applied a heavy dressing of fine shell how it would compare with a dressing of ground carbonate of lime. How much shell would I need to apply to equal a 2-ton dressing of carbonate of lime? Is burnt shell as strong as ordinary burnt rock lime?

## The Fields Division:

As shells contain a very high percentage of carbonate of lime, when burnt they produce as high a percentage of calcium oxide (burnt lime) as the burnt rock of high grade. So, also, when ground to a powder there is equally as much powdered carbonate of lime as when rock of high grade is crushed. Thus 2 tons of carbonate of lime produced from high-grade rock is equivalent to 2 tons of ground shells. As to whether or not the fine shell you intend to use from the beach is serviceable for liming land depends upon its fineness. If the shell is as fine as the coarse sand itself it would be serviceable; otherwise it would become soluble very slowly, and hence would not be suitable, except perhaps under very sour soil conditions.

#### RAISING CUPRESSUS MACROCARPA, ETC., FROM SEED.

# "Subscriber," Dannevirke:-

Will you kindly inform me as to the correct method of starting *macrocarpa* seed, also regarding care of young seedlings, as I find that a large proportion of them disappear after starting?

# The Horticulture Division:-

The seed-cones of *Cupressus macrocarpa*, *Pinus insignis*, &c., may be gathered at any season, and, if spread out on a sheet during bright sunshine and kept free from damp, most of the cones will open sufficiently to release the seeds in the space of a few weeks. The ground intended for seed-beds should be deeply dug and worked to a fine tilth. Fine netting is needed to prevent birds picking off the seedlings as they germinate, and the beds should be covered with scrim where there is a strong sun. The seed should be sown in the early spring, and does not require soaking in hot water to hasten germination. As to the depth the seed should be planted, a safe guide is to cover seed to a depth of about double its diameter.

#### CASTRATING COLTS.

# "INQUIRER," Waimate:-

Is it necessary in castrating colts to open the inner skin or covering of the testicle before severing with the emasculator ?

# The Live-stock Division:—

The usual way, in ordinary operations, is simply to expose the testicle, place the emasculator on, and then remove. There is no need to cut the inner skin, though there would be no harm at all in doing this.

#### MOVING A HEDGE.

# "Interested," Oturoa:-

I have some *Cupressus Lawsoniana* trees and elaeagnus and barberry hedging which have been planted three years and are growing strong. I now find it necessary to remove them and plant elsewhere. Would you advise me to "wrench" the trees, and if so, how, and at what period of the year?

### The Horticulture Division:—

Plants comprising a three-year-old hedge of *Cupressus Lawsoniana* should be "wrenched" before shifting, otherwise they would probably die. Wrenching is done in the early autumn, and is most successful when followed shortly by the autumn rains. The work consists of cutting the roots on all sides of the plant with a sharp spade and partially lifting. Although not so necessary, the same process had better be carried out in respect to your elaeagnus and barberry. If time will not allow of this, cut the plants hard back when shifting.