## THE ONTARIO

## NATURAL SCIENCE BULLETIN

JOURNAL OF THE
WELLINGTON FIELD NATURALISTS' CLUB
GUELPH - ONTARIO
No. 7. 1911.

## The Myxos of Middlesex.

BY PROFESSOR JOHN DEARNESS, LONDON.

WHY should anyone be interested in the Slime-moulds? Are they of any use? In the ordinary sense of the word—No. Do they injure any useful thing? Excluding the few species of the probably allied Phytomyxineae they are not injurious to anything of economic importance.\* But if beauty is its own excuse for being, they certainly have a valid raison d'etre; and if forcing upon thoughtful minds problems that are at once unique, interesting and difficult is a mental stimulant, then they may share a claim to utility with those plants that provide satisfaction for the physical appetite.

These organisms, Myxomycetes, or Myxogasters, or Mycetozoa—Myxos will do for short—what are they anyway? Are they plants or are they animals? Some biologists say Both; others say Neither. But paradoxical as it may seem it is hardly disputed that they are animals in their vegetative stage, called the plasmodium, and plants in their reproductive stage, called usually the sporangium. The reader is probably familiar with the form and movements of the common amoeba. Let him imagine a coalescence of a swarm of amoebae—a plasmodium—rhythmically flowing hither then thither, creeping in and out among the interstices of rotting wood, decaying straw or other organic substances—selecting, engulfing, and digesting suitable food materials; spreading out when food runs low to discover pastures new, and passing a message along the lines when the discovery is made to gather in a mass at the table.

<sup>\*</sup> Usu in vita communi parum admodum sese commendant, sed in oeconomia naturae certe non spernendi. Multa insectorum genera ex eorum sporidiis unica capiunt nutrimenta. FRIES Systema Mycologicum III, p. 74.