

COMPOSITION OF SWILL MILK.

BY DR. ALBERT R. LEEDS.

The Dairy Commissioner of the State of New Jersey, under the impression that the milk supplied by cattle entirely stall-fed upon the swill and brewery grain obtained from New York hotels and breweries would afford milk of quality below the State standard, and objectionable or dangerous on other accounts, has recently submitted a sample of this milk to me for examination. The cattle were in dark, dirty and ill ventilated stables, the principal alleviation of their condition being that afforded by a great abundance of excellent spring water for drinking. At the time of collecting the sample, which represents the milk of a number of cows, the animals appeared to be all in good physical condition.

The milk was normal in color, smell and taste, with slightly acid reaction. Its specific gravity at 15° C. was 1.0309.

Instead of giving very low percentages, all its constituents were as high in amount as is usual in the milk obtained at the same season of the year (November) from dairy cattle. The composition was :

Albuminoids	3.469	per cent.
Fats	5.17	“ “
Lactose	4.427	“ “
Ash	0.749	“ “
Total	13.815	

A plate culture of from one drop, one-twentieth of a cubic centimeter, showed the presence of 4,200 colonies of bacteria after the lapse of eighteen hours, with so numerous a proportion of liquefying colonies that further counting was discontinued.

The swill fed to these cattle was accompanied by a large amount of brewers' grains, the latter indeed being the chief component of the food. There was no hay, or other feed, nor were they at any time put on pasturage.