H.—23.

```
11.20 per cent, of sp. gr. .820
Fine lamp oil
                                    37.75
Inferior lamp oil ...
                                                                ·853
                             . . .
                                                          ••
Lubricating oil
                                    25 69
                             •••
                                    16:00
Parafine ...
Bituminous residue
                                     9.36
                                  100
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By repeated rectifications, this oil would probably yield 20 per cent. of lamp oil adapted for consumption in common kerosene lamps. A small sample of oil from the same district had specific gravity 866, and gave, when twice rectified, 10 per cent of lamp oil of specific gravity 819, or at proof, 40°.

PETROLEUM OIL.

Waipawa River, Poverty Bay, Province of Auckland.

STEATITE.

Collingwood, Nelson. Occurs in a large mass or dyke in the Parapara Valley.

MARBLE.

Collingwood, Nelson. Forms a large part of a mountain range, and could be quarried and shipped with facility in blocks of any size.

Dr. Hector, Colonial Museum.

TAN BARKS, NATIVE TO NEW ZEALAND.

Bark of the Towhai, from which an extract is obtained.

Timber of the Towhai.

Two samples of Extract of Hinau.

The Hinau Elæocarpus dentatus is a large forest tree, abundantly diffused throughout most parts of New Zealand. The bark has been successfully used in tanning operations. The natives also use it in producing the beautiful black dye for their flax work, for which purpose the bark is first bruised and boiled for a short time. When cold, the flax, if put into the mixture, where it is left for two days, after which it is taken out and steeped thoroughly for two days in red swamp mud, rich in peroxide of iron, when it is removed and dried in the sun. The *Hinau* can be used in the manufacture of ink, by dissolving a small quantity of the extract in water, and adding a little rust of iron. As it contains neither corrosive acid nor gum, the pen is neither injured nor clogged. The extract of *Hinau* can also be used instead of logwood.

The extract of Towhai is much more astringent than that of Hinau, and needs only to be introduced

to be accepted by tanners.

Wood of Fuchsia excorticata, native name Kotukutuku; percentage of tannin, 5:3.

Bark of Eugenia maire, native name Whawhako; percentage of tannin, 16.7. Bark of Elæocarpus hookerianus, native name Pokako; percentage of tannin, 9.8.

Bark of Corvaria ruscifolia, native name, Tutu; percentage of tannin, 16.8.

Bark of Knightia excelsa, native name, Rewarewa; percentage of tannin, 2.7.

Bark of Elæogrpus dentatus, native name Kiri-Hinau; percentage of tannin, 21.8.

Bark of Weinmannia racemosa, native name Tawheri; percentage of tannin, 12.7.

Bark of Myrsine urvillei, native name Mapau; percentage of tannin, 14.

Bark of Phyllocladus trichomanoides, native name Kiri-Toa-Toa; percentage of tannin, 23 2.

Bark of Hoheria populnea, var. augustifolia.

Hirneola auricula-Judæ, Ear Fungus; exported largely to China by Chinese emigrants. Leaves of Celmisia coriacea, native name Tikapu; hills of South Island.

PHORMIUM TENAX, OR NEW ZEALAND FLAX, RAW AND MANUFACTURED.

Bevan and Sons, Wellington.-Assortment of Cords and Twines. Manufactured from Nativedressed Fibre by Exhibitors.

Kinross and Company, Hawke's Bay.-Nine exhibits of Cordage and Twines, made from Maoridressed Fibre.

Grant and Company, Otago.—Assortment of Cordage, Manufactured by Exhibitors.

Auckland Patent Steam Rope Company, Auckland :-

1 coil 6 inch 4 strand White Rope. 6 " 4 Oiled 2 coils 5 inch 4 strand Oiled Rope. $\mathbf{2}$ 4 4 " " ,, 31,, ,, 4 ,, ,, ,, $ar{f 2}$,, " ,,

Canterbury Flax Association, Christchurch, Canterbury .-- Assortment of Cordage, tarred and 7 exhibits.

T. Lennon, Christchurch, Canterbury.—Assortment of Cordage, Ropes, and Twines. Manufactured by Exhibitor.