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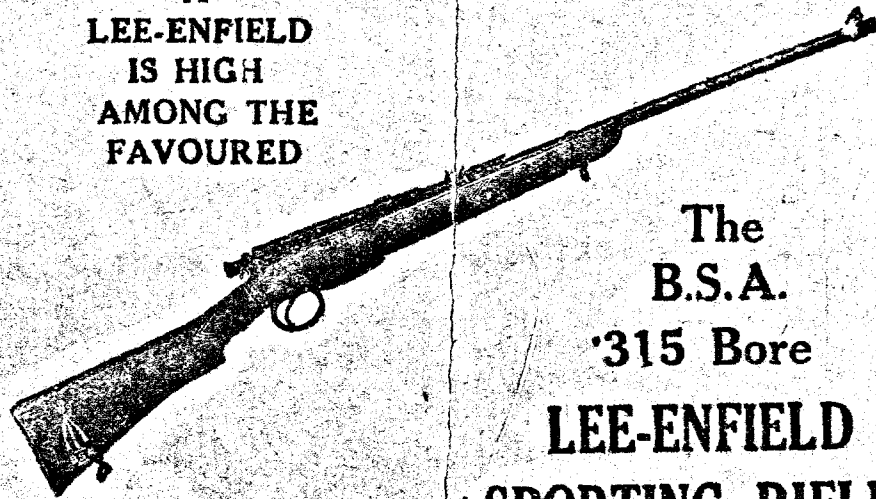
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CONTENTS.

	PAGE.
1. The Forest section of the Madras Exhibition 1926	 39
2. Marathon Race 1926	 42
3. Proceedings of the seventh annual Conference of the Madras Forest Rangers' Association	 43
4. Revenue Administration by the Forest Department II By, T. N. V. Ramanujachari, M. F. C.	 47
5. EXTRACTS :—	
Combating prickly-pear—Forest utilization—Some phases in the manufacture of Newsprint—Re- lation between Forests and Rainfall—Wood splinters and fibres—Coloured woods; how to grow them—Mechanical tree felling with a saw plane—Man-eaters in India—Uses of wood flour.	 55
6. Contributions to the museum and Library	
7. Gazette Notifications	

ST. GORGE'S HOMES

FOR DESTITUTE CHILDREN OF EUROPEAN DESCENT

IN

SOUTH INDIA, CEYLON AND BOMBAY.

The Declaration of Geneva—which surely represents the considered opinion of experts—says :—

THE CHILD should be the first to receive relief in times of distress.

THE CHILD should be given the means requisite for its normal development both materially and spiritually.

THE CHILD that is hungry should be fed; THE CHILD that is sick should be nursed; THE CHILD that is backward should be helped; THE CHILD who errs should be reclaimed; and THE ORPHAN and WAIF should be sheltered and succoured.

THE CHILD should be brought up in the consciousness that its talents are to be used in the service of its fellowmen.

The Declaration expresses exactly what we are trying to accomplish in these Homes.

Most of us at one time or another have been 'had' by some plausible fraud, but that should not prevent our helping GOOD causes in these times of un-employment and distress. It should merely make us discriminate. Will You discriminate by sending us a subscription? So doing, you will be able with clear conscience to say 'No' to the next plausible rotter who comes along.

Rev. S. F. STREATFEILD B. A.,

Principal.

KAITY., (Nilgiris).

The Madras Forest College Magazine.

Published Quarterly.

Vol. XI]

DECEMBER, 1926.

[No. 2.

The Forest section in the Madras Exhibition 1926-27.

The "utilization branch" of the Madras Forest Department again exhibited in Madras during the last Christmas, a very interesting and instructive collection of forest products, raw and finished. The exhibits included typical scantlings of some of the more important Madras timbers, tongued and grooved boards, planed boards, bound shooks, tea, oil, and rubber chests, flooring boards; hammer and axe-handles made of *Anogeissus latifolia*, doors and windows of Poon and Ainee, samples of three, and seven, ply-wood of Indian timbers, sections illustrating the preservation of sleepers by impregnation with creosote, samples of paper and pulp from bamboos (*Ochlandra* and *Dendrocalamus*); trophies, samples and panels of the more common Madras timbers, and important minor produce of Madras selected from the Gass Forest Museum.

The show was an improvement upon the previous year's in that labels giving information that would interest and instruct the

commercial public in particular, were prepared by Mr. M. F. Bridge, the Forest Economist, and affixed to exhibits of the more important or common panels of timbers abundant in the Dhoni Forests. The tea and oil chests made of "miscellaneous" timber exhibited in December 1925, and stored for a year *without special care*, exhibited no signs of cracking or warping, as the timber used, was *well seasoned*. The same chests were, therefore again kept on view in the recent show, with a note to this effect and this made the public realise how the so-called jungle wood species would serve admirably well such purposes, if they are only thoroughly seasoned. The methods and object of seasoning were briefly indicated on a placard.

In addition to other useful notes as regards the technical properties, vernacular names and uses, the following information was furnished for some of the Dhoni timbers.

1. *Terminalia paniculata* :—

From various forests it is expected to extract at least 50,000 c. ft. in 1926—27.

Price :—Standard stock :—

Battens and scantlings according to sizes from Rs. 2 4 0 to 2 8 0

Boards, do. from 3 0 0 to 3 4 0

2. *Machilus macrantha* :—

Stocks available in the log at Olavakkot : 5,000 c. ft.

3. *Diospyros spp* : (*D melanoxylon* ?) :—

It is hoped next year to extract at Olavakkot 5 tons of this material.

4. *Calophyllum tomentosum* :—

It is expected to extract in 1926—27, 30,000 c. ft. in the log.

Price :—Battens and Scantlings : from 2 4 0 to 3 12 0

Boards 3 0 0 to 3 12 0

5. *Grewia tiliaefolia* :—

It is expected to extract in 1926—27, 49,000 c. ft. from Olavakkot.

Price :—Battens and Scantlings : from 2 4 0 to 2 8 0

Boards 3 0 0 to 3 4 0

6. *Mesua ferrea* :—

In 1926—27, 29,000 c. ft. are expected to be extracted at Olavakkot.

7. *Terminalia Tomentosa* :—

Amount exploited at Olavakkot and Pollachi in 1926—27 is expected to be 40,000 c. ft.

Price :—Battens and scantlings, from 2 4 0 to 2 8 0

Boards ; from 3 0 0 to 3 4 0

Between the trees:—

"I beg your pardon," said the first little evergreen, "but may I inquire what family of trees you belong to?" "Well," replied the second evergreen, "to day I feel quite spruce, and I know that I'm pop'lar, but by the time the week is over I'm afraid I'll be quite out of my elm'ent and classed with the ashes!"

Marathon Race. (1926.)

This race, which is a cross-country race of about seven miles, was run on 9-11-26 over almost the same course as previously.

Boota Singh was the winner, in 49 minutes 10 seconds, followed by Gupta, who was last year's winner, one minute later.

Considering the nature of the ground, rendered heavy by recent rain, the time was good. All starters finished the course, and in quite reasonable time. Kashmiri Lal, extraordinary as it may seem, was *not* last man in!

Names and times of the first twelve in are appended.—

1.	Boota Singh	Senior	Division	...	49 min.	10 sec.
2.	Gupta	"	"	...	50 "	10 "
3.	Tiwari	"	"	...	53 "	3 "
4.	Bandigiri	Junior	"	...	53 "	8 "
5.	Hukum Singh	Senior	"	...	53 "	50 "
6.	A. N. Rao	"	"	...	54 "	53 "

7.	Poovappa	"	"	...	55 "	3 "
8.	Gattewar	"	"	...	56 "	50 "
9.	Dutt	"	"	...	57 "	44 "
10.	B.K. Chaudhri	Junior	"	...	57 "	51 "
11.	Bankey Lal	Senior	"	...	58 "	20 "
12.	G. R. Naidu	Junior	"	...	58 "	24 "

**Proceedings of the Seventh Annual Conference of the
Madras Forest Rangers' Association.**

The Seventh Annual Conference of the Madras Forest Rangers' Association was held on the 27th and 28th December 1926 at Mambalam, Madras, M. R. Ry., C. P. Garudachala Mudaliyar, retired Forest Officer, presiding. After a brief reference to the premature deaths of Rangers Messrs G. N. Subba Rao, A. Manikka Mudaliar, S. V. Sigbatullaht, P. K. Kuttappan Pillai and B. Poniah Panthulu, the president dwelt on the gloomy outlook of Rangers as they have been denied the benefit of a time scale of pay or the near prospect of promotion to the Provincial Forest Service.

The following were among the more important resolutions passed :—

That this conference of the Madras Forest Rangers,

(i) regrets to place on record its utter disappointment at the absence of response from the Government for the several Memorials and resolutions conveying the demands of the Forest

Rangers for increase of pay and allowances, for the early introduction of time scale of pay, for the removal of the disabilities under the Arms Act, for the abolition of the system of half yearly conduct reports and for the reduction of the period of pensionable service; and it desires to draw the attention of the Chief Conservator and the Government to them with a view to get an early redress for the several grievances,

(ii) is emphatically of opinion that the nonabsorption of Supernumerary Rangers into the regular cadre for the last five years and more is unjust and causes great hardship besides being contrary to the spirit of the agreements executed by them on deputation to the Forest College; and that it appeals to Government to bring about their absorption immediately,

(iii) regrets to place on record the unsympathetic attitude of the Government and the differential treatment it meted out between Rangers in the Forest Department and the Police Officials in the Police Department in the matter of conveyance allowances; that it is inequitable to allow the Sub-Inspectors allowance for bullock carts and disallow the same for the Forest Rangers who are admittedly of a higher status and whose tours are more extensive and difficult,

(iv) desires to request the Chief Conservator to press the rightful claims of Rangers for the acceptance of Government in all questions affecting their status and emoluments,

(v) desires to draw the attention of Government that in view of the recent retrenchment effected in the Rangers' Cadre and the consequent difficulty to get any promotion for a decade the introduction of time-scale is imminent not only in the interests of Rangers themselves but also in developing the Department,

(vi) requests to draw the attention of Government to modify the punishment rules and bring them up-to-date with those existing in other departments such as Police, Salt, and Registration,

(vii) notes with pleasure the honourable acquittal meted out to Ranger M. R. Ry., A. Rama Rao Kini and other Forest Subordinates and the President is authorised to communicate this to M. R. Ry., A. Rama Rao Kini,

(viii) notes with pleasure the nomination of Henry Tireman Esq., I.F.S., C.I.E., to the Council of State,

(ix) resolves that the next annual conference should be held at Palghat during the Michaelmas holidays, Madras not being a central place of meeting for most of the Rangers of the Presidency.

Mr. N. Raghavan Nayar, Forester, attended the conference as a delegate of the Foresters' Association. Addressing the audience he said on behalf of Foresters, that his class was not treated by the Rangers as well as they deserved and pointed out that foresters are equal in rank to Revenue Inspectors, Sub Inspectors of Police, etc. who receive a far better treatment at the hands of their superiors. He concluded by an appeal to the Rangers to respect their feelings and better their prospects.

Administration Report of the Madras Forest Department for 1925—26.

The following extracts from the Government's review of the report of the Madras Forest Department for 1925—26 may be of interest:

"The chief features of interest have been the development of the Engineering branch, and the constitution of a new Working Plans Circle. * * * * The Utilization and Economic branch has been placed on a proper footing and effected sales amounting to Rs. 3 lakhs, Saw mills have been started, an arrangement has been made to supply sleepers to the railways, a depot has been opened in Madras, with the object of increasing the sales of sawn timber.

* * * * The cost of extracting timber at Chenat Nair has been still further reduced and the output at the Olavakkode saw mill which works in conjunction with the operations at Chenat Nair, has shown a very satisfactory increase.

* * * * The work of regeneration has met with various misfortunes; in some areas the young crops have been attacked by parasites or a kind of fungus, in others the crops planted have been a failure.

Certain insects which attack the leaves of teak trees have been causing considerable trouble in Nilambur and the question of sanctioning the appointment of a forester to investigate means of exterminating the pest is under the consideration of Government.

But perhaps the most serious disease which the department has to combat is spike disease in sandalwood. If this disease is not checked a serious loss of revenue will result. The question of having a special investigation made is at present under consideration.

The number of forest offences reported during the year was less than the average of the previous three years. * * * *

The question of early burning requires to be decided for each locality according to special circumstances prevailing in that locality * * * *

The total gross revenue realised during the year was 51.70 lakhs as against an expenditure of Rs. 48.15 lakhs. The result was a net surplus of Rs. 3.55 lakhs as against Rs. 4.52 lakhs in the previous year, the decrease being largely due to fall of revenue under sandalwood owing to a drop in the auction prices.

Revenue Administration by the Forest Department.

II

Demarcation Survey and settlement.

In my previous article, I described how the revenue affairs of the Javadhis happened to be transferred to the Forest Department. In the present one I shall deal with the way the Forest Department handled them. When the department took up the task, the state of revenue affairs was anything but encouraging. The "Malayalees" were very fond of shifting cultivation and when they began their practice they never cared to know whether the land they cleared was

a patta land or not. Whereever they found good growth of trees, with a deep soil, and good leaf mould, and humus, they began to clear and cultivate. The sylvicultural methods of clear felling and burning were practised in the wrong direction—of course beneficial to them. This method of cultivation yielded them good harvest for at least three years, if not more, without manuring ploughing and weeding. They obtained the maximum of yield with minimum labour, and expenditure. The result of all such unchecked cultivation was that isolated patches of "Sivayijama" cultivation were found all over the unreserves and porambokes and the work of spotting out such cultivations by one man in a hilly tract was a precarious task. Such cultivations increased year after year until the Forest Department opened their eyes to these glaring things in 1917. During that year, the extent of patta holding was 6427.38 acres with an assesment of Rs. 2503-13-0 and the extent of Sivayijama cultivation over the three Revenue villages was 1206.53 acres yielding a revenue of Rs. 421-15-0. The proportion of Sivayijama cultivation to patta was one to five as checked by the Forest Department. This is not an encouraging state of affairs. The revenue derived from the Sivayijama cultivation shows that it was not sufficiently penalised.

When the people cleared the land, they did not care to protect the sandal trees. Cultivation of lands with standing sandal trees was not desirable to them. In that natural sandal forest one does not know how many trees there were on the land before clearing and how many were cut and burnt. Presence of sandal trees impeded their cultivation at every stage. The trees occupied a greater area,

they obstructed ploughing and they died when the land was burnt as they are fire-tender. If the trees are destroyed before burning the land, they had nothing to fear and there would be no scorched sandal trees to attract the forest subordinates.

This state of affairs presented two important problems to be tackled by the Forest Department—namely to put an end to the Sivayijama cultivation completely, and to protect the sandal trees. Let me emphasise here the point that the sole aim of the Forest Department is to protect the sandal trees, as a single moderate sized sandal tree standing on an acre of pattaland will yield as much revenue as we will get from the land for at least fifty years.

To put an end to Sivayijama cultivation it was necessary to assign the unobjectionable cultivated lands, and to evict the Sivayijamadhars from objectionable lands. This meant a regular survey and settlement, as these cultivations were scattered here and there in the unreserves. Hence it is that the Forest Department took up survey and settlement first.

In the three Revenue villages known as Pungampatti Nad, Pudur Nad, and Nellivasal Nad, a Revision survey was undertaken.

As a preliminary to this the demarcation of the villages was done in a particular manner to fix the limit of the cultivation of each and every hamlet in the village. A line 10 feet wide was cut around each and every hamlet so as to include all the unobjectionable cultivated lands and some lands for future extension of cultivation and excluding all the objectionable lands from the forest point of view, having at the same time as straight a demarcation as possible.

At all the bends, cairns like those of Reserved Forest lines were constructed. These demarcation lines with the cairns had such a permanent nature that there may not arise any necessity to alter them in the near future. The lines were known as "Delimitation lines" Any step taken by the Forest Department had the approval of the Government so much so any alteration of the Delimitation lines required their previous sanction. The malayalees were given strictly to understand that any petty encroachment beyond these lines would end in a very severe punishment. Thus every village was surrounded by a line so that it looked like an enclosure, though situated in unreserves.

Having thus fixed the external boundary of the villages, the survey of the lands inside was taken up. The original survey of the village was kept up as it was, and the new fields beyond those original ones were surveyed and numbered serially beginning from the last number of the village. Thus the survey of all thirty two hamlets of these three "Nads" was completed in the course of two years.

The demarcation of these villages and the survey were done by a Deputy Ranger who was in charge of the Revenue work and a Ranger posted on special duty for the purpose. The external boundaries of the villages also were surveyed and maps of the villages and the individual fields were prepared. The total extent of all the villages came up to nearly twelve thousand acres.

Settlement of these villages was taken up early in 1919 and most of the villages were settled then. The District Forest officer of West Vellore was the settlement officer.

New "A" Registers known as digloth Registers were prepared for these villages and in those registers themselves the District Forest Officer during the settlement of these villages, passed orders either assigning them to the persons, or treating them as porambokes or assessed waste. This was done in order to simplify accounts. Though a major portion of the work was completed in 1919, the objectionable cases of assignments were taken up in 1920 and practically completed after detailed inspection.

The principle with which the assignments of lands were made were extremely favourable to the Malayalees. It was the intention of the Department and the Government that Non-Malayalees from the plains should not be allowed to exploit them there. With this object in view the Government ordered that lands should not be assigned to "Non-malayalees" and alienation of the lands to them by the Malayalees was prohibited. Further no plainsmen should attach or bring to auction the lands belonging to the malayalees without the previous sanction of the District Forest officer of West Vellore in writing, and anything done without such proper authority was null and void. This was the spirit of the Government order and keeping this in view the Forest Department conducted the settlement of these villages. In 1920 out of nearly 600 pattas on the hills only six pattas were in the names of plainsmen who owned land there. The original rights of these plainsmen (Mahamadans owning small patches of coffee plantations in Chambai village had to be recognised during the settlement though the plantations were neglected by them and the pattadhars lived elsewhere on the plains only paying kists.

Pattas were issued after the settlement, to the Malayalees afresh, including the fresh assignments. These were conditional pattas. In the pattas themselves the conditions were inserted, and they were to the following effect:—

1. The pattadhars undertake the demarcation of these lands if necessary at any future date.
2. The pattadhars have no right to the standing classified trees and the sandal trees on the lands.
3. The pattadhars should not sell the lands to the Non-malayalees without the permission of the District Forest officer in writing, and if anything was done without it, it was null and void. No non-malayalee can attach the lands on the hills without such permission.
4. The courses of the rivers and jungle streams passing across the fields, should not be obstructed, and a width, of a chain on both banks should be left without cultivation.

After this settlement Sivayijama cultivation was completely eradicated, and for three years subsequent to the settlement there was not even petty encroachment.

Having put an end to the indiscriminate Sivayijama cultivation like this the attention of the department was turned towards the sandal trees. The sandal trees on each and every field were distinctly numbered with tar and girth measurements were taken. Lists

of these sandal trees were prepared for each field. A Register of such sandal trees was posted up for each "Nad" separately.

There were two distinct class of sandal trees on the patta lands. As I have already mentioned in my previous paper, the sandal trees on patta lands assigned prior to 1906 belonged to the pattadhars and from them the Government purchased at certain rates fixed for different girth classes. The trees also were numbered both with tar and metallic punches with a government arrow mark to show that they were purchased and with a broad tar band at $4\frac{1}{2}$ feet from the ground. These trees were shown in form 10 of the Range office and the District Forest Office, though standing on the ground and green. The Registers showing these trees were known as "Registers for purchased patta sandal trees." The sandal trees on lands assigned after 1906 were reserved to government. Such reserved trees also were numbered after the settlement of these villages and the Registers showing these trees are known as "Patta Sandal trees registers for reserved trees." These trees were numbered only in tar with narrow tar bands at $4\frac{1}{2}$ feet from the ground nearly.

This procedure on the part of the Forest Department had the effect both of restricting the existance of private sandal trees, and the destruction of Government sandal trees by the Malayalees on the patta lands. Extraction of some of the sandal trees if found dead, was undertaken year after year and for the last three or four years, the yield of sandalwood from the dead trees on patta lands alone, avarages to nearly ten tons per year. The trees that are entracted are shown in the Registers as extracted, and in the case of purchased trees

the yield of each tree was noted along with the invoice number and date. The history of each purchased sandal tree from the time of its purchase, up to the time of its extraction will be found in those Registers. Similar is the case with the Reserved trees though in a smaller degree. If trees are destroyed on any land the fact can be easily detected by checking the standing numbered sandal trees with the Registers. So far the sandal trees also were safe guarded.

Though personal references are forbidden here, yet I cannot refrain from mentioning that the officer who began these works of demarcation survey and settlement and who shaped them to their proper form and pushed them through with only limited assistance, was M. R. Ry. K. A. Chengappa Avl. the then Dt. Forest Officer. M. R. Ry. Rao Sahib K. R. Venkataramana Iyer Avl., the then Dt. Forest Officer of S. Vellore who happened to be in additional charge of W. Vellore also contributed his mite towards the speedy completion of the work and half of the villages were settled by him during the Jamabandhy in 1919.

The ground work was completed. It was the most difficult task at the beginning and carrying on with it afterwards, was an easy one. The further improvements and developments and also the different sets of revenue accounts maintained by the Forest Department will form the subject matter of my next article.

T. N. V. Ramanujachari,

Student (1926-28) M. F. C.

EXTRACTS.

Combating Prickly Pear:

(Use of Arsenic Peroxide):

Arsenic pentoxide is distributed in a powder form by the Prickly-pear Land Commission of Queensland, and has been found to be most efficacious and the cheapest form of poison for the destruction of prickly pear. The department has not carried out any tests with arsenic pentoxide in the powder form, but tests which have been made by the Queensland Prickly pear commission indicate that it is cheaper and more convenient than any other form provided it can be applied by an injection. It has the advantages that when once introduced in the pear plant it circulates both to the extreme segments, and to the extremities of the roots, and then completely destroys the plant. Unlike arsenic it is soluble in water. It is not dangerous to handle, is economical in use and may be supplied to land-holders in a concentrated powder form.

Experiments have shown that the poison is so powerful that one twelfth of an ounce will destroy pear plants weighing 1 cwt. The poison does not entail danger to stock. The powder, before being used, is mixed in three or four times its weight of water. The present price is about 6d. for lb.

Extract from "The Agricultural Gazette, New South Wales, XXXVII, part III.

* * * * *

Forest Utilization :

“ * * * * The public should be distinctly informed that the forester's slogan is not “ Woodsman, spare that tree,” but instead “ Use *all* of the tree, *and grow more!*” Without logging there can be no practice of silviculture, and without silviculture there can be no forestry. * * * * ”

“ * * * * We hear so much nowadays about diversified farming as a solution of the farmer's ills. Diversified utilization of the forest products would also go a long way in making forestry possible ; A forest that is worked only for the choicest veneer logs or the largest saw logs and nothing else cannot be indefinitely a paying proposition. It is only when each part of the tree, or each kind of tree is being put to its best use that timber cropping becomes a truly profitable enterprise. * * * * ”

Some phases in the manufacture of Newsprint :

By, Harry Andrews, B.Sc. U. B. C., Chemical Engineer, Powell River Pulp and Paper Company.

The first substances on which the human race maintained its records were stone, bricks, tablets of wood, leaves, bark and specially prepared skins of animals. Following these, the Egyptians very early produced from the papyrus reed a surface suitable for writing upon, and it is from the name of this substance that our word “ paper ” is derived

However, the first conversion of a mass of felted fibres into a sheet similar to that of present day paper was the work of the Chinese, who can thus be called the first real makers of pulp and paper.

In England the first successful paper machine was built in 1803. Dating from this, paper came into its first extensive usage, and consequently the substances from which it was made—mostly jute and hemp, and such rag fibres as cotton and linen—became increasingly scarce. As a result, then, of the paper makers' search for more plentiful raw materials, a great deal of experimenting was done on wood, of which there was apparently a boundless supply, with the idea of finding in it an inexpensive source of fibre. Finally various chemical processes were devised for treating the wood and preparing from it a pulp which, when converted into paper, produced a sheet of fine texture and great durability. But even this material although produced wholly from wood, was not yet sufficiently inexpensive to satisfy the growing demands of the newspapers. Eventually however the longsought material was found, as a result of the invention, in 1870, of a process for making mechanical pulp simply by tearing the fibres of the wood apart through the action of a revolving cylinder of sandstone.* * * * ”

In the manufacture of newsprint the soft woods are practically the only ones used.

Extracts from “ The Forest Club Quarterly, The University of Washington ” April 1926.

* * * * *

Relation Between Forests and Rainfall.

Colonel Sir Henry C. Lyons, R. E. F. R. S., contributes the following interesting article to the "Tropical Agriculture," on the question of the relation between forests and rainfall. It contains several interesting points, and is therefore reproduced.

The occurrence of dense forest growth in regions of heavy rainfall, and the humid atmosphere and damp soil which prevail in many forest regions suggest a relation between forestation and rainfall which has often been constructed to mean that forests cause the quantity of rain falling in their immediate neighbourhood to be larger than that falling on a corresponding area on which no trees are growing. Proof of this is difficult to obtain, and even the records provided by rain gauges exposed within and without the forested area need care in their interpretation. The trees reduce the velocity of the wind blowing over the forested area and tend to cause the amount collected in the gauges to be larger than on treeless and more wind swept land. Again, when rain falls on trees a proportion, estimated by some at 25 per cent, is temporarily held on the surface of leaves and branches where the drops evaporate more freely than on the ground, thus making comparison more difficult.

The relation of forests to climate, and especially to rainfall, has been investigated on many occasions, and in many parts of the world, without any satisfactory proof being furnished that they influence materially the rainfall of a district. Even where reliable measurements of rainfall are available, these vary considerably from year to year, and a

long series of observations is necessary before they can be expected to furnish reliable evidence of climatic change.

The Government of India carried out an exhaustive inquiry during the ten years from 1906 to 1915 in order to ascertain whether there was evidence of any relation between forests and atmosphere and soil moisture in India. The results were published in a Bulletin where it is stated that the influence of forests on rainfall is probably very small, the Director-General of Observatories giving as his opinion that probably it did not reach 5 per cent.

In 1910, Dr. W. L. Moore, then Chief of the United States Weather Bureau, published a report on the Influence of Forests on Climate and Floods in which he and Professor Cleveland Abbe record their opinion that forests have little or no effect on the quantity of rain falling. Similar conclusions have been reached by other investigators working other regions.

Let us now consider the meteorological conditions which prevail in and near a forest region. Summer temperature is usually slightly less in the forests, and winter temperature slightly higher than in the open country. Sheltered by the leaves and branches, the soil loses less by evaporation than does treeless land, and so conserve the rain that it receives longer. Growing vegetation transfers a large amount of water to the air by transpiration through its surface pore, and from his experiments at Mariabrunn near Vienna, Von Hohnel estimated that an acre of oak forest 115 years old contributed to the air in this way about ten tons of water daily on the average.

In the marsh region of the Upper Nile, the loss of water through the vegetation and by evaporation from the open water surface of lagoons, over some 600 kilometres of valley reaches about 220 cubic metres per second at low stage and 600 cubic metres per second in flood. The water vapour in the air immediately over the forest or the valley is thus increased but it is being continually removed by the air currents and no additional precipitation can be traced to this cause.

It is now generally recognised that rain falls continuously when a current of moist air flows into a region where it comes under reduced atmospheric pressure, the expanding air is unable to contain all the water vapour so that a proportion of it is condensed to form clouds and finally rain. Such conditions occur when a moisture laden current striking against a hill range is deflected upwards into higher altitudes; or when a colder and heavier air current pushes underneath a warm moist current forcing the latter upwards; or when the heating of a mass of air in contact with the ground gives rise to an ascending current of warm moist air as in the case of hot weather thunder-storms. So long as such conditions continue and the supply of moist air is maintained to be carried up to altitudes at which it can no longer retain all its water vapour rain will continue to fall. But such conditions are not provided by forests. Forests on a hill side may gain by the heavier rainfall on that slope which is the more exposed to moist air currents, and tropical forests flourish in the heavy rainfall provided by the upward movement of masses of moist heated air near the equator, but the forest is not the determining cause of the precipitation. Forest covered hill tops, stand-

ing in a moist air current will often be covered with a cloudeap and the water particles will condense freely on the leaf surfaces of the trees. In this case the forest may cause an appreciable amount of water to be condensed and so become available, as on the Ascension Island, which on a bare hill-top would probably evaporate in the drier air on the leeward side of the hill. Thus it will be seen that forests alone cannot provide the energy needed to raise a moist air current to such an altitude as will ensure a proportion of its moisture being precipitated as rain. A hill range whether forested or not may do this as also may a colder current with its greater density pushing under the warmer current and raising it either on the secant and do provide that continuance of suitable conditions which results in a steady rainfall. There is nothing which forests apart from the mountainous country in which they may occur possess which can produce like results."

* * * * *

Wood splinters and fibres: -

It is a common impression among wood workers that wood which in breaking shows long splinters has, therefore, longer fibres than material which breaks off short, but this is not necessarily the case. A sample of timber submitted for examination to the Forest Products Laboratories of Canada, Montreal, was described by the sender as weak, brashy, and with short fibres. On examination with a microscope, however, the fibres were found to be unusually long for that particular kind of wood. It is stated by the laboratories

that there is, infact. no known relationship between the length of the fibres, and the strength of any piece or kind of wood.

Coloured Woods : How to grow them :—

Neither the process of melting wood nor that of hardening soft timber proves half so interesting to the casual observer as watching Nature produce coloured trees, observes a "Daily Chronicle" writer. In growing coloured timber so that stain, varnish, and paint are unnecessary, the trees are usually operated upon in the spring. This is because the sap, and mineral matter are then more readily absorbed by the tissues of the trunk, and branches. After the various tints or colourings are decided upon, a slanting hole is bored through each tree about a foot from the ground. In the lower end of the hole a short wooden plug is driven. Before the air has come to dry up, the sap in the concentrated solution or aniline dye in the hole, is forced through by means of a rubber hose and a hand pump. The result is that the dye, on mixing with the sap circulates throughout the tree, and colours the wood.

With the exception of a few trees, a pumpful of the dye every two or three hours is sufficient. Some of the large trees will soak up a gallon a day. Others need little more than a pint a day. In every case, the amount of dye standing in the slanting holes, serves as a guide. As might be expected, the first part of the tree to stain is the outer layer of wood. This becomes nicely coloured in about three days. The remaining time is taken up by the dye spreading to the tree centre.

To determine if the colouring is effectual throughout, augurs are driven into the branches at different heights, and microscopic examinations made of the saw dust. Variation in the shades of the saw dust reveals if the process of colouring is incomplete. For example, too much white indicates streaks. This is due to insufficient dye.

—*Extracts from "The Indian Daily Mail" 29th November, 1926.*

Mechanical tree felling with a Saw-plane.

A French Engineer has invented a new machine for the felling of trees by machinery, also plank sawing, etc., which is giving very interesting results. This machine weighing 270 lbs. called 'Saw-plane' by its inventor, has just been adopted by the French ministry of War, and by most of the French Timber and Forestry concerns. The process of cutting is quite *suigeneris*, the sawing is done per medium of a cutting chain, which encircles the tree, and turns at a lineal speed of 7 metres per second. Trees may be cut level and square with the ground. The chain is composed of links bearing each two tracing knives, and a plane, hence the name of Saw-plane. The sawing speed is about one second per inch of thickness for soft wood, and about two seconds for hardwoods.

A poplar bole of 40 centimeters diameter is cut in thirty five seconds, Oaks measuring 90 centimeters, in two minutes. The biggest oaks measuring $1\frac{1}{2}$ metre take 12 minutes. It is worthy of note that the machine fells trees of any diameter with the same facility and passes from one diameter to another without loss of time.

As the sawing goes on, the tree sags on the saw line without jamming the cogs, and it finally falls on the opposite side of the machine. The sawing of a tree with a saw-plane does not entail the use of ropes, or of a jack, and reduces felling expenses by 75 per cent.

—Extract from the *Queensland Agri. journal* Vol. XXV March 1926.

Man-eaters in India:—

Brigadier-General R. G. Burton writes in the "National Review."

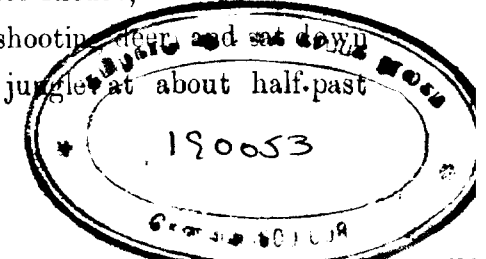
There are many popular fallacies regarding tigers in general and man-eating tigers in particular. In the first place the tiger is proverbially the embodiment of cruelty and blood-thirstiness. These animals are responsible for the death of 1,600 people each year, and they destroy a large number of cattle. It is commonly supposed that tigers will attack openly any human being who meets them. But the tiger is far more afraid of man than man of the tiger, and even the man-eater seldom seizes its victim openly, but approaches him by stealth. But **man-eaters** are scarce.

There is a strange and very "human" interest in the history of man-eaters, which were at one time far more numerous than they are to-day, when, except in certain favourable regions, the tiger is a somewhat rare animal. There are some early records of Europeans being killed by man-eating tigers, which are not without interest and even instruction. Two episodes, though of ancient date, may be given as a warning to people not to trust to fire as a protection against man-eaters.

On an afternoon in October 1787, a small vessel bound from Ganjam to Calcutta ran out of provisions and water; being near Saugur Island at the mouth of the Hugli, the six Europeans who were on board went ashore in search of cocoanuts and other provisions. They wandered some way inland; darkness came on, and as the vessel was at a distance it was thought wise to stay for the night in the ruins of an old pagoda. A large fire was lighted; it was arranged that two of the men should keep watch at a time, in turn, and in the first watch one of the two was a silversmith of Calcutta named Dawson. In the middle of the night a tiger rushed over the fire and seized Dawson; and in springing off with its victim in its jaws, struck with its head the side of the pagoda, which caused it with its prey to rebound into the fire, on which they rolled over before the tiger made off with its quarry. In the morning the legs of the unfortunate Dawson were found at some distance, the thighs stripped of flesh and the leg shockingly mangled.

This incident is of special interest, for it is not often that Europeans have fallen victims to man-eaters, while it shows also that the common idea that wild beasts may be kept at a distance by fire is erroneous. It was unfortunate that the facts of this tragedy were not known to another party which five years later anchored in the ship *Ardesier Shaw* off the same island. For they also lit a large fire, composed of ten or a dozen whole trees, on purpose to keep the tigers off, as they had heard it always would. The party consisted of four Europeans, including Mr. Monro, son of Sir Hector Monro, and some native attendants. They landed for the purpose of shooting deer, and set down to eat, and lit, their fire on the edge of the jungle at about half-past

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were Brinjaras, a wandering tribe, some of whom had settled temporarily in the neighbourhood in order to graze their cattle. In another case a large tiger which I killed had recently attacked a herdsman who died of his wounds; but this was probably because he had tried to drive it from his herd, for no attempt was made to carry the man off. An account too is given of a tale related by a Gond of the death of a priest living in an isolated temple, who was killed and devoured by a man-eating tiger. Such solitary recluses were in former times, when tigers were numerous, especially liable to suffer, and several similar instances are recorded.

It is a remarkable circumstance that tigers were unknown in Singapore during the early years of the British settlement of that island but made their appearance soon afterwards, apparently attracted by the sound of human voices and the lowing of the cattle in hitherto uninhabited wilds. The tiger readily takes to water, and in the hot season may often be found lying in a pool. They swam across the narrow strait which separates Singapore from the mainland, and in the fifties of the last century the annual mortality caused by these animals numbered from two to three hundred persons.

In 1856 a man-eating tiger killed some sixty people in the Kurnool District of Madras, causing the cultivators to desert their fields and their work. These creatures are generally cowardly and will retreat if faced boldly by the intended victim. Their prey is generally pounced upon and seized unawares. But this tiger became so bold that it killed two men one day from a crowd of forty people

who, accompanied by a hundred bullocks, had formed themselves into a party to get to their fields. It was eventually killed by a party of shikaris under the leadership of a jemadar of the Kurnool Irregular Horse, who surprised it as it was carrying off the body of a man just killed. In its stomach were found the hair and teeth of a girl who had been killed the previous day.

It is noteworthy that man-eaters are generally tigresses, which are probably led into this course by the difficulty of nourishing their young, and by discovering that people are easy to kill. Then they pass on the propensity to their offspring, which may account in some measure for the recurrence of these monsters in particular districts.

It is probable that Man-eating Leopards are at least as destructive as tigers. They are more numerous; almost any leopard will take a child should a favourable opportunity present itself; the leopard is in some respects bolder and more cunning, and it constantly lives in closer proximity to the habitations of man than does the tiger, which requires extensive jungles for its wanderings.

A man-eating leopard in the Seoni District of the Central Provinces killed more than two hundred people. It used to seize its victims by the throat, and apparently killed only to lap the blood, for the dead were not devoured. It killed for killing's sake; sometimes there were as many as three victims in one night. In that part of India watchers sit on platforms above the crops to protect their charge from the depredations of pigs and antelopes. The watcher would be dozing on his perch, when this monster would swarm silently up one

three on the afternoon of December 22, 1792. They had just begun their meal when one of the party said there was a fine deer a few yards off. Two of them jumped up to get their guns. The narrator wrote: "I had just laid hold of my gun when I heard a roar like thunder, and saw an immense royal tiger spring on the unfortunate Monro, who was sitting down. In a moment his head was in the beast's mouth, and it rushed into the jungle with him with as much ease as I could lift a kitten, tearing him through the thick hedges and trees, everything yielding to his monstrous force." Several shots were fired, the tiger was seen to stagger, and in a few minutes Monro came out of the jungle all covered with blood, and fell. He was taken back to the boat, where medical assistance was obtained, but he lived only twenty-four hours. His head and skull were torn and broken to pieces, and he was wounded by claws all over the neck and shoulders, but, says the chronicler, "it was better to take him away, though irrecoverable, than to leave him to be devoured limb by limb." A remarkable circumstance connected with this incident was that they had scarcely pushed their boat from the shore when the tigress made her appearance, almost raging mad, and remained on the sand as long as they were in sight.

Another instance of a European being attacked by a man-eater of which details are recorded was near Chakrata, nearly forty years ago. Two officers of the Forest Department went to look for a man-eating tiger, which had been infamous in the neighbourhood for many years, and which had killed a buffalo near their camp. As they went one each side of a ravine, the one in front heard growls

and cries for help, and on looking round saw his companion in the jaws of the tiger, which was tearing his neck and face with its claws. He fired on the instant, and the tiger rolled down into the ravine within ten feet of him. He then went to look for his companion, but could not see him, and hurried back to camp for assistance. In the meantime the latter had been found by a native attendant in the water close to the dead tiger. He had crawled down into the ravine to escape the monster, and had collapsed in the water a few feet from his dead enemy.

Man-eating tigers are now scarce. Perhaps they were more numerous in days when tigers abounded in districts where these animals are now not to be found. They have not only been destroyed in large numbers, and kept down by the more efficient weapons of modern times, but the spread of means of communication, the construction of railways and the extension of roads and of cultivation have driven them to more and more remote fastnesses. Sixty years ago man-eaters were killed within a comparatively short distance of Bombay, where for many years no tiger has been seen. The present writer, in the course of many shooting expeditions in jungles infested by tigers, came across only one man-eater, and that was nearly thirty years ago. The beast had fortunately not long taken to this habit, and its victims numbered only a dozen or so of human beings.

This was a fine and healthy animal in the prime of life, as man-eaters generally appear to be, not having the mangy coat which is popularly but erroneously ascribed to these monsters. Its victims

of the supporting posts and slay him in an instant. He would enter a village and seize the sleeper on his cot; or if driven off, he would go round to the other end of the village and take another victim in the confusion.

I have several times known leopards take children from the threshold of a hut and devour them in the adjoining jungle. In more than one such instance the midnight murderer stepped over the sleeping form of the mother and took the child from her side. In another instance a leopard had killed more than twenty people in a group of villages in Hyderabad.

Wolves are not as common or as destructive as they used to be. I recollect how, nearly forty years ago, a small pack of seven or eight of these animals killed over a hundred people in one district before they were destroyed. Still they are responsible for the death of many children annually, although adults are seldom attacked. Many years ago two wolves took up their abode near one small village and preyed on the children of the inhabitants, who had not the energy or enterprise to attempt their destruction, although they resided in a cover and far from the place. One wolf used to hide in the bushes at the foot of the hill on which the hamlet was situated, while the other raced down the main street where the children were playing and picked up a victim on the way. The two then devoured the body in their lair among the bushes. If the man-eater with its victim were pursued, and made to drop its prey, the other wolf would seize and make off with another child in the confusion. As the first one would be already

dead, this led to the death of two children, so after a time the beasts were allowed to pursue their depredations without molestation. After some months a sportsman fortunately arrived on the scene, and drove out and shot the wolves; but not before many had been killed. There is also an instance recorded where three wolves attacked a sentry on duty near Cawnpore. The man shot one, bayoneted another, but was killed by the third.

Crocodiles are apparently not the cause of much loss of human life, although they will on occasion seize someone while washing or drinking at the river. They subsist more on carrion and in the large rivers find no lack of food, as testified by the contents of the stomach. I have found human remains, including a silver bracelet, inside the reptiles shot on the banks of a large river; also the bodies of cats, dogs and ducks. But these occasional man-eaters have neither the opportunity nor perhaps the inclination to kill that possesses the feline monsters which turn on man to provide their ordinary prey.

Wood flour has many uses:—

That the importation of wood-flour from Europe into the United States amounts to approximately 12,000,000 pounds yearly is the statement made by Harry H. Steidle, Research assistant Dept. of Wood Utilization. Saw dust, shavings and other mill waste which makes up its contents are generally considered by American lumber operators as merely fire hazards and while they pay to dispose of them European operators are busy converting such waste into wood flour, exporting it to America, paying duty and apparently selling it at a profit.

Spurce, fir and pine are the chief European woods used to produce their highest grades of wood flour which must necessarily be light of colour and free from rosin.

Wood flour which is a finely ground or pulverised form of wood is made chiefly in Europe by grinding the saw dust in stone or steel burr roller mills, while in this country a pulverising machine is used.

The uses of wood flour are numerous and diversified ranging all the way from dolls to dynamite. While close to 20,000,000 pounds of the flour is used annually in making linoleum, its greatest usefulness is as a constituent of dynamite. Bakelite, one of the newer industries, used in the manufacture of radio dials, etc., utilises wood flour, while another extensive use is as a surfacing in the making of "oatmeal" wall papers.

—*American Forests and Forest Life* December 1926.

Contributions to the Gass Forest Museum.

Serial No.	Contribution.	Contributor.
1.	A colubrine snake (<i>Polyodontophis</i> spp.) from the Javadi hills	M.R.Ry. J. S. Vedanaya- kam Avl. R.O. Alangayam.
2.	Four panels of <i>Diospyros embryop- teris</i>	M.R.Ry. K. Jayaramaiyer Avl. R.O. Kannikatti.
3.	One panel of <i>Chloroxylon swietenia</i> and one of <i>Shorea robusta</i>	The Range officer Berhampore.
4.	Thirteen long panels and five short panels	The Conservator of Forests, Ceylon.

Additions to the College Library.

1. Memoirs of the Indian meteorological department. Vol. XXIV Part 9.
2. Correlation in seasonal variations of weather—a further study of world weather.
3. Hand book of Photo-micrography; by H. L. Hind and W. B. Randles.
4. Indian Forest Records—Entomology series. Vol. XII Part 7—By J. C. M. Gardner.
5. Working Plan of the scrub forests of the Bijapur District.
6. Madras Forest Bulletin No. VIII. Sylvicultural research in the Madras Presidency. 1924—25.
7. Report of the Department of Industries, Madras for the year ended 31st March 1925.
8. Annual progress report of the administration in Ajmere-Merwara Forest 1924—25.
9. Madras Agricultural Department, year Book 1924.
10. Proceedings of the Board of Forestry held at Dehra Dun, July 27th to 31st, 1925.
11. Note on the strength, quality, supply, and uses of *Lagerstroemia lanceolata*—By, The Forest Economist.
12. "Tropical Woods" Nos. 4 and 5 December 1925, and March 1926 of Yale University School of Forestry.

13. "Flora Siamensis Enumeratis."—A list of the plants known from Siam, with records of their occurrence. Part I, By, W. G. Craib, M. A.
14. "Forest Research in India." 1924—25.
15. Annual return of statistics relating to Forest administration in British India for 1923—24.
16. Revised Working Plan for the Gund working circle, Kanara West Division.
17. Summary of results of treated and untreated experimental sleepers laid in the various Railway systems of India, brought up to date—by J. H. Warr, B, Sc.
18. A manual of Forest mensuration, revised by C. E. Simmons.
19. Administration report of the Forest Department of the Madras Presidency for the year ending 31st March 1925. Vols. I & II.
20. Report on Public Instruction in the Madras Presidency for the year 1924—25.
21. Burma Forest Bulletin No. 13. Report on aerial reconnaissance, stock mapping etc.—January to April 1925.
22. Photosynthesis (the assimilation of carbon by green plants)—By Walter Stiles.
23. Special lecture notes on (1) Timber strengths, and Timber testing, for Indian Forest students—By L. N. Seaman.
- (2) Saw-Mill, wood workshop, and tool-room management for Indian Forest students—By, W. Nagle.

- (3) Minor Forest Products of India—By, H. Trotter.
- (4) Pulp and paper making By, W. Raitt.
- (5) Timber seasoning, By, S. N. Kapur B. Sc.
- (6) Preservation of Timber By, J. H. Warr
- 24. Short notes on Madras Timbers,—By Forest Economist, Madras.
- 25. The Indian Forest Records:—Sylvicultural series. Vol. XII Part 4.
yield table for clear felled sal coppice by S. H. Howard B. A.
- 26. Do. Do. for *Pinus longifolia*.
- 27. Do. Do. *Cedrus Deodar*.
- 28. The families of flowering plants:—I Dicotyledons. By J. Hutchinson
- 29. Note on the utilization of *Cullenia excelsa*, and *Dichopsis elliptica*
issued by the forest utilization office, Madras.
- 30. Flora of the Presidency of Madras—By J. S. Gamble Part VII.
- 31. Military Engineering Vol. IV, Demolition, and mining.
- 32. List of trade names for Indian Timbers.
- 33. Aims and methods in the study of vegetation—By Tansley and
Chipp.

Gazette Notifications.

7—9—1926.

Mr. D. A. Stracey, E. A. C., a further extension of leave on half average pay for four months in continuation of the leave already granted to him.

* * * * *

14—9—1926.

A District Forest Officer may grant to Forest Rangers leave on medical certificate and a conservator may grant to them any leave other than special disability leave. A Conservator may also delegate at his discretion his powers under this rule to a District Forest Officer to the extent of enabling to grant leave not exceeding one month subject to a report to the conservator in each case.

21—9—1926.

The Hon'ble Mr. H. Tireman, C. I. E., leave on average pay for the period from the date of termination of his temporary duty in the Council of State to 4th November 1926.

Md. Habibullah Sahib Bahadur, special Forest Officer, Parlakimedi maliahs, to be District Forest Officer North Mangalore with effect from 6th October 1926.

Mr. J. H. Longrigg, Dy. Conservator of Forests, on return from leave, to be District Forest Officer, Tinnevely.

M. R. Ry. S. V. Devadasan A. L. E. A. C., on return from leave, to be District Forest Officer, North Cuddapah.

M. R. Ry. E. B. Ramachandra Rao A. L. District Forest Officer, North Cuddapah to be special Forest Officer, Parlakimedi maliahs with effect from about 15th September 1926.

Saiyid Abdul Qadir Sahib Bahadur, Dy. Conservator of Forests, granted extension of leave on half average salary for one month with effect from 18th September 1926 in continuation of the leave already sanctioned.

(ii)

5—10—1926.

Mr. T. A. Whitehead, Conservator of Forests, has been granted an extension of leave for two months from 8th November 1926.

Mr. A. A. F. Minchin, Deputy Conservator of Forests, extension of leave from 3rd December 1926 to 9th March 1927.

12—10—1926.

Mr. D. L. Sathe, District Forest Officer, West Cuddapah, to be in additional charge of Ananthapur Division, with effect from the date of taking charge.

Mr. M. F. Bridge, Dy. Conservator of Forests, on return from leave to be Forest Economist, Madras.

Mr. M. V. Laurie Assistant Conservator of Forests, on relief by Mr. M. F. Bridge, is attached to the Madura Forest Division to work under the District Forest Officer.

19—10—1926.

M. R. Ry. S. V. Devadasan Ayl., E. A. C., on return from leave to be D.F.O. Chittoor with effect from 15th October 1926.

26—10—1926.

Mr. N. D. M. Sahni, Assistant Conservator of Forests, on completion of work at Beypore is posted to work under the D. F. O. S. Coimbatore.

Saiyid Riazuddin Sahib Bahadur, E. A. C. of Forests, South Kurnool Division is posted to act as D. F. O. North Cuddapah, until further orders.

2—11—1926.

Mr. J. E. M. Mitchell, Dy. Conservator of Forests is granted with effect from 7th November 1926 leave on average pay for eight months and in continuation thereof leave on half average pay for two months.

(iii)

23—11—1926.

M. R. Ry. P. Govinda Menon Ayl., E. A. C., South Coimbatore division, is posted to act as District Forest Officer, North Coimbatore, in relief of Mr. Trimurthi until further orders.

7—12—1926.

Muhammad Abdul Karim Sahib Bahadur, E. A. C. extension of leave with effect from 15th October 1926 on average pay for five months, and on half average pay for one month in continuation thereof.

Mr. A. M. C. Littlewood, Dy. Conservator of Forests, on the expiry of his leave, to be District Forest Officer, North Coimbatore.

Mr. K. T. Mathew, Assistant Conservator of Forests, Nilambur is posted to the North Mangalore Division for training.

M. R. Ry. M. S. Rangaswami, E. A. C. of Forests Palghat is posted to Wynaad Division to be in charge of Chedleth Range.

(iv)

Notifications relating to Rangers.

The Hon'ble Mr. H. Tireman, C. I. E.

Chief Conservator of Forests.

24—11—1926.

The following promotions of rangers are ordered with effect from 1—10—26:—

1. N. Chakrapani Ayyangar from VI Grade S. P. T. to VI Grade permanent.
2. A. K. Anantarama Ayyar from VII Grade permanent to VI Grade permanent.
3. K. Kunhiraman Menon from VII Grade permanent to VI Grade permanent.
4. T. G. Sitarama Mudaliar from VII Grade permanent to VI Grade permanent.
5. V. Jagannatham Pillai from VII grade permanent to VI Grade permanent.
6. S. F. Lobo from VII Grade permanent to VI Grade permanent.
2. The number of posts in the VI Grade is temporarily increased from 48 to 54 and the 6 posts in the VII Grade vacated by the promotion of the 6 men referred to above will remain unfilled.

17—11—1926.

1. M. R. Ry., K. Raghavan, Ranger VI Grade sub-protem on duty under Forest Utilization Officer, Beypore Depot is granted leave to attend the annual training with the 13th Battalion 3rd Madras Regiment to be held at Cannanore from 20th November to 17th December 1926. He will hand over his duties in the Beypore Depot on or after the 16th instant to Ranger Ayanna.
2. M. R. Ry. N. Ayanna will relieve N. R. Ry. K. Raghavan of his duties in the Beypore Depot on or after the 16th inst. and will be in sole charge of the works of the Beypore Depot.

(v)

First Circle.

20—9—1926.

M. R. Ry. B. Vaideswara Ayyar Ranger V Grade Nellore District is granted leave an average salary for four months with effect from date of relief by Ranger Y. Venkataswami Naidu.

29—9—1926.

M. R. Ry. Y. Venkataswami Naidu, Ranger VII Grade, is posted to the Nellore District on the expiry of the leave granted to him (5-10-1926).

5—10—1926.

Mr. I. John, Ranger 7th Grade, Guntur, is posted to the Charge of Ellore Range, Godavari Lower.

30—10—1926.

M. R. Ry. Y. Venkataswami Naidu, Ranger VII grade, is transferred from Nellore to Upper Godavari, to do duty under Mr. J. A. Master, Deputy Conservator of Forests, on special duty.

5—11—1926.

M. R. Ry. Y. Venkataswami Naidu, Ranger VII grade, doing duty under Mr. Master, Deputy Conservator of Forests on special duty, is posted to Pulusumamidi Range in relief of Ranger K. Raghava Rao.

Second Circle.

14—10—1926.

Ranger M. Subbarayalu Nayudu, II grade on return from sick leave on 19th October 1926 is posted for special duty to Kurnool South.

17—10—1926.

Supernumerary Ranger V. N. Leapingwell now on special duty in Gundla-brahmeswaram Range, Kurnool West Division is posted to work under the Special Sylvicultural Officer.

(vi)

12—11—1926.

M. R. Ry., O. Venkataramana Ayyar Range I grade on return from sick leave is posted to the charge of Chitvel Range, Cuddapah South Division subject to production of a Medical certificate of fitness to return to duty.

M. R. Ry. K. Raghuraman Ranger VI grade on relief by No. 1 is placed on special duty in the same division.

14—11—1926.

M. R. Ry., N. C. Mahadevan Pillai Ranger III grade now working in Kurnool West Division is posted for special duty to Kurnool South Division.

6—11—1926.

M. R. Ry. S. Sankaran, Ranger on special duty—Cuddapah South Division is posted to Kurnool East Division on special duty for preparation of Stock Maps.

6—11—1926.

M. R. Ry. A. Ranganayakulu Nayudu Ranger II grade, in charge of Kodur Range Cuddapah South Division is granted leave for 3 months as follows from date of relief:—

Leave on average pay for 2 months 29 days.

„ half pay for 1 day,

M. R. R. P. Dhananjaya Rao Ranger IV grade on expiry of his leave is posted to the charge of Kodur Range vice No. 1.

16—11—1926.

M. R. Ry. N. Rajagopala Chetty Supernumerary Ranger is posted for duty to Kurnool East Division.

25—11—1926.

M. R. Ry. K. S. Ramayya Ranger IV grade—from Yerragundapalayam Range of Kurnool East Division to Giddalore Range of Kurnool South Division.

(vii)

Mr. M. Hussain Khan Ranger II grade on relief by No. 1, from Giddalore Range of Kurnool South Division to Yerragundapalam Range of Kurnool East Division.

No. 1 to move first.

25—11—1926.

M. R. Ry. T. N. Seshagiri Rao Ranger I grade on return from sick leave on 2-12-26, is posted to Madanapalle Range which is attached to Anantapur District from 1-12-26.

2. Mr. P. M. Mathew Ranger now in charge of Madanapalle Range will on relief by No. 1 avail himself of the 3 months leave granted to him by Conservator of Forests IV Circle in his Service order No. 95/26 dated 5-11-26.

27—11—1926.

M. R. Ry., T. K. Ramaswami Ayyar Ranger II grade is granted extension of leave for two months on average pay, on medical certificate from 24-10-26 the date of expiry of the leave already granted to him.

28—11—1926.

M. R. Ry. S. Ramachandra Aiyar, Ranger III Grade, Cuddapah Range, Cuddapah Division is transferred to Gudalakama Range on Kurnool South (Present Head quarters at Diguva Metta) vice M. R. Ry. C. Ramaswami Naidu reported sick.

M. R. Ry. S. V. Duraiswami Aiyar, Ranger VI Grade, on special duty in Cuddapah West Division is posted temporarily to Cuddapah Range vice No. 1 until further orders.

(No. 2 to relieve No. 1 at once and No. 1 to join forthwith Gundlakama Range).

30—11—1926.

M. R. Ry. A. Arogyaswami Pillai Supernumerary Ranger working under the Special Sylvicultural Officer, Kurnool District is granted leave on average pay for one month and 12 days from 12th November 1926 to 23rd December 1926 (both days inclusive) with permission to avail himself of the Christmas holidays.

30—11—1926.

M. R. Ry. C. Ramaswami Nayudu Ranger I grade, in charge of Gudlakamma Range Kurnool South Division is granted leave on average pay for one month from 24 November 1925 with permission to avail himself of the Christmas holidays from 24th December 1926 to 2nd January 1927 both days inclusive.

8—12—1926.

M. R. Ry. O. Venkataramana Ayyar Ranger I grade is granted an extension of leave on half average pay on medical certificate for 4 months from 26th November 1926 the date of expiry of the leave already granted.

10—12—1926.

M. R. Ry. T. K. Ramaswamy Ayyar, Ranger II grade on return from sick leave on 24th December 1926 is posted to Chitvel Range charge Cuddapah South Division subject to production of Medical Certificate of fitness to return to duty.

M. R. Ry. K. Raghuraman Ranger IV grade on relief by No. 1 is posted for special duty to Kurnool West Division.

10—12—1926.

M. R. Ry. R. Jagannadam Naidu Ranger VI grade on special duty in Cuddapah North Division is granted leave on average pay for three months from 3rd January 27 with permission to prefix the Christmas holidays from 24th December 1926 to 2nd January 1927.

10—12—1926.

1. M. R. Ry. C. Ramaswami Naidu, Ranger I grade on return from leave is posted as Senior Instructor, Vernacular Training School, Cuddapah.
2. M. R. Ry. G. Rama Rao, Ranger VI grade on the expiry of sick leave on 20th December 1926 is posted to Markapur Range, Kurnool East Division.

3. Mr. A. H. Kirmani Ranger III grade subrotem on relief by No. 2 is posted to Vonipenta Range, Cuddapah North Division.

4. M. R. Ry. B. H. Anandathirtha Rao, Ranger IV grade on relief by No. 3 is posted as Junior Instructor, Vernacular Training School, to join not later than the 13th January 1927.

21—12—1926.

M. R. Ry. G. Rama Rao Ranger IV grade on special duty in Kurnool South is granted leave on average pay on medical certificate for 2 months from the afternoon of 24th October 1926.

24—12—1926.

Mr. A. Khalak Sheriff, Ranger, VII grade on special duty will relieve M. R. Ry. B. H. Anandathirtha Rao about the 5th January '27 and be in charge of Vonipenta Range till he is relieved by Mr. A. H. Kirmani.

27—12—1926.

1. M. R. Ry., K. Raghuraman Ranger, VI grade is posted to the charge of the Bailuty Range to relieve Mr. V. N. Subrahmanya Ayyar.
2. M. R. Ry., V. N. Subrahmanya Ayyar on relief will be in charge of the Rudracode building work.

9—1—1927.

This office Service Order granting 3 months leave on average pay to Ranger R. Jagannatham Nayudu on special duty in Cuddapah North, is cancelled

9—1—1927.

M. R. Ry., T. M. Krishnamachary Supernumerary Ranger is granted an extension of leave for 2 months on average pay on medical certificate from 21-11-1926 the date of expiry of the leave already granted in this office Service Order No. 141/26 dated 3-12-26.

The Ranger will be attached to Kurnool South on expiry of the leave as already ordered and subject to production of medical certificate of fitness to return to duty.

17—1—1927.

M. R. Ry., G. Rama Rao Ranger IV grade Kurnool South Division is granted an extension of leave on full average pay for 2 months on medical certificate in continuation of the leave granted for 2 months, from 24th October 1926.

Third Circle.

17—10—1926.

Ranger Raman Pillai, on return from leave is transferred from being Working Plans Ranger under the Working Plans officer Nilgiris, to be Working Plans Ranger under the working plans officer Nilambur.

27—11—1926.

Ranger Raman Pillai is granted an extension of leave on average pay for 10 days from 6-11-26 to 15-11-26, in continuation of the four weeks leave granted to him by the Working Plans officer Nilgiris, in his S. O. No. 3/26 dated 6-10-26 and 1-11-26.

Fourth Circle.

28—9—1926.

1. M. R. Ry. T. D. Raja Bahadur Mudaliar, Ranger VI grade on completion of the demarcation of Morappur Reserved Forest is posted to the charge of Anchetti Range, North Salem Division.
2. M. R. Ry. V. Narayanaswami Ayyar, Ranger V grade in charge of Anchetti Range, on relief by No. 1, is posted to the charge of Chitteri Range, Central Salem Division.
3. M. R. Ry. S. G. Venkataramanan, Ranger V grade in charge of Chitteri Range on relief by No. 2 is posted to the charge of Denkanikotta East Range, North Salem Division Vice M. R. Ry. R. Manickam Pillai granted leave from or after 15-11-26.

4—10—1926.

The transfers of M. R. Ry. P. Mathuramuthu Pillai, Ranger II grade from Krishnagiri Range to Alangayam Range, and M. R. Ry. S. Doraiswami Ayyar Ranger IV grade from Alangayam Range to Krishnagiri Range are cancelled.

26—10—1926.

1. M. R. Ry. S. Nagalingam Pillai, Ranger, VI grade, Namakkal Range, is granted leave for three months on average pay from date of relief from or after 30-11-1929.
2. M. R. Ry. Muthuswami Ayyar, Ranger II grade, Salem Range, is on relief by No. 3, posted to charge of Namakkal Range.
3. M. R. Ry. T. D. Rajababdur Mudaliar, Ranger VI grade, on special duty, Dharmapuri Range, is transferred to charge of Salem Range, Vice No. 2.

To join on 24-11-1926 by which time he should complete his special work.

2—11—1926.

M. R. Ry. V. P. Narayana Menon, Ranger VI grade Chittoor District, on return from leave on 17-11-1926, is posted to the charge of Santhavasal Range, Vellore division.

2. M. R. Ry. T. K. Parthasarathi Ayyangar, Ranger VII grade in charge of Santhavasal Range Vellore division, on relief by No. 1, is posted to special duty for road works in the Vellore division.

2—11—1926.

Mr. Saiyid Ibrahim Albeiz, Ranger VI Grade, Vellore division on return from leave on 24-11-1926, is posted for special duty in Santhavasal Range, Vellore division.

5—11—1926.

1. Mr. P. M. Mathew, Ranger V grade, Madanapalle Range, Chittoor District, is granted leave on medical certificate, for 3 months from date of relief.
2. M. R. Ry. V. P. Narayana Menon, Ranger IV grade, now on leave is posted to Madanapalle Range Vice No. 1 granted leave.

6—11—1926.

1. M. R. Ry. P. A. Krishnaswami Mudaliyar, Ranger IV grade, Santhavasal Range, Vellore division, is granted leave on average salary on medical certificate for 3 months from 21—10—1926.

Fifth Circle.

4—11—1926.

K. O. Anandan, Supernumerary Ranger, Kollegal is granted leave on average pay for two months from date of relief.

4—11—1926.

1. Ranger K. Venkatramana Rao, is transferred to Bhavani Range.
2. Ranger N. S. Easwara Ayyar, on relief by No. 1 is posted to Punachi Range.
3. Supernumerary Ranger K. O. Anandan is charge of Bargur Range is granted leave on average pay for 2 months with effect from date of relief by Ranger S. Sundaravaradachari.

20—11—1926.

M. V. Laurie, Esq., Assistant Conservator of Forests, attached to the office of the District Forest Officer, Madura, is posted to charge of Ayyalur range.

2. On relief by No. 1 Ranger A. R. Manual will be attached to Ayyalur range and work under the orders of the Assistant Conservator.

26—11—1926.

M. R. Ry. T. P. Palanikumaran Pillai, Ranger VII grade is dismissed from service with effect from date of relief.

10—12—1926.

The leave on average pay granted to M. R. Ry. P. Sithapathy Ayyar is to have effect 16th October 1926 and not 24th September 1926.

9—12—1926.

1. M. R. Ry. P. Sithapathy Ayyar, Assistant Ranger V Grade, Tunacadavu Range, should return to duty by 20th December 1926.
2. M. R. Ry. S. Narayanaswamy Ayyar, Supernumerary Range. Tunacadavu range, is granted leave on average pay for 2 months with effect from 10th December 1926.

3. M. R. Ry. P. Velayuthan Nair, Ranger I grade, Tunacadavu Range, is granted leave on average pay for 3 months from or after 20th January 1927. He should hand over charge to Ranger P. Sithapathy Ayyar.

17—12—1926.

M. R. Ry. A. K. Anantharama Iyer, Ranger VI Grade, should relieve Ranger K. Jayarama Ayyar who should obtain orders from the Conservator of Forests, VI Circle regarding his positing.

M. R. Ry. T. G. Sankaran Nair, Ranger II Grade, is granted leave on average pay for one month from 15th January 1927.

M. R. Ry. M. Sankaran Nair, Ranger VI Grade, will on relief in the I Circle. join Sityam angalam Range as a temporary measure.

2—1—1927.

The order transferring Rangers K. Jayarama Ayyar and A. K. Anantharama Ayyar is cancelled.

4—1—1927.

M. R. Ry. T. R. Thayuman Mudaliar, Ranger VII Grade is dismissed from service with effect from 4th September 1926.

Sixth Circle.

7—10—1926.

M. R. Ry. K. Shankaranarayana Rao, Ranger V grade, is granted an extension of leave on average pay, for six weeks, from 17th September 1926.

12—10—1926.

M. R. Ry. K. Dooma Shetti, Ranger V grade, is, on return from leave, posted to Bolampatti Range, Palghat Division.

Paragraph 2 of this office S. O. No. 63 dated 2-9-1926 posting Ranger K. Shankaranarayana Rao to Bolampatti Range is cancelled.

xii.

2. This office Service Order posting M. R. Ry. V. P. Narayana Menon, Ranger IV grade to Santhavasal Range, is cancelled.
3. M. R. Ry. T. K. Parthasarathi Ayyangar, Ranger VII grade, will continue to be in charge of Santhavasal Range. Vellore division, vice No. 1 on leave or until further orders

26—11—1926.

Saiyid Ibrahim Albeiz Sahib, Ranger IV grade, Vellore Division is granted extension of leave for 1 year without allowances in continuation of the leave granted to him in this office Service Order No. 78 of 1926, dated 16—9—1926.

28—11—1926.

M. R. Ry. R. P. Narayana Menon, Ranger IV grade, Chittoor District, is granted extension of leave on medical certificate on average salary for 3 months in continuation of the leave granted to him in this office S. O. No. 67 of 1926, dated 29-7-26.

2. Paragraph 2 of this office S. O. No. 95-26., posting him to Madanapalle Range, is cancelled.

10—12—1926.

Mr. E. W. Fernandez, Ranger V grade on special duty North Salem division is granted leave on medical certificate for 3 months from 24-11-1926, i. e., on full average salary for 2 months and half average salary for one month in cancellation of the leave for one month granted by the District Forest officer, North Salem, in his Service Order No. 188, dated, 26-11-1926.

23—12—1926.

1. M. R. Ry., T. S. Sankaranarayana Ayyar Supernumerary Ranger on special duty Chittoor district is transferred to Central Salem division for charge of Cauvery Range as a temporary measure. To join forthwith.
2. M. R. Ry. Syed Yabib Ranger V Grade now in charge of Cauvery Range with additional charge of Sheveroy's South Range is on relief by No. 1 posted to the charge of Sheveroy's South Range.

xiii.

23—12—1926.

1. M. R. Ry. R. Thangavelu Pillai Ranger VII on special duty South Salem division is transferred to North Salem division for charge of Anchetty Range.
2. M. R. Ry. R. Narayanaswamy Aiyar Ranger on relief by No. 1 is posted to the charge of Denkanikotta East Range North Salem, Division
3. M. R. Ry. R. Manikam Pillai Ranger II Grade on relief by No. 2 is appointed as Senior Instructor Vernacular Training School 1927 Session to be held at Pappireddipatty Sheveroy's North Range Central Salem Division.
4. M. R. Ry. S. Ramalingam Aiyar supernumerary Ranger on special duty North Salem division is appointed as Junior instructor Vernacular Training School Session 1927.

31—12—1926.

Mr. S. Ramalinga Ayyar Supernumerary Ranger on special duty, Denkanikotta East Range, is granted leave on average pay for 21 days from date of completion of the Siddapuram road estimate, which is expected to be on the 3rd January 1927. On expiry of the leave he should join the Vernacular Training School in the Central Salem as Assistant Instructor as previously ordered by the Conservator.

5—1—1927.

1. Subject to production of medical fitness certificate, M. R. Ry., P. A. Krishnaswami Mudaliar, Forest Ranger IV grade, on return from leave on medical certificate, is posted to the charge of Santhavasal Range, Vellore division.
2. T. K. Parthasarathi Ayyangar, Ranger, VII grade, on relief by No. 1 is transferred to Harur Range for stock mapping timber areas in the Chitteris and elsewhere in that Range.

24—10—1926.

M. R. Ry. B. Sambamoorthy Ayyar, Ranger IV grade, on special duty in Nilambur Range is granted leave on average pay for one month from 1st November 1926.

24—10—1926.

1. M. R. Ry. A. Rama Hebbbar Ranger II grade, at the end of the vernacular training school session, to the charge of Nilambur Range, Nilambur Division.
2. M. R. Ry. K. Shankaranarayana Rao, Ranger V grade, on return from leave, to the charge of Bolampatti Range, Palghat Division.

This cancels this office S. O. No. 69/1926 dated 12-10-26 posting Ranger Dooma Shetty to Bolampatti Range.

3. M. R. Ry. M. Mandanna, Supernumerary Ranger, at the end of the Vernacular Training School session to the Wynaad Division.
4. M. R. Ry. P. Madhavan Nair, Supernumerary Ranger, on relief by No. 3 is transferred to the Nilgiri Division.

30—10—1926.

M. R. Ry. N. Ayyanna, Supernumerary Ranger and Ranger, VII grade acting is transferred from the Nilambur Division, and posted to work under the Forest Utilization Officer, for the charge of the Beyapore Depot.

2. M. R. Ry. K. Raghavan, Ranger VI grade sub-protem, attached to the Beyore depot, is transferred to the Nilambur Division after his military training.

1—11—1926.

The leave on average pay for one month from 22nd September 1926 granted to Ranger K. Dooma Shetty, Palghat Division, is extended by one month.

7—11—1926.

M. R. Ry. A. Rama Hebbbar, Ranger II grade, is granted leave on average pay for 15 days with effect from the date of relief from the Vernacular Training School.

10—11—1926.

1. M. R. Ry. A. Rama Hebbbar, Ranger II grade, at the end of the Vernacular Training School session, to the charge of Kasaragode Range, South Mangalore Division.
2. M. R. Ry. M. Sankaran Nair, Ranger V grade, on relief by No. 1, to special duty in South Mangalore Division.

25—11—1926.

M. M. Mandanna, Supernumerary Ranger, is granted leave on average pay for one month from the afternoon of 15th November 1926. He should join the Wynaad division on the expiry of the leave.

26—11—1926.

M. R. Ry. M. P. Subbayya, Ranger 6th grade, Sultan's Battery Range, Wynaad Division, is granted leave on average pay for 1 month and 12 days from 12th November 1926, with permission to affix the Christmas and New Year Holidays, from 24th December 1926 to 2nd January 1927.

28—11—1926.

1. M. R. Ry. K. Dooma Chetty, Ranger 5 Grade, on return from leave, is reposted to Bolampatti Range, Palghat Division.
2. M. R. Ry. K. Shankaranarayana Rao, Ranger 5th grade, on relief by No. 1, is posted for special duty in Palghat Division.

21—12—1926.

Ranger P. Kannan, 7th Grade, is reduced to the bottom of the 7th Grade for one year from 19th December 1926 and debarred from range charge for the same period.

26—12—1926.

The transfer of M. R. Ry. P. Madhavan Nair, Supernumerary Ranger Wynaad, to the Nilgiri Division is cancelled.

7—1—1927.

The leave on average pay for one month from the afternoon of 15th November 1926, granted to Supernumerary Ranger, M. M. Mandanna is extended by two months.

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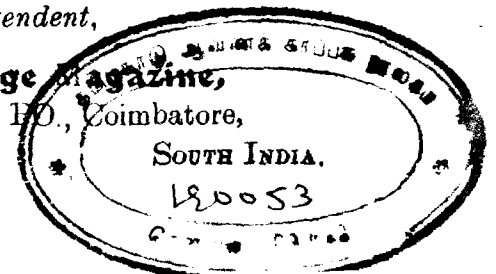
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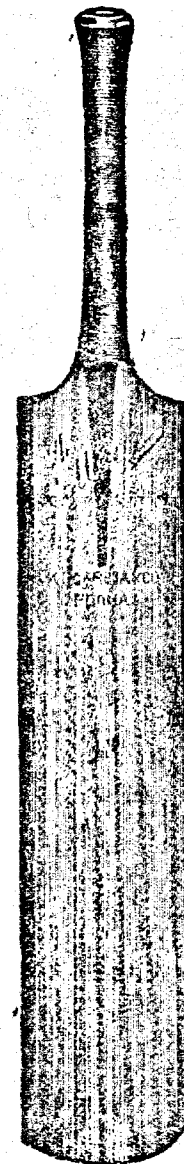
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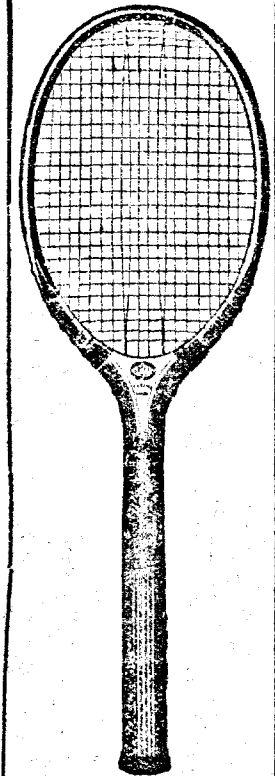
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