TREASURY.

COPY SENT TO ACCOUNTS DEPARTMENT

DOWNING STREET.

14 May, 1936.

Sir,

I am etc. to refer to your letter of the 17th August last No.S.34609/0226 regarding the loan to the Government of Kenya of £10,500 from the Colonial Development Fund in connection with the construction of a factory to carry out a new process for the softening of sisal fibre, and to request you to inform the Lords Commissioners of the Treasury that Mr. James McCrae, to whom it was agreed that the proceeds of the loan should be advanced by the Kenya Government, has submitted an application for a modification of the original proposals. A copy of his letter is enclosed.

(2) ~~In the proposal first~~ submitted ~~by him~~ (C.D.A.C. 1823) the sum required ~~was~~ stated

FURTHER ACTION.

C. O.

Mr.
Mr.
Mr.
Sir C. Parkinson.
Sir G. Tomlinson.
Sir C. Bottomley.
Sir J. Shuckburgh.
Permt. U.S. of S.
Parly. U.S. of S.
Secretary of State.

DRAFT.

2. The amount of the loan authorised for the purpose of Mr. McCrae's experiments was ~~stated as~~ £10,500. This amount was to provide certain essential machinery and to cover travelling expenses, salary, and factory expenses for the necessary period to start the plant working on a commercial basis. In the schedule of machinery required was included an item of £1,514 for the purchase of a drying machine to be procured from Messrs. Petrie and McNaught. In the communication addressed to Mr. McCrae he was informed that the advance would be made on the condition, inter alia, that the sums advanced to him would be spent on the purposes described in his memorandum of 7th July 1931 (C.D.A.C. 1823), and allocated in accordance with the schedule appended thereto showing the estimated cost of plant, etc.

3. Mr. McCrae now represents that, on the one hand, the drying machine has proved unnecessary since his improved method of softening leaves very little moisture in the fibre, and Messrs. Fairbairn Lawson Combe Barbour Limited are allowing him to use their drying arrangements which will serve the purpose of the experimental stage, and, on the other hand, that the development of his softening machinery is still in its early stages and the necessary research is likely to extend beyond the period of his original estimate. Accordingly, he seeks authority to omit the purchase of the drying machine and to expend the £1,514 on running and working expenses over the extended period which he thinks will be necessary. The money ~~would~~ will be held by the Crown Agents and advanced to him in the same way as other payments are made.

4. A further modification proposed by Mr. McCrae is that instead

FURTHER ACTION.

of ordering three splitting machines at £1000 each from the Hydraulic Engineering Company Limited, he now finds that a process of combing holds out the best prospect of success. The Hydraulic Engineering Company has released him from his engagement to order this machinery from them and Messrs. Fairbairns Limited, who are specialists in combing and carding machinery, are prepared to supply the necessary plant for the purpose. ~~Mr. McCrae states that the result of the trials has proved that the process of softening and splitting will increase the value of sisal.~~

(5) ~~The concurrence of~~ Sir Alan Rae Smith has been consulted with regard to the proposed modifications of Mr. McCrae's original proposals and has signified his concurrence. ~~has been obtained by the Secretary to the Colonial Development Advisory Committee, and~~ Mr. Thomas trusts that their Lordships will also agree to the present proposals. ~~not withhold their approval.~~

I am, etc.,

Sir Alan Rae Smith:

With reference to Colonial Development Fund Scheme No.352 - advance of £10,500 to Mr.James McCrae for the construction of a factory to carry out his process for softening sisal fibre - Mr.McCrae has now submitted an application for a modification of the original proposals.

In the proposal first submitted by him the sum required was stated as £10,500. This amount was to provide certain essential machinery and to cover travelling expenses, salary, and factory expenses for the necessary period to get the plant working on a commercial basis. In the schedule of machinery required was included an item of £1,514 for the purchase of a drying machine to be procured from Messrs. Petrie and McNaught. In the communication addressed to Mr.McCrae he was informed that the advance would be made on the condition, inter alia, that the sums advanced to him would be spent on the purposes described in his memorandum and allocated in accordance with the schedule appended thereto shewing the estimated cost of plant, etc.

Mr.McCrae now represents that, on the one hand, the drying machine has proved unnecessary since his improved method of softening leaves very little moisture in the fibre and Fairbairn, Lawson, Combe, Barbour Limited, are allowing him to use their drying arrangements which will serve the purpose of the experimental stage, and, on the other hand, that the development of his machinery is still in its early stages and the necessary research is likely to extend beyond the period of his original estimate. Accordingly he seeks authority to omit the purchase

of

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Accordingly he seeks authority to omit the purchase

of

of the drying machine and to expend the £1,514 on running and working expenses over the extended period which he thinks will be necessary. The money would be held by the Crown Agents and advanced to him in the same way as other payments are made.

In view of the conditions attaching to the grant it would be necessary to get Treasury approval to this modification in which your concurrence is invited.

A further modification proposed by Mr.McCrae is that instead of ordering three splitting machines at £1,000 each from the Hydraulic Engineering Co.Ltd., he now finds that a process of combing holds out the best prospect of success. The Hydraulic Engineering Co. has released him from his engagement to order this machinery from them and Fairbairns, who are specialists in combing and carding machinery, are prepared to supply the necessary plant for the purpose. Mr.McCrae says that the result of the trials has proved that the process of softening and splitting will bring up the value of sisal. This alteration involves merely a re-allocation of the sum granted between the two firms and on different types of machinery, but approval will also be required for it.

A copy of Mr.McCrae's letter of the 16th April is attached.

S. Caine

1.5.36

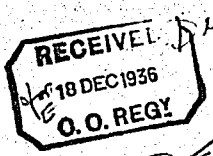
I concur in the suggested revisions.

4.5.36

LASIS
(REGISTERED)
FIBRE PRODUCTS

JAMES McCRAE, WELLINGTON FOUNDRY, LEEDS, 1.

16th April 1936.



The Under Secretary of State,
Colonial Office,
London. S.W.1.

Sir,

Reference 38159/35.

I beg to submit an intrim report upon progress made in connection with my experiments for softening and splitting Sisal fibre.

The methods which have been followed are those which gave promise of success in my earlier experiments. They are mechanical, and include two distinct operations; first a process of pressure rolling to remove the gums and so soften the fibre, followed by a splitting action to subdivide the strands.

Softening. The softening effect of pressure rolling was discovered in my earlier research, and was further advanced by making use of a Jute Calender machine, between the rollers of which the fibre was repeatedly passed until the degree of softening was obtained. This evidence formed the data for the design of the present experimental plant which is a powerful machine of sixteen tons capable of exerting a pressure up to 150 tons. This machine is in its experimental stage now, and when it has been adjusted to produce my requirements, it will provide the necessary information for a commercial design.

Splitting. Three distinct systems presented themselves for investigation; vibration, combing, and carding. Intense vibration tended to seperate the sub-strands, an action observed by Captain Mangnall during his research into decorticating problems. As this action, if proved successful, would result in the most economical of splitting, it was considered advisable to investigate it. An experimental machine was built by The Hydraulic Engineering Co Ltd, and trials were carried out at their works at Chester. The results proved that a considerable degree of splitting was done, but not sufficient for my purpose, so this method was discarded.

Of the alternative systems, that of combing holds most promise of success, and as Messrs Fairbairn Lawson Combe Barbour Ltd, are specialists in combing and carding machinery, and as my research is being carried out at their works in Leeds, it was decided to invite their co-operation in this work as well as in the softening process. This firm are rendering me most valuable assistance.

This alteration in my arrangements has been simplified by The Hydraulic Engineering Co Ltd, releasing me from the the agreement which I entered into with them on 2nd October, and by Fairbairn Lawson Combe Barbour Ltd, including in their agreement with me dated 7th September, machinery for splitting in addition to the softening machinery which was the subject of that agreement. I enclose letters from both firms giving effect to this new arrangement, and would be glad to have your formal approval.

The development of this machinery is still in its early stage, but it is sufficiently advanced to permit a series of trials to be carried out. The results of those trials have proved conclusively that this process of softening and splitting enhances the value of Sisal to a very considerable extent, and will be the means of opening up new markets which this fibre does not at present enter.

Research work of this kind is naturally slow, and is likely to extend beyond the period of my original estimate. This period is not quite lapsed, but I desire to provide for its probable extension, and therefore beg to submit the following proposal for your approval.

In the approved schedule for machinery there is an item of £1514 for drying machinery. This machine is not now essential as I find that my improved method of softening leaves very little moisture in the fibre, and Messrs Faitbairn Lawson Combe Barbour Ltd, have kindly permitted

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the agreement which I entered into with them on 2nd October,
and by Fairbairn Lawson Combe Barbour Ltd, including in
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permitted)

me to make use of their drying accomodation, which will serve the purpose of those experiments.

This sum of £1514 should be sufficient to carry my research over the extended period to a point when it becomes self supporting. I would be grateful therefore if you will kindly authorise the Crown Agents to transfer the amount of £1514 from Messrs Petrie & McNaught Ltd, who were to make this drying machine, to me, and to make payment to me upon application in the usual manner. This money to be used for contingencies which will arise during the extended period, and for management and travelling expenses on the same scale as already laid down.

I attach statement of accounts showing expenditure to date, together with receipts.

I have the honour to be,

Sir,

Your obedient servant,

Jas M. Gale

38159/36

C. O.

Mr. Greene 25/3

Mr. ~~Boyd~~ Paskin 25/3 [illegible]

Mr.

Sir C. Parkinson.

Sir G. Tomlinson

Sir C. Bottomley.

Sir J. Shuckburgh.

Perml. U.S. of S.

Parly. U.S. of S.

Secretary of State.

DRAFT.

6a. 3]

31

~~23 March 1936~~

2 APR 1936

Gentlemen,

I am etc. to ack. the receipt of your letter No. 0/Kenya 90 of the 21st of March regarding Colonial Development Fund Scheme ~~No.~~ No. 352 (Sisal Softening Plant) and to inform you that arrangements have been made for the sum of £1500 to be ~~issued from the Fund~~ included in the next issue which is shortly being made from the Colonial Development Fund for credit to your account at the Bank of England.

I am etc.

(Signed) J. E. W. FLOOD

FURTHER ACTION.

ALL COMMUNICATIONS
TO BE ADDRESSED TO THE
CROWN AGENTS FOR THE COLONIES,
THE FOLLOWING REFERENCE AND THE
DATE OF THIS LETTER BEING QUOTED.

O/Kenya 90.

TELEGRAMS: "CROWN, LONDON."
TELEPHONE: VICTORIA 7730.

4, MILLBANK,
LONDON, S.W.1.

Dup.

RECEIVED
23 MAR 1936
O. O. REGY

21st March, 1936.

Sir,

With reference to your letter No.38159/36 of the 5th March, regarding a loan from the Colonial Development Fund to the Government of Kenya for the development of a sisal softening plant, I have the honour to enclose a copy 18.3.36 of a letter and enclosure from Mr. J. McCrae applying for a further advance of £1500.

We shall be glad if H.M. Treasury may be requested to place this sum to our credit at the Bank of England in order that payment may be made.

I am, Sir,

Your obedient servant,

for Crown Agents.

The Under Secretary of State,
Colonial Office.

JCL

COPY OF LETTER FROM MR. JAMES McCRAE, LABIS (REGISTERED) FIBRE PRODUCTS TO CROWN AGENTS.

Wellington Foundry,
Leeds 1.

18th March, 1936.

Your reference O/Kenya 90.

Gentlemen,

With reference to item No.2 of my schedule for plant for treating Sisal fibre.

I have to advise you that this special machine for softening the fibre has been delivered to me and been erected by Messrs. Fairbairn Lawson Combe Barbour Ltd.

I beg to enclose their invoice for £1,500 duly certified, and will be obliged if you would kindly arrange to make payment direct to them at Leeds.

Yours faithfully,

(signed) James McCrae.

O/Konya 90.

COPY.

AEW/FW.

28th February, 1936.

Messrs. Lenis (Registered) Fibre Products,
Per James McCrea, Esq?,
Wellington Foundry,
Leeds 1.

DR. TO

FAIRBAIRN LAWSON COMBE BARBOUR LTD.

LEEDS & BELFAST.

Your order dated 5th November.

1 Special Hydraulic Calendar for the treatment of Sisal fibre, all as per drawings and specification.	£1500.0s.0d.
Delivered and erected Leeds.	Net.

Certified Correct.

(signed) James McCrae.

Leeds, 18.3.36.

38159/56.

118

2

Kenya.

C. O.

Mr. Coleman

Mr.

Mr.

Mr. Parkinson.

Mr. Tomlinson.

Sir C. Bottomley.

Sir J. Shuckburgh.

Permt. U.S. of S.

Parly. U.S. of S.

Secretary of State.

Room 64

5 MAR 1956

DRAFT.

Ea.

Gentlemen

I am etc to ack receipt of your letter of the 20th of Feb (O/Kenya 90) regarding Colonial Development Fund Scheme No. 352 and to inform you that arrangements have been made for a sum of £200 in respect of that scheme to be included in the next vote which is shortly being

made from the Colonial
Development Fund for
credit to your account
at the Bank of England.

Yours

(pp) H. Palmer.

ALL COMMUNICATIONS TO BE ADDRESSED TO THE CROWN AGENTS FOR THE COLONIES. THE FOLLOWING REFERENCE AND THE DATE OF THIS LETTER BEING QUOTED.

O/Kenya 90

TELEGRAMS: "CROWN, LONDON."
TELEPHONE: VICTORIA 7730.

4, MILLBANK,
LONDON, S.W.1.

20th February, 1936.

RECEIVED
[illegible] 1936
C.O. REGY

Sir,

402 Ky 192

46/38159/35

15.2.36.

With reference to your letter No. 402 A/cs. of the 24th December last, regarding a loan from the Colonial Development Fund to the Government of Kenya for the development of a sisal softening plant. I have the honour to enclose a copy of a letter and enclosure from Mr. J.McCrae applying for a further advance of £200.

We shall be glad if H.M.Treasury may be requested to place this sum to our credit at the Bank of England in order that payment may be made.

I have the honour to be,

Sir,

Your obedient servant,

for CROWN AGENTS.

The Under Secretary of State,
Colonial Office.

JCL

COPY OF LETTER FROM MR. J. McCRAE TO CROWN AGENTS.

Wellington Foundry,
Leeds, 1.

15th February, 1936.

Gentlemen,

Reference O/90, Kenya

Referring to my letter to you of 18th December, I beg to enclose a second invoice from Messrs. The Hydraulic Engineering Co.Ltd., for £200 in connection with the machinery which they are making for me.

This invoice has been duly certified and I will thank you to make payment to them direct as you did in the last payment.

This payment is part of £3000 allocated for plant to be delivered by this firm, and of that sum £2450 remains on hand.

Yours faithfully

(sgd) Jas McCrae.

121
END

COPY

CHESTER. 13th February, 1936.

James Mc. Crae Esq.,
LEEDS.

Dr. to

THE HYDRAULIC ENGINEERING COMPANY LIMITED.

36985.

2nd Instalment on Experimental Sisal Splitting Machine £200. 0. 0.

NETT CASH.

Certified correct

(sgd) Jas McCrae

15. 2. 36.

x

121
END

COPY

CHESTER. 13th February, 1936.

James Mc. Crae Esq.,
LEEDS.

Dr. to

THE HYDRAULIC ENGINEERING COMPANY LIMITED.

36985.

2nd Instalment on Experimental Sisal Splitting Machine	£200. 0. 0.
	NETT CASH.

Certified correct

(sgd) Jas McCrae

15. 2. 36.