## SHRINKAGE IN WEIGHT OF KAURI-GUM.

The question of moisture contained in kauri-gum, and the consequent shrinkage in weight, is one

concerning which considerable difference of opinion exists.

Gum as bought on the fields is liable to varying shrinkages according to the condition in which it is marketed. This shrinkage is easily tested by air-drying the gum and comparing the weights before and after drying. In the case of some gums, however, no matter how well they may be dried, there is an almost continual loss of weight, and it is this class of gum that I refer to. Samples of different grades were eased up in the store at Auckland and subsequently tested for shrinkage. The following tabulation shows the result of these tests. Each sample was well air-dried before being eased up.

| Grade.      | Dates of Weighings. | Net Weights.                | Percentage of Loss at Last Weighing. | Remarks.  |
|-------------|---------------------|-----------------------------|--------------------------------------|---|
|             |                     | Cwt, gr. lb.                |                                      |   |
| Swamp chips | 7/3/1916            | 1 3 16                      |                                      | It will be noticed that during the firs   |
|             | 3/8/1917            | t 3 H                       |                                      | seventeen months there was a loss of 5 lb   |
|             | 19/8/1919           | 1 3 8                       | 3.7                                  | and during the next twelve months the loss was 3 lb., making a total shrinkage of 3.7 per cent. for the whole period.                                     |
| Swamp 3     | 30/3/1915           | 1 - 2 - 15                  |                                      | This sample was weighed once only and   |
| .,,,        | 19/8/1919           | 1  0  22                    | 26.7                                 | showed a loss of 49 lb. in about fou years and a half, or 26.7 per cent.  |
| Swamp nuts  | 7/3/1916            | $1 - 2 - 13\frac{3}{4}$     | · ·                                  | This grade was also weighed once only, the  |
|             | 19/8/1919           | 1 1 27                      | 8.1                                  | loss being 14 <sup>3</sup> lb., or 8·1 per cent. in three years and a half.   |
| Swamp 1     | 30/3/1915           | 1 3 13                      |                                      | During the first two years and a half this  |
|             | 3/8/1917            | $1 - 2 \cdot 20\frac{1}{2}$ |                                      | sample lost 201 lb., and during the nex   |
|             | 19/8/1919           | $1  2  5\frac{3}{4}$        | 16.8                                 | two years lost another 143 lb., a total loss of 16.8 per cent. for the period.  |
| Black nuts  | 7/3/1916            | 2 - 0 - 2                   |                                      | For the first seventeen months a loss o   |
|             | 3/8/1917            | $1 - 3 - 24\frac{1}{3}$     |                                      | 5½ lb. was shown, whilst for the next two   |
|             | 19/8/1919           | 1 3 23                      | 3.1                                  | years the loss was only 1½ lb., making a total shrinkage of 3:1 per cent. for the three years and a half.   |
| Black chips | 7/3/1916            | 1 - 2 - 20                  |                                      | During the three years and a half between   |
|             | 19/8/1919           | i 2 13                      | 3.7                                  | weighings this grade lost 7 lb. weight, o 3.7 per cent. It is interesting to not that the loss on these black chips and or the swamp chips was identical. |

## FRENCH MISSION.

When the French Mission was in Auckland opportunity was taken to invite the commercial representatives of the Mission to visit the Government kauri-gum store, and a full inspection was made of the stocks of gum and of Dr. Maclaurin's salt vacuum process for cleaning kauri-gum. The representatives of the Mission were very much interested in the work of this Department and in the Government operations in connection with the industry. Samples of the various commercial grades of gum were despatched to France through the High Commissioner, and we have since been notified of their safe arrival by letter from General Pau.

## NEW LEGISLATION.

It is suggested during the present session of Parliament to make certain amendments to the Kaurigum Industry Act, dealing principally with the issue of gum-brokers' and gum-diggers' licenses, and the extension of leases granted under section 3 of the Amendment Act of 1915. Full particulars of these have already been submitted to you.

The license fees are proposed to be altered as follows: In respect of every special license the fee shall be 5s., as at present; in respect of every ordinary license the fee shall be £5; gum-buyer's license, £1; and gum-broker's license, £5. It is proposed that a gum-broker's license shall authorize the holder thereof, acting as the agent of the purchaser or the seller, or both, to buy and sell kauri-gum.

## OPERATIONS OF THE DEPARTMENT.

In another part of this report it is stated that probably £25,000 has been expended by private individuals and companies in the investigation of the kauri-peat-oil industry. I think that I am well within the mark in stating that probably another £25,000 has been expended in connection with gum producing and cleaning devices; but it was not until this Department was set up in 1914 that the Government showed any practical sympathy with such matters or with the kauri-gum industry generally. In spite of anything that may be said to the contrary by men in the trade in Auckland, the work of the Department has been highly beneficial to the industry and the workers engaged in it; and although the Department owes its existence in a measure to the exigencies of circumstances arising out of the war, it should be remembered that it was one of the recommendations of t¹e Royal Commission which reported on the kauri-gum industry in June, 1914, that a special Department should be set up to take charge of the industry. Whatever good work may have been done in the past, now that the war is over and conditions are getting back to normal there is great scope for the Department extending its operations with benefit to the State and to the large body of men supported by the industry.

I have, &c., R. P. GREVILLE,

The Hon, the Minister of Lands, Wellington.

Kauri-gum Superintendent.