

Remedies and Treatments.—These three diseases are more easily prevented than cured. The best preventives are the following:

1o. Only sound seed should be used. In case of doubt, it should be disinfected by a 45 minute immersion in a bath of formaline reduced to 1-200.

2o. Beans should not be grown two consecutive years on the same ground and we should avoid planting them in places partly shaded.

3o. Never cultivate the soil or slightly touch the foliage of bean plants when damp.

4o. Pull out and burn all diseased plants.

5o. A first spraying should be made with Bordeaux mixture before the blossom, and a second, 18 to 24 days after, making use of the formula 3-3-50, viz: 3 lbs of vitriol and 3 lbs of lime in 50 gallons of water (1).

These sprayings must be made in a very dry weather, when no rain is expected, with a sprayer. There are several kinds of spraying machines with insecticides and fungicides. Fig. 11 shows one of the most recommendable sprayers for potatoes, beans, etc., against diseases and insects, on average areas. It is fitted with a gauge so that the operator may spray at an even pressure. Nozzles can be adjusted at the required distance, upon a cross iron rod solidly fixed to the frame work of the pump.

Grey worms.—About ten different species are known of in the Province of Quebec. During the day, they hid under ground, one inch deep. They come out at night, looking for food, cut the young stems of plants and often work great havoc.

Destruction.—After sunset, spread around the plants, bran poisoned in the following manner: make a dry mixture of 20 lbs of bran with $\frac{1}{2}$ (one-half) lb. of Paris green. Dissolve one quart of molasses into 2 or 3 gallons of water, pour this sweetened water on poisoned bran and mix thoroughly.

Fresh cut clover could also be immersed for a couple of hours in a solution of Paris green (1 ounce in 1 gallon of water), and spread here and there between the rows.

Another excellent means consists in cleaning, after the crop, all bean wastes



FIG. 10.—Rust.

and remains from the surface of the soil, and in plowing deeply in the fall so as to occasion the killing of eggs and young worms

For a small garden.—One teaspoonful of Paris green; one tablespoonful of molasses; sufficient water and bran to make a consistent and homogeneous paste.

Shorts may also be used instead of bran.

(1) Ask the Publications Service, Quebec Department of Agriculture, for bulletin No. 37, on Sprayings.