## THE ASPARAGUS RUST (PUCCINIA ASPARAGI, D. C.)

With stealthy pace,
With Tarquin's strides, towards his design
Moves like a ghost.
—SHAKESPEARE.

BOUT four years ago a stranger ap-

peared on the Atlantic coast of this continent manifesting an unusually marked partiality for aspar-Clad with invisibility he entered gardens, without arousing resistance, and proceeded quite leisurely to make himself at home while he feasted at the expense of the owner's asparagus beds. The precise date of his arrival, by what steamer he came, the port at which he landed are all unknown. Unheralded, unseen, he went from garden to garden, leaving all untouched save his favorite asparagus. At length his voracity made such havoc with the asparagus beds of some of the cultivators of this valuable esculent in New Jersey that they became alarmed lest their crop should be utterly ruined. Specimens were sent to the State Experimental Station showing the work of the devouring marauder. This was in August, 1896. The station sent out circulars, setting forth the cause of the injury, to the several Experimental Stations and to the agricultural press of the country, and found that the asparagus destroyer had just been discovered to be at his work in New England, Long Island, and the State of Delaware. In 1898 he was as far west as Michigan, and in 1899 had arrived in North Dakota. It is therefore possible, even probable, that the marauder has entered Ontario and is now "with stealthy pace moving towards his dec gn," the ruin of our asparagus.

This destroyer is a parasitic fungus, named by botanists Puccinia Asparagi, one of the Rusts, a near relative of the Wheat Rust, the Puccinia Graminis, which in one form of its life cycle infests the berberry;

but unlike it the Asparagus Rust completes its life cycle solely on the asparagus. That our readers may the more readily detect the presence of this rust should it appear we give a short account of its life history.



In the autumn dark lines will be found upon the stalks quite visible to the naked eye as shewn by Fig. 2029. These lines are composed of spores of this fungus, which are analogous to the seeds of flowering plants. These are the winter or final spores, formed



Fig. 2029.

Fig. 2030.

at the end of the season, in which form the plant, the fungus, passes the winter. Botanists have named them Teleuto-



Fig. 2031.