coffee-coloured mass will be noticed, which on the insertion of a splinter of wood adheres to the point, and can be drawn rope-like for some little distance out of the cells. This is one of the most distinctive features of foul-brood prevalent in many countries, and, where present, it is considered conclusive evidence of the disease.

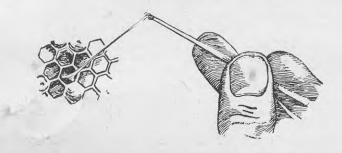


FIG. 2. SHOWING ROPY NATURE OF AMERICAN FOUL-BROOD.

[U.S.A. Bulletin 442.

Later on this glue-like substance dries up into the before-mentioned black, scale-like body. When the scale is scraped off and held to the nose a strong objectionable smell can be detected. Some beekeepers may fall into the mistake of supposing a colony to be clean when there is no objectionable odour, but the foul-brood must be in an advanced stage before this is noticeable. It is through honey being put into these cells that it becomes a source of infection, and, however little disease there may be in a colony, the honey in the hive is liable to contain the germs of disease. Uncapped diseased cells may easily pass unnoticed, especially when the comb is empty and there are no capped cells to betray its presence. To detect the disease in such a case, stand with the sun shining over the shoulder from behind and hold the comb horizontally with the top bar towards the body. The light will strike on the lower side of the cells and will show up the dried scales of disease.

## SOURCES OF INFECTION.

Foul-brood is highly infectious, and is spread chiefly by the robbing of diseased colonies, honey being the chief agency by which the disease is transmitted from colony to colony. When a diseased colony becomes too weak to defend its stores it is liable to be robbed out by bees from healthy colonies, and in this way the germs of disease are carried. The principal causes of infection may be stated as follows:

(I) Healthy colonies robbing infected colonies; (2) the acquisition of infected swarms, colonies, hives, and appliances; (3) supplying bees with honey or combs from an infected colony; (4) indiscriminately manipulating first diseased and then healthy colonies without taking proper precautions to disinfect the appliances used.

## BASIS OF TREATMENT.

Bees may be successfully treated during any period of the honey-flow, but the most desirable time is shortly after the beginning of the main flow. At this time there is little danger of robbing. In