

## MILK ANALYSIS.

The following refers to the correspondence we reprinted last month on this subject:

## THE DAIRYMEN AND THE ANALYSTS.

TO THE EDITOR OF THE EXETER AND PLYMOUTH GAZETTE.

SIR,—Your leader of to day states; “We should very much like to know the name of the large town in the West of England” respecting the *Medical Examiner's* milk story, and I hasten to gratify such laudable curiosity, the more especially as on public grounds, it is highly desirable that there should be a complete exposure of the incident referred to.

After several milk prosecutions undertaken by the Stonehouse authorities, a private meeting of the Plymouth milkmen appears to have been held, and, whether as a result of the collective deliberative wisdom of the assembly, or of individual inspiration, the fact remains that the Chairman of the meeting, a Mr. Sayer, selected a cow and a constable, had the cow *partially* milked in the presence of the constable, and filled three bottles, one of which was sent to Dr. Robert Oxland, a second to me, and the third was at first retained by the police, but subsequently analysed by Mr. Wigner.

This milk, direct from the cow, was returned by the three analysts, and justly returned as adulterated. That is adulterated in the sense of the Sale of Food and Drugs Act. It was, indeed, almost destitute of cream, and the two first analysts *not knowing its history*, stated their belief that cream had been abstracted; the third analyst, Mr. Wigner, in full possession of the facts, certified—“It has unquestionably been deprived of part of its cream by skimming, or by *abnormal milking*.”

It is well known, both to the milkman and the analyst, that the first portions of milk, technically called “fore milk,” are, practically speaking, destitute of cream, and to sell this milk as new milk is evidently fraudulent, and has justly been held so by more than one magistrate. As an example, I will cite the Dublin case, reported in *The Analyst*, August, 1877, p. 82, where one Michael Hayden, a dairy proprietor, was charged before Mr. Woodlock, the divisional police magistrate, for selling milk deprived of its cream; the defendant stated that it was “fore milk,” and that he had sold the “strippings” as cream, believing that he was allowed by law to do so. The magistrate expressed his opinion that milk should be sold whole, *i e.*, with both fore milk and strippings, and fined the defendant £10.

The difference in the amount of cream in the first and last portions of milk is thus evidently known to the trade; and the uncharitable may suppose that the object of the Plymouth milkmen in undertaking an experiment costing them two guineas, the value of over thirty gallons of milk, was to enable fraudulent and lucrative practises to be carried out with impunity by casting discredit upon analysts in general and me in particular; the charitable, that the dairymen were animated with a sudden thirst for knowledge, and desired to place the composition of their milk beyond a doubt. I of course adopt the latter hypothesis, and remain,

Yours, &c.,

A. WYNTER BLYTH.

BARNSTAPLE, *September 3rd*, 1877.

## SYNCHRONIZED CLOCKS.

MESSRS. BARBAUD & LUND, the chronometer makers, have long been known in the City for the accuracy with which their own regulators were adjusted, but it is an entirely new feature in timekeeping that they have now attempted to regulate, or, as they, perhaps, more correctly term it, synchronize, any or all of the clocks in the City of London. We have recently had an opportunity of inspecting the electrical arrangement by which they are doing this, and we must say that, not only as electrical mechanism, but as a perfect piece of apparatus, it is unique and simple. The arrangement which is supplied to the clock is of the simplest kind, and does not interfere in any way whatever with the works of the time-piece itself, and it can be applied to any clock, no matter what its size may be. The arrangement virtually consists in two small pins, which project through a narrow slit in the dial of the clock, and at regular intervals of one hour adjust the clock. An electric current is automatically sent from the regulator in Messrs.

Barraud & Lund's establishment, which passes through an electric magnet, and causes these two pins to approach each other, and for a second nip the minute hand of the clock between them, so that, whether the clock has gained or lost time during the hour, it is certain at the hour to be set right. The mechanism can, if necessary, be removed at any time, without interfering with the clock itself. At present there are some five or six different circuits at work in the City, each one taking from eight to fifteen clocks. Nearly all the banks in Lombard Street and the neighbourhood have adopted it, and many firms at a greater distance. Perhaps among the greatest advantages of this system is its purely automatic character.

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