

The potatoes should not be placed over or within three feet of the generator, and they should be disposed in such a manner that the gas may easily have access to them on all sides. They should be in sacks, or crates, or shallow slat-work bins not more than one foot deep. The amount of potatoes to be disinfected must not be too small in proportion to the size of the disinfecting chamber, as they are liable to be injured in that case, brown sunken spots making their appearance around the eyes. If the tubers have commenced to sprout at the time of fumigation, they are much more likely to be injured by the gas. The potatoes should be kept in the disinfecting chamber for twenty-four to forty-eight hours before the doors are opened and the temperature during this time inside the chamber should not be allowed to fall below 50°F. The tubers should be dry when they are disinfected. The dishes used should have wide bottoms, and should be sufficiently deep to prevent the liquid from bubbling over when the gas is given off. Tin or galvanized iron dishes can be used. Three pints of commercial formalin and 23 oz. of potassium permanganate should be used for 167 bushels of potatoes per 1000 cubic feet of space. The permanganate should be spread in a thin layer on the bottom of the pan, the formalin poured over it and stirred quickly, and then the door should be tightly closed.

Carman No. 3 and Irish Cobbler are said to have some power of resistance to Scab.

Remedies:—

1. Use only clean-skinned potatoes for seed and disinfect them to make sure that any germs adhering to the skin are killed.
2. Disinfect annually all cellars used for storing potatoes. Disinfect all sacks, barrels, etc., before use, unless these are new. Disinfect all implements used in an infected field.
3. Plant potatoes only in land that has not had a crop of potatoes or other crop liable to the disease during the previous five years.
4. Attend carefully to the manures used, and boil all scabby potatoes before feeding to live stock.

II. POWDERY SCAB.

This disease occurs in the Maritime Provinces of Canada, and, like the previous disease, is also caused by a minute organism known as *Spongospora subterranea* Lag. parasitic on the skin of the tuber, and in rare cases also on the roots. The pustules produced on the tuber are more uniform in size and shape than in the case of Common Scab, and are usually darker in colour. The skin of the tuber is slightly raised around the pustules and the central part of the wart or pustule is made up of a powder, which, under the microscope is seen to consist of spore-balls. These spore-balls readily distinguish it from all other potato diseases.