THE SHAW SCHOOL OF BOTANY.

WILLIAM TRELEASE,
ENGELMANN PROFESSOR OF BOTANY.
H. VON SCHRENK,
INSTRUCTOR IN CRYPTOGAMIC BOTANY.
W. H. RUSH,
INSTRUCTOR IN PHANEROGAMIC BOTANY.

ST. Louis, Mo.,

189

In decayed wood of Taxodium distichum, Libocedrus decumens and Juniperus Virginiana, fungus mycelium is found constantly, colorless, with very numerous clamp connections (Fig.1). No spores have been found attached to this mycelium. In the wood of Libocedrus, large masses of spores are found (Fig.2), brown with a central body (oil globule?). These as a rule lie singly in the vessels, have a marked point at which they seem to have dropped off; many were found in chains of two or three (see Fig.). The spores are in such quantities as to suggest rapid formation. A brown mycelium is in this same wood, and appears to stand in some connection with these spores. The latter could not be made to germinate in any medium, acting in this respect like spores of Peziza tuberosa (Brefeld, Schimmelpilze, Heft 4, p. 113). In the rotted Taxodium wood, large black spores (Fig. 3) in chains are often present, looking much like Xenodochus ligniperda (Willkomm, Die mikroskopischen Feinde des Waldes).

All the spores appear to be saprophytic. A similar case seems to be the fungus in oak wood attacked by Polyporus sulphureus (see slide) mentioned by Hartig, Zusetzungserscheinungen des Holzes, p. 112, pl. 14, fig. 12; also found in the oaks about here. I have not been able to cause these to germinate.