the germs which had given flavour and odour to the water had, with their vitality retained, passed, in each case, to the milk of the cow and by their marvelous multiplication developed their peculiar effects in the warm curds and whey.

From such observations I had become so thoroughly convinced of the passage of living spores into the milk of cows from bad water and food and air, that I had determined, so soon as I could procure a suitable microscope for the purpose, to test the fact by ocular demonstration. You can easily imagine, then, with how deep a satisfaction I received the following facts from Professor James Law, of Cornell University, with permission to copy the sketches he had made for his own use, which are presented to your inspection to-day. They afford the desired proof, and their application comes directly home to us as dairymen.

On the first day of October, 1870, a man who regularly furnished the people of Ithaca with milk, left some of his goods at the house of Professor Law. It was set away for the cream to rise, which, when it came to the surface, did not appear just right; it was more adhesive than usual, and half inclined to be ropy. Others



might not have noticed any peculiarity; indeed, I have not learned that any one else observed anything unusual, though other parties were furnished from the same vessel. But under the observant eye of that distinguished Professor, such a fact could not be allowed to pass without investigation. The microscope was

brought into requisition, and here is what it revealed. The first thing that will strike your attention is this large stem of a fungus plant. Whence the spore of that plant reached the milk was a mystery that needed a solution.

The next thing to notice is the great adhesion of the milk globules. They are closely stuck together, all in a mass, and overlapping each other and apparently piled up, so as to cover the fungus stem. This is a striking characteristic of tainted milk. Then there is a large spore lying bare on the adhering globules;

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