Notes from the Reports of Public Analysts.

The Editor would be glad to receive the Annual or other Reports of Public Analysts containing matter of special interest to the Society. Notes made from such Reports, would be submitted to the Publication Committee.

CITY AND COUNTY OF KINGSTON-UPON-HULL.

Annual Report of the Public Analyst and Bacteriologist for the Year 1929.

The total number of samples examined was 1398, of which 1213 were analysed under the Food and Drugs Act, 739 being official samples, 474 informal samples, and 185 miscellaneous samples. The total number of adulterated samples was 55, while 16 were of suspicious character.

MILK.—Of the 605 samples examined, 560 were genuine. The reductase test was applied to 37 other samples, and 12 of these gave unsatisfactory results.

"Dirt" in Milk.—Of a total of 605 samples of milk received from the Sampling Officers under the Adulteration Acts, 14 contained unwarranted amounts of extraneous matters (dirt), a percentage of 2·3. The corresponding figure for the year 1928 was 1·0, the lowest recorded for some years. Seven of these 14 dirty samples were one-pint samples purchased and divided in the usual way and they were found to contain appreciable amounts of dirt. The remaining 7 milks were the unsatisfactory samples of a total of 17 milks taken specially for examination for dirt; they were three-pint samples, allowing after division one pint for the determination of any extraneous matters. These seven samples were found to contain (1) 3·7 parts dirt (sand); (2) 2·5 parts (sand); (3) 2·2 parts (partly dung); (4) 4·9 parts (mainly dung); (5) 4·5 parts (partly dung); (6) 5·4 parts (mainly dung); and (7) 6·1 parts (mainly dung) in each 100,000 parts of the milk. The vendor of (1) was cautioned; samples (2) and (3) were reported as of suspicious character; and the two vendors of the remaining four samples (Nos. 4 to 7) were each fined £2 10s. by the Court.

The methods for the determination of dirt in milk continue to be the subject of investigation by a Committee of the Society of Public Analysts. The work has been protracted by initial difficulties, but these are in a fair way to solution, and it is expected that a satisfactory method of working will be evolved. When the task of this Committee is completed it is hoped that the Government will set up a standard of cleanliness for ordinary commercial milk.

CREAM.—One sample of bottled cream contained only 24 per cent. fat, and three "tinned" creams were also low in fat-content (23 to 25 per cent.). It is not desirable that such creams should be allowed to be sold in competition with fresh cream containing practically double the amount of fat, without a declaration on the label as to composition, but in the four cases mentioned only one (a tinned Danish cream) was so labelled. Moreover, it is highly objectionable that such statements as "Pure Thick Cream" should be permitted without qualification to describe cream containing no more than 25 per cent. of fat, for the public associates *thickness* in cream with *quality*. There is to-day, however, no necessary connection in these respects.

CHEESE.—The seven samples of soft cheese, wrapped in tin-foil, contained from 39 to 44 per cent. of water, and 25·5 to 32·5 per cent. of fat. They cost from 1s. 8½d. to 3s. 9½d. per lb., as compared with 1s. to 1s. 8d. per lb. for ordinary ripened hard cheese. All the samples comply with the requirements of the Cheese Bill before Parliament, *viz.* a minimum of 45 per cent. of fat on the dry substance.

"FRENCH" COFFEE.—Three samples of so-called "French" coffee were mixtures of coffee with 35, 50 and 50 per cent. of chicory. The description "French" as applied to a mixture of coffee and chicory, appears to be common in this country, though coffee in France is not usually a mixed article. The description is generally accompanied, as in these three samples, by the words: "A Mixture of Coffee and Chicory," in smaller type than the main title "French Coffee," and it is desirable that there should be some requirement as to the size of the lettering of the whole of the descriptive matter. There was such a requirement many years ago framed (by the Commissioners of Inland Revenue) to protect the revenue.

WHITE PEPPER COLOURED WITH TURMERIC.—Three samples were found to be true white pepper (pepper corns ground after removal of the outer husk) with the addition of a yellow colouring matter (turmeric). The practice of colouring pepper in this way is very objectionable. It masks the real colour of the pepper,

making it difficult to detect on cursory examination whether decortication has been properly done, and it gives an unsightly and unnatural yellow tinge to the pepper. The practice serves no good purpose, and is just another of those unwarranted interferences with our foodstuffs (albeit in this instance a minor one and concerning no more than a condiment) which it is difficult, in the present state of the law, to protest against successfully.

SUNLIGHT (ULTRA-VIOLET RAYS) OBSERVATIONS.—Records of ultra-violet light strength (units of fading of standard acetone and methylene blue solution) have been taken throughout the year at the central and suburban sites described in previous reports. Little variation is shown in the figures for these two stations, and observations at the suburban station were discontinued from the end of the year. In the following table the maximum and minimum daily averages recorded by various towns are given:

RECORDS OF ULTRA-VIOLET LIGHT.

Place.	Units of fading. Daily average throughout the months mentioned. Maximum.	Minimum.
Hull (Central)	5·8 (June)	0·1 (Jan.)
Hull (Suburban)	6·0 (June)	0·1 (Jan.)
Cardiff (Central)	5·1 (June)	0·5 (Dec.)
Cardiff (Suburban)	5·0 (June)	0·5 (Dec.)
Doncaster	6·2 (Aug.)	0·3 (Dec.)
Lowestoft	11·7 (June)	1·0 (Jan.)
London (Kingsway)	3·8 (July)	0·3 (Dec.)
London (Hampstead)	5·4 (July)	0·5 (Jan.)
Rochdale	1·0 (July)	0·03 (Dec.)
Stirling (Central)	4·6 (June)	0·4 (Dec.)
Stirling (Suburban)	4·9 (June)	0·4 (Dec.)

ARNOLD R. TANKARD.

JHARIA MINES BOARD OF HEALTH.

ANNUAL REPORT OF THE PUBLIC ANALYST FOR THE YEAR 1929.

FOUR hundred and eighty-five samples of foods, disinfectants and waters received from the Mining Settlements of the province of Bihar and Orissa were examined during the year.

GHEE.—Of 144 samples analysed, 61 were found adulterated or below the standard prescribed by the Bihar and Orissa Food Adulteration Act. The usual adulterant is the imported vegetable product sold as "vegetable ghee." In two cases the vendor professed to sell pure cow ghee, but each sample consisted wholly of mowah oil, the indigenous product largely used by the labouring population.

MUSTARD OIL.—This is extensively used in cooking by the labouring class. Of 173 samples analysed, 43 were found to be adulterated or below the standard. The usual adulterants found are linseed oil, niger seed oil (*Guizotia abyssinica*) and sesame oil.

TEA.—Of 13 samples analysed, 12 were found to be adulterated or not to conform to the prescribed standard. The principal fraudulent practices are the mixing of foreign dusts with tea dust and the sale of exhausted tea leaves.

MILK.—Of 40 samples analysed, 13 were found to contain added water.

B. K. MANDAL.

DHANBAN, BIHAR AND ORISSA.