Mr. Wm. C. Mather, President,
Rockefeller Building,
Cleveland, Ohio.

Dear Sir:

I beg to submit my report covering the operations of the Cleveland-Cliffs Iron Company, Lumbering Department for the period of 12 months ending December 31st, 1911.

**LATHESW TRACT IN**

Refer to Flat "A"

December 31st, 1911 closed the 12th year of operations on the Matthews Tract.

- Commenced the year with: 21738 cords
- Cut during the year: 28244 "
- Shipped during the year: 25562 "
- Fire loss: 7257 "
- Balance on hand December 31st, 1911: 16543 "

Showing a decrease for the year of: 5195 cords.

**LATHESW CROPPING**

The price of 90c per cord for chopping wood which had existed for the previous 11 months was reduced to 80c for June, when a general reduction for any wages was made. We had been chopping freely at 300 Line points, where we had accumulated a good deal of wood during the spring months, but about April 1st we practically discontinued chopping on these jobs for the reason that we had literally no place to place choppers. Considering that the Gladstone Furnace suspended operations on the 6th of June for a period of about 5 months during a period of repairs, our stocks of wood on hand for that furnace remained the same during that period. It will be noted that we only cut on the Matthews Job during the year about 7300 cords. This was done by a few family men who worked on scattering fragments of timber, and on a small block of timber which we had remaining on Section 10-41-21. The average number of choppers per month was 12 as compared with 22 of the previous year. The average cords cut per man per month was 57.2 as compared with 54.5 for the previous year, showing an increase of 2.7 cords per man per month. Reference to Flat "A" shows in yellow that almost the entire area of the solid group of the Matthews Tract has been cut and hauled, including some U. T. descriptions on Sections 24 and 27. We are making a strong effort to haul and ship the material to come in on the last two miles of Mathews Spur and on Miners Spur to enable us to withdraw the steel, and use it in other places where it is very much needed.

(1)
due to the suspension of the Gladstone Furnace. The intermittent character of the
work together with the fact that small groups of wood had to be hauled from a large
number of places off at long distances, increased the cost of hauling and leading to
1.362 as against 1.229 of the previous year, an increase of .103. This location and
that at Bremo show an increase in the hauling costs, but all of the other locations
in the business show a decrease.

MARCHWOOD JOB

During the year we have been able to find sale for all of our softwood products
at fair prices, with the exception of hemlock logs, which have been difficult to sell
even at a reduced rate, but all of the material produced has been moved in the proper
season. Our products and shipments for this job are as follows:-

<table>
<thead>
<tr>
<th>Product</th>
<th>Production</th>
<th>Shipments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swy Logs</td>
<td>787585</td>
<td>916454</td>
</tr>
<tr>
<td>Stulls (Pt.1.4)</td>
<td>524</td>
<td>1123</td>
</tr>
<tr>
<td>Stulls (Pieces)</td>
<td>2479</td>
<td>1070</td>
</tr>
<tr>
<td>Polos</td>
<td>5</td>
<td>148</td>
</tr>
<tr>
<td>Posts</td>
<td>2404</td>
<td>1153</td>
</tr>
<tr>
<td>Ties</td>
<td>5442</td>
<td>4783</td>
</tr>
<tr>
<td>Bark (Coras)</td>
<td>1307</td>
<td>2641</td>
</tr>
</tbody>
</table>

The parties to whom our products were sold, and the prices which we obtained are all
incorporated in our Annual Statement of Sales, so it is unnecessary to incorporate it
all in this report. At the end of the year we had on hand at this job ready to be
sold in the spring of 1912 and shipped during the following winter, about 800,000'
of logs of various kinds, one-half of which is hemlock, and besides have some small
quantities of various kinds of piece-staff as shown by our stock sheet. At this writ-
ing, we are receiving competitive propositions for these logs, and a sale will be
closed in a few days.

LIMESTONE WOOD JOB

Refer to Flatt "B".

December 31st, 1911 closed the 8th year in the history of this location.

\[
\begin{align*}
\text{To commenced the year with} & \quad - & \quad 27725 \text{ cords} \\
\text{Transferred from Alger Wood} & \quad - & \quad 6456 \\
\text{To cut during the year} & \quad - & \quad 11089 \\
\text{Total} & \quad - & \quad 44200 \\
\text{To shipped during the year} & \quad - & \quad 11789 \\
\text{Balance on hand Dec. 31st, 1911} & \quad - & \quad 26681 \text{ cords.}
\end{align*}
\]

The transfer of 6456 cords from Alger coddage to Limestone coddage means that
on the West 1/2 of the West 1/2 of Section 15-48-21 we had wood which was produced by the
Alger Job, but the work of hauling took such form as to make it desirable to haul and
ship it by the Limestone Job, and therefore, this transfer on the stock books was made.

LUMBER CHOPPING.

Concerning the Lumber Job regarding the prices paid, etc., apply also to Limestone. The average number of choppers was 51 as against 65 for the previous year, a decrease of 14 men. They have averaged 357.2 cords per man per month as compared with 401.9, a decrease of 44.6 cords per man per month.

About April 1st, we had entirely exhausted the timber tributary to this job, and since that time no new assignments of timber have been made. At this writing, we are making a strong effort to secure from the Land Department Section 6-46-21 to enable us to place choppers which are now plentiful, and cut the wood to be dried during the summer of 1912, to insure us wood for wagon haul in the spring of 1913.

LUMBER MILLING.

During the suspension of the Limestone Milling, we only shipped about 10,000 cords, or 10,000 cords less than for the previous year, all of which is prejudicial to our costs, but notwithstanding this we hauled and shipped at a cost of 1.199 as against 1.274, or a decrease of .075 below the cost of the previous year. As has been stated in previous reports, we can never look for very low costs in this district, as is shown by the plat, the country is badly broken up by swamps and streams, making summer hauling extremely difficult.

LUMBER MILL WOOD JOB

We produced at this job entirely from so-called U. T. Lands.

<table>
<thead>
<tr>
<th>Saw Logs (Ft. L.)</th>
<th>Production</th>
<th>Shipments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sawn (Pieces)</td>
<td>206877</td>
<td>1071</td>
</tr>
<tr>
<td>4 × 3 Cuts</td>
<td>704</td>
<td>707</td>
</tr>
<tr>
<td>6 × 6 Cuts</td>
<td>149</td>
<td>122</td>
</tr>
<tr>
<td>8 × 8 Cuts</td>
<td>1064</td>
<td>1063</td>
</tr>
<tr>
<td>10 × 10 Cuts</td>
<td>475</td>
<td>470</td>
</tr>
<tr>
<td>12 × 12 Cuts</td>
<td>222</td>
<td>220</td>
</tr>
<tr>
<td>Total</td>
<td>2397</td>
<td>227</td>
</tr>
<tr>
<td>Tiling (Ft. L.)</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

During the summer on account of the shortage of labor, we made very little progress, our real effort being to get to the banking grounds the material already made, but early in the fall we took on a contractor, who is making and delivering at Spar 176 the softwood products from the U. T. Portion on Section 7. This work is going satisfactorily, and the contractor has already a considerable amount of material on the banking grounds.

A violent wind from the Northwest occurred on July 24th which blew down an immense quantity of timber all over the country, and was especially disastrous on areas where a portion of the timber had been removed. This was the case on our Section 9-46-21,
where large quantities of elm, birch and basswood had been left standing among the cordwood piles, and was practically all blown down. This necessitated strenuous efforts to reclaim this valuable timber before it should spoil, and we set about early in September to make it into logs, and put it in decks, with the result that we have on this job about 370,000 feet of logs, of which about 450,000 feet is elm and basswood, and 170,000 feet birch. At this writing, these logs are being decked alongside of a survey which we rate last year for the extension of Carol Spur, which we will ask to have authorized very soon now, and must push to completion as rapidly as possible in the spring, not only to keep these logs from spoiling, but to secure wagon hauls for the Gladstone Furnace.

ALGER WOOD 103

Refer to Plot "23".

December 31st, 1911 closed the 8th year of the operations of this location.

* We commenced the year with ** 53726 cords
  * Transferred to Limestone Wood ** 4456 "
  * We cut during the year ** 17093 "
  * Total ** 64875 "
  * We shipped during the year ** 15064 "
  * Balance on hand Dec. 31st, 1911 ** 49811 cords

ALGER CHAPLAIN.

Under the name of Alger Camp, we have worked choppers from Alger Camp proper on Section 27-45-11, from Alger Side camp on Section 18, Alger-Smith camp on Section 33, and Alger-Stevens on Section 5-44-21, also the wood cut on Section 34-46-21, at Chatham. We have literally cut all of the timber in sight from these locations, and have not a single description where we can place a chopper. The situation for the Gladstone Furnace is already a desperate one, as has been act forth at meetings with the President, and in special reports from time to time, but it should be again recorded that unless some of our plans for purchasing cordwood stumpage from the Northwestern Choperage & Lumber Company, or the Kimberly-Clarke people, or entering into screenings of this company in Range 12, are brought to a focus very soon, the Gladstone Furnace is menaced by the great danger of getting out of wood, and I cannot speak too forcibly of the necessity of immediate action.

The average number of choppers for Alger Camp was 82 men as against 94 of the previous year, and they cut 29 cords per man per month as against 41.9 per man per month for 1910.

ALGER CHAPLAIN.

All that we said last year under this head applies to the year 1911, except that we limbed and shipped wood at a cost of 1.140 as against 1.206 for the previous year.
or a reduction of .006.

Although we have had buckeye Spar 52 with some of its branches to open up the Alger country, it has been a continual fight during the life of this camp to conserve wood near tracks for wagon hauls, and we have extended our hauling to long distances on snow hauls, and this is still the case. At this writing we are hauling from Section 22-46-21, a distance of 23½ miles, and the hauling for the summer of 1912 will exhaust every stick of wood available for wagon hauls.

**ALUMINUM FOOD JOB**

In the early years of Alger operations, our work was confined entirely to S. I. stumpsage, but later we acquired about 9000 cords of cordwood stumpsage from farmers and took on certain descriptions of U. F. Lands. The latter were very lean in cordwood, but carried considerable amounts of various kinds of log timber, which we have been able to operate and take care of pretty thoroughly to date. We have produced during the year as follows:

- Saw Logs (Pr. B.M.L.) 69775
- Stulls (Pieces) 751
- T. & I. Sats " 1505
- Ferts " 1386
- Ties " 767
- Bark (Cords) 275

Of the above, all is on banks ready to sell and ship during the summer of 1912, except 207 cords of bark already shipped.

<table>
<thead>
<tr>
<th>WOODS FOUND CORING STUMPAGE SURFACE</th>
<th>Mathews</th>
<th>Lifetone</th>
<th>Liter</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory Dec. 1st, 1910</td>
<td>21735</td>
<td>27775</td>
<td>57710</td>
<td>107220</td>
</tr>
<tr>
<td>Transferred during 1911</td>
<td>11705</td>
<td>44191</td>
<td>64894</td>
<td>127090</td>
</tr>
<tr>
<td>Cut during the year 1911</td>
<td>2304</td>
<td>11899</td>
<td>17093</td>
<td>31307</td>
</tr>
<tr>
<td>Total</td>
<td>26042</td>
<td>45982</td>
<td>25587</td>
<td>97711</td>
</tr>
<tr>
<td>Shipped during year 1911</td>
<td>7917</td>
<td>11429</td>
<td>19346</td>
<td>38682</td>
</tr>
<tr>
<td>Fire Loss during year 1911</td>
<td>17048</td>
<td>7391</td>
<td>4314</td>
<td>28753</td>
</tr>
<tr>
<td>Inventory Dec. 1st, 1911</td>
<td>10548</td>
<td>72681</td>
<td>49614</td>
<td>92504</td>
</tr>
</tbody>
</table>

It will be noted from the above that we cut 49420 cords less than in the previous year, and shipped 27125 less than in 1910, and that on December 1st, 1911, we had on hand 4629 cords less than a year before that date.

**ALUMINUM FOOD JOB**

Refer to Chart "C3".

December 1st, 1911, closes the 11th year in the history of this camp.

- We commenced the year with 56792 cords.
- We cut during the year 6815 cords.
- We shipped during the year 49697 cords.
- Total Balance on hand Dec. 1st, 1911 20580 cords.
COALWOOD CHOPPING.
The average number of choppers has been 24 as against 77 for the previous year, and they have cut 49.2 cords per man per month, as compared with 44.9 for the previous year. Reference to Plat "C" will show that we have made some inroad on the standing timber in Sections 1, 2, and 3, which is all of the timber which is left of the original Coalwood Tract, except that shown in green North of the divide, and which will have to come out over the South Shore Railroad, and for which no provision has as yet been made. We have been paying taxes on these lands for many years, and it is very desirable that we find an outlet for the timber tributary to the D. S. S. & A. Railway and relieve ourselves of this burden.

COALWOOD TRADING.
Although we had a good deal of railroad to depreciate, we shipped and loaded nearly 40,000 cords at a cost of .015 less than for the previous year. We should have done considerably better than this except that we were obliged to construct Crusoee Spur extending onto Sections 2 and 3, on a very hilly country, and at considerable expense, to secure a comparatively small amount of wood, but the topography was such that we could not get it otherwise without being very hard on our teams. As has been previously stated, Coalwood District has been the source of about two-thirds of our annual fuel supply for the Marquette Furnace, and considering it's sandy soil and generally good topography, we have always made good costs, and kept up uniform shipments during the summer, but as will be seen by reference to the plat, this District is almost exhausted, and we must have other territory to take it's place within a very short time, or the Marquette Furnace will be crippled as in the case of the Gladstone Furnace. My Annual Reports and special reports extending over a series of years have kept you fully informed of the rate at which we were cutting over the territory assigned to us, and I wish to remind you again of the serious importance that lands be turned over to us in the Immediate Future, else we shall find ourselves in a very embarrassing situation, which will cost a great deal of money to correct.

COALWOOD EDITED FOR

Then you assigned to us a row of sections on the East end of the Coalwood Tract, provided that we should operate the timber other than cordwood. This had been done almost to completion. Production and shipments follow.

<table>
<thead>
<tr>
<th>Product</th>
<th>Production</th>
<th>Shipments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saw Logs</td>
<td>419268</td>
<td>181756</td>
</tr>
<tr>
<td>Tiea</td>
<td>2127</td>
<td>2337</td>
</tr>
<tr>
<td>Bark</td>
<td>72</td>
<td>74</td>
</tr>
</tbody>
</table>

(6)
A considerable portion of the logs made were pine from Section 6-45-19. There still remains some hemlock on Section 20-46-19 which will be cleaned up during the coming summer.

RHYMING WOOD JOB

Refer to Plats "EM".

December 31st, 1911 closed the 10th year in the history of this camp.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>We commenced the year with</td>
<td>78522 cords</td>
</tr>
<tr>
<td>We cut during the year</td>
<td>3699</td>
</tr>
<tr>
<td>Total</td>
<td>82212 cords</td>
</tr>
<tr>
<td>We shipped during the year</td>
<td>81612</td>
</tr>
<tr>
<td>Fire Loss during 1911</td>
<td>6100</td>
</tr>
<tr>
<td>Balance on hand Dec. 31st, 1911</td>
<td>1700 cords</td>
</tr>
</tbody>
</table>

NEARBY COUNTRY

The average number of choppers was 45 as against 64 for 1910, and they cut 2619 per man per month as against 481 for the previous year. It will be noted that we cut less than 4000 cords of wood, mostly on Section 20-46-22, and that our stock of wood for the territory, considering the loss of 1700 cords by fire, is reduced nearly 20,000 cords. Considering the stock on hand last year, we were not warranted in cutting more and exposing it to fire and having it lost, as we now stand, this territory is in better shape than any other in the business. Reference to the plat will show that all of the timber has been cut in the Northeast portion of the Township, with the exception of some small softwood areas, most of which are now being cut, and it is our plan to ship all of the wood in this portion this winter to enable us to withdraw the steel from that part of Diering Spar, and have it for use in our Northwest Extension, where we have conducted an exhaustive survey during the present winter, which will be made the subject of a special report.

NEARBY TOWNSHIP

As shown by the plat, the Rarely District extends over 7 miles east to west, and 4 miles north to south, and presents a varied topography with much swamp. In the course of time small lots of wood are left when either wagon or sleigh hauls change with the season, and under the pressure of supplying the Marquette Furnace, it is not always possible to clean up these blocks just when it should be done, so that for the past two years, we have had a great deal of this picking up besides a lot of wood made on softwood jobs and difficult to get out of the swamps. All of these facts have contributed to high costs in this district of late years. As previously stated, the Rarely and Mathews Jobs are the only ones where costs have increased over 1910, the others all showing a slight decrease. We shipped about 21000 cords of wood from this district at a cost of 1.61 as compared with 1.151 for 1910, or an increase of .057.
With the Coalwood District nearing its end, we must increase our shipments from the Rumely District, and with this in view, have constructed the Diebling Logging Railway, and purchased a locomotive to enter a country where we could not afford to build high-class grades. All of this scheme has been presented to you in special reports, and need not be fully reported here.

**MAINLY SOFTWOOD JOB**

The three Softwood Jobs which have been designated as Rumely, Rumely-Diebling, and Rumely-Dorsey, have now been merged into one account called Rumely Logging Job, and will hereafter be handled in this form. At the beginning of the year, we had at various points in this district about 2,700,000 feet of logs, with other products, all of which is reported monthly to your office, and it seems unnecessary to incorporate all of these details in a report of this kind. Most of these logs were homestead which had been piled in the spring alongside of Diebling spur. During the summer of 1911 we availed ourselves of some of the teams which were not needed for supplying the Gladstone Furnace, and did more logging on bare ground than we have done heretofore, with the result that we cleaned up a good many softwood areas in the Rumely District at costs which were better than we have been able to make in deep snow. We produced during the year about 740,000 feet of logs, and shipped about 1,000,000 feet, with the result that in the fall our banks were well cleaned up.

On the 6th of May, 1911, we suffered a severe loss by fire, all of the details of which have gone to you in Special Reports.

As outlined last year, we have adopted and put in operation the production of mixed products by contractors, and while it was a slow process to secure contractors, we have gradually increased their number, till we have small contracts going in nearly every district. This system, while it involves close supervision, has the advantage of positive costs at rates less than it costs us to do the work, and it is working out satisfactorily. For the past two years the advance of our cordwood operations in this district has opened up comparatively small softwood areas, and in the meantime we have been steadily taking care of such areas as were left by the cordwood operations of the past, so that at this writing, we are in very good shape in this respect, and are steadily gaining ground.
December 31st, 1911 closed the 2nd year in the history of this camp.

We commenced the year with = 10,377 cords
We cut during the year = 10,724 "
We shipped during the year = 10,816 "
Total = 31,917 "
Balance on hand Dec. 31st, 1911 = 8,083 "

AU TRAIN SHOPTHING.
This job was started in the summer of 1909 for the purpose of removing the merchantable timber from that portion of the Valley of the Au Train River, which will be submerged by the raising of the water by the dam for the Water Power, which will be finally constructed. The general plan for operating this valley was outlined to you in my report for 1910, and this has in a general way been followed. It was not till the summer of 1911 that the Mining Department made a survey of the contour, and furnished us with well defined lines to limit the area to be cleared. As soon as this was done, we increased our choppers in the fall of 1911, and at this writing have very nearly cut all of the timber inside of the boundary on all of the descriptions which the Land Department has purchased and will permit us to enter upon. The average number of choppers working during the year has been 11 as against 28 for the previous year, and the number of cords cut per man per month has been 29:18 as compared with 37:7 for the previous year.

AU TRAIN SHOOTHING.
We shipped about 9,000 cords at a cost of 1.354, or .014 less than for the previous year. Reference to the plat will show that the heads for the most part have been long, and everything that we have to do in this district is expensive, owing to the general layout. This valley catches an immense amount of snow.

AU TRAIN SOFTWOOD JOB
During the summer of 1911 we constructed two dams on the Au Train River for the purpose of flooding the softwood products, and loading them with a power pull-up near the main line of the Hancock Railway. We previously figured that to handle these products in this way would be less expensive than hauling in winter by team, but with the work of constructing and operating dams, pulling out the material piece by piece, and sorting it on banks, it was necessarily tedious and expensive work. During the summer and fall we operated the low swamp country, where we could not use teams, with a gasoline skidder, and at the same time, cutting and deckling the logs on the higher elevations with teams. At this writing we are hauling and deckling alongside of Forest Lake Spur these logs which aggregate 685,000 feet, of which...
200,000 feet if very fine elm, 275,000 feet hemlock, and the balance various kinds.

A special report of the progress of the work in the Am Train, and our plans for completing it ready for the construction of the second dam, was made in Oct. 1911.

<table>
<thead>
<tr>
<th>Inventory Dec. 31st, 1910</th>
<th>Am Train</th>
<th>Densely</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cut during year 1911</td>
<td>5615</td>
<td>2638.5</td>
<td>10287</td>
</tr>
<tr>
<td>Shipped during year 1911</td>
<td>5309</td>
<td>13312</td>
<td>18621</td>
</tr>
<tr>
<td>Fire Loss in 1911</td>
<td>2000</td>
<td>1700</td>
<td>3700</td>
</tr>
</tbody>
</table>

From the above it will be noted that we only cut about 11000 cords for the year on the Manising Road, and shipped about 70000 cords, leaving only about 12 months supply on hand, and that we reduced our stocks on this line by about 60000 cords, all of which demonstrates the fact which I have repeated several times that new territory must be assigned to us at once where we can place choppers, and make wood for our coming needs.

LEANING ON A BANK JOB.

At the time of writing my annual report for 1910, the actual work of this job was drawing to completion, and all features of the work were carefully described.

With the approach of spring in 1911, negotiations with the American Hide & Leather Company, and with the Manising Paper Company were renewed, looking towards a continuance of our contract to operate the balance of the Weston Tract, but we could not get together with them on a contract price after many meetings and much discussion, and finally it was decided that we should not continue.

ALSTER-CHATHAM JOB.

This work was thoroughly described in my report for 1910, and covers the operation of the West 1/4 of the West 1/4 of Section 24-46-21 at Chatham, where this entire section was turned over to the Board of Control of the State Farm. The logs made were all shipped early in the year, and the cordwood was allowed to dry at the stump during the summer.

A contract was let for the hauling of this wood during the winter of 1910-11, at a price of 75½ per cord, with 10% reserved to guarantee the completion of the contract, and work under this contract is now going on satisfactorily.

The arrangement with the Board of Control contemplated that the timber should be removed from four forths of this section each year, and in the fall of 1911, the plant of the Manising Woodware Company was completed, and was in sore straits for timber, and we consented to allow them to enter upon the East 1/4 of the West 1/4 of this section and remove the logs. At the same time, we placed choppers to follow
up the logging contractor, and have made some progress, but have not forced this on account of the deep snow which entails a loss of some timber covered up. But we shall make a special effort to secure choppers when the snow goes off, and take care of the balance of the cordwood stamapce.

Carp Dam Site.
Early in the fall of 1911, we took a contract from the Mining Department to clear the area to be submerged by the construction of the Carp Dam, and at the same time, recover the merchantable timber. This area comprised about 70 acres covered for the most part by second growth timber, and a tangle of brush and driftwood. The mining Department wished a very thorough job of clearing done, and this necessitated a great deal of labor, but in the end we left the ground very clean and entirely acceptable to them. By special reports show the quantity and disposition of the merchantable products.

Notable Wood.
For a few years following the starting of the Marquette furnace, we obtained a good deal of wood from farmers on the Lumising Line, amounting first to about 12,000 cords per year. This wood came entirely from farmers who had bought timbered Company lands in the Chatham and Maynuck District. The amount of wood from this source gradually decreased as these farmers cleared up their land, till finally it has come to play a very small part in our business. We have always predicted that as other stamapce became more scarce, the shipment of farmers wood would increase, but this has not worked out to any extent, and we have only received from farmers during the past three years, as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Cords</th>
</tr>
</thead>
<tbody>
<tr>
<td>1909</td>
<td>2,256</td>
</tr>
<tr>
<td>1910</td>
<td>1,854</td>
</tr>
<tr>
<td>1911</td>
<td>1,406</td>
</tr>
</tbody>
</table>

There is some indication that such shipments are increasing on the Rapid River Branch of the Soo Line, and we are doing all possible to encourage it.

Mining Timber.
Under normal conditions, the mines make up their requirements in mining timber for the year about August, to give the shippers an opportunity to lay their plans for the season. Of late years, they have divided their requirements between us and Thomas Connors, of Chicago, and when the requirements are made up as to quantities and dimension, we usually meet with him at the Mining Department office, and mutually agree on the division, depending on the character of timber which each can best supply, with the result that about one-half of the requirements are assigned to each party. For the past two years, the needs of the mines have been greatly reduced by the curtailment of their operations, and the quantities which we have supplied for
The past three years are as follows:

- **Stulls (Pieces)**: 220160, 22907, 230929
- **Nine Poles (L'n.Ft.):** 200196, 470140, 127305
- **9-ft Lagging (Codra):** 1965, 154, 1134
- **7-ft Lagging (Pieces):** 26992, 38355, 108713
- **8-ft Lagging:** 10772, 72863

**PROPOSED EXCHANGE OF STUMPSAGE WITH CHICAGO LUMBERING COMPANY.**

The Chicago Lumbering Company, of Manistique approached us in 1908 to exchange their owning north of the D. J. S. & A. Ry., amounting to about 25000 acres, for lands owned by us tributary to Manistique, and this question was taken up under your instructions by Mr. Everard and the writer in two meetings held in Manistique. Careful reports were made of these negotiations, accompanied by maps, and submitted for your consideration, but after considering the effect of such a transaction on the Manistique Sawmill, the Manistique Paper Mill, the Railroad, and ourselves, you decided to decline the offer, and the Chicago Lumbering Company were so notified.

**EXCHANGED TIMBER OR CORDWOOD STUMPSAGE FROM MANISTIQUE RIVER, A RUN COMPANY.**

For several years negotiations have been under way looking towards the purchase by us of cordwood stumpsage from the Northwestern Cooperage & Lumber Company, from lands on which they have cut or will cut the hardwood logs. Such an arrangement would be most logical and desirable for us, if the material could be obtained under reasonable terms, but meetings have been held at intervals with Mr. Bushong on this subject nearly every year, and during the past year, special effort has been made to get together with him as to prices and terms without result to date. Mr. Bushong has about 10000 acres of such lands tributary to the Rapid River Branch, on which we have a low contract rate of freight, but he wants to include under the arrangement about 15000 acres lying east on the Soo Line, at distances of from 64 to 112 miles, where the freight rates to the Gladstone Furnace are practically prohibitive. All of these features have been fully covered by special reports, and only reference to the negotiations herein is necessary.

**KINGFISH-SDAM LANDS.**

The United Logging Company, representing the interests of several concerns, and handled by Mr. Bushong, has about 20000 acres, mostly purchased from the C. & N.W. Railway, and lying tributary to the Beaver Branch of that Road. Of this acreage, they have cut about one-half, and negotiations are in progress for securing their cordwood stumpsage, and a special report on this subject is being made.

**FIRE PROTECTION.**

The fire record which we maintained for many years for protecting our property in the woods from fire went all to pieces, when in 1909 we suffered a severe loss of
which is contagious, but responds to treatment of a veterinarian. The characteristics of cases differ greatly. By disinfecting our barns, and assembling the afflicted horses in a hospital stable, we have done much to check the disease, but cases occur frequently where not expected.

**OPERATING BY CONTRACT.**

As planned a year ago, we have almost discontinued the making of piecstuff and skidding and hauling it with our own teams, but have gradually increased the number of small contractors who make, skid and deliver on hand the material at stated prices, and under this system, we are gradually adding contractors, and producing a good deal of material at positive costs. Furthermore, we have contractors hauling cordwood from four different places at 70¢ and 75¢ per cord, which is much less than we can do it for.

**ASSIGNMENTS OF TIMBER.**

While this question has been thoroughly covered by special reports, and under each job in this report, I feel that I ought further to emphasize the importance that new assignments of timber be made both on the Kunsing and Soo Lines, to enable us to cut and dry wood for the coming year, and I trust that you will fully appreciate the situation.

Yours truly,

TH. Rader
Manager.

TH. Rader,
Marquette, Michigan,
February 23th, 1912.