fallacious and unreliable are the analyses of Somerset House, and it may be hoped that the condemnation of their methods and the repudiation of their results may induce the authorities at the Government Laboratory to make the alterations necessary to entitle their analyses to respect or acceptance. Dr. Whiteside Hime testified to certain alleged experiments by himself which, he said, showed the copper was excreted very rapidly, and therefore could have no cumulative effect, and also that the bulk of the salt of copper was retained in the husk or skin of the pea. Being asked the details of his tests, he said he treated the excreta with water and alcohol and other solvents, a method so manifestly ridiculous that, being further pressed, he absolutely declined to state any particulars of his processes. . . . Of his evidence, the learned judge said it had no force, as Dr. Hime declined to give details. Dr. Burney Yeo, who was called as an authority by reason of his work on "Food in Health and Disease," being confronted with his book, admitted that copper as a colouring ingredient or adulteration or in any other way was not mentioned in it, and eventually, as I have before indicated, the appeal was dismissed and the conviction affirmed, with costs. It is but necessary, to indicate the care and regard to detail shown in the case, to state that no fewer than sixteen separate books were handed to the learned judge on behalf of the conviction, the whole of which he retained, and many of which he referred to in the course of his judgment.

For the defence, some German works and one American authority were referred to, and one work, Dr. Tschirch's treatise on "Copper," was by both sides accepted as authoritative. This learned author, who has made copper and the salts of copper the subjects of exhaustive study, would permit, without approving, the use of salts of copper for colouring or fixing the colour in proportions strictly limited and less than in the present case. According to him, the proportion necessary to preserve the colour in peas is 18 parts in 1,000,000, while in the case of the peas in question there were present 114 parts in 1,000,000. Dr. Tschirch also suggests as an absolute maximum, 1 part in 10,000, while in the present case the proportion was 1 in 8,750. It must not, in this connection, be forgotten that Drs. Stevenson and Luff, authorities equally deserving of respect, would absolutely forbid the use of copper or any salt of it as an addition to articles of food, and the reason of this is more apparent when it is remembered that the use of the salts of copper enables defective and worthless peas to assume an appearance of freshness which, however pleasing to the eye and so tempting to the appetite, is after all but a sham or mask to render marketable, and therefore profitable to the preserver and vendor, articles of food which otherwise would be rejected and condemned.

SLAUGHTER-HOUSE DIFFICULTIES IN RURAL DISTRICTS.*

BY

JNO. C. HEAVEN, L.R.C.P., D.P.H., etc., M.O.H.
Keynsham Rural Sanitary District.

Slaughter - Houses.— In consequence, presumably, of the statement in my annual report for 1894, that "bye-laws for the regulation of slaughter-houses would be useful," the Local Government Board, in the last quarter of 1895, wrote to your Council, asking why it was desired that the provisions of the Towns Improvement Clauses Act, 1847, with respect to slaughter-houses, should be made to apply to the parishes of Keynsham and Brislington. Your Council thereupon requested me to make a special report on the matter, and I did so as follows:—

Definition of "Slaughter-house":— Under section 4 of the Public Health Act, 1875, a "Slaughter-house includes the buildings and places commonly called slaughter-houses and knackers' yards, and any building or place used for slaughtering cattle, horses, or animals of any description for sale." At present your Council has no power to regulate or control the business carried on in such places, nor any power over such places, until they become a nuisance or injurious to health, unless section 113 Public Health Act, 1875, giving power to make bye-laws to prevent or diminish the noxious or injurious effects of offensive trades, could be held to sanction the passing of bye-laws for regulating slaughter-houses. Even if bye-laws for the above purpose could be made under section 113, there would still be no power to cause registration of, or to license for use, premises intended for slaughter-houses; and it is obvious that inspection to see that bye-laws were complied with would be practically impossible when slaughter-houses are not registered, and it is open to anyone to slaughter when and where he pleases, and to vary the scene of his operations as he sees fit. There is nothing at present to prevent anyone in your district from slaughtering when, where, and how he pleases. Registration of slaughter-houses is important, not only to render easier the inspection of meat intended for the food of man, with a view to the detection of that which may be diseased, unwholesome, or unfit, but also to prevent the contamination of meat prepared in such places by rendering possible the application of bye-laws with respect to proper cleanliness, ventilation, water supply, and drainage. The power to license any premises as a slaughter-house is desirable to prevent the use of such places as are structurally unfit.

Section 169 Public Health Act, 1875, enacts that "for the purpose of enabling any urban sanitary authority to regulate slaughter-houses within their district, the provisions of the Towns Improvement

* From a special report by Dr. Heaven to the Rural District Council.

Clauses Act, 1847, with respect to slaughter-houses, shall be incorporated with this Act." These incorporated provisions state :—(section 128) "The Commissioners (Urban Sanitary Authority) shall, from time to time, by bye-laws, make regulations for the licensing, registering, and inspection of the slaughter-houses and preventing cruelty therein, and for keeping the same in a cleanly and proper state, and for removing filth at least once in every twenty-four hours, and requiring them to be provided with a sufficient supply of water." A penalty of £5 may be imposed for breach of bye-laws, with a continuing penalty of 10s. for every day the breach continues after conviction. Section 129 provides that where a person is convicted before the justices for killing or dressing any cattle contrary to the provisions of the Act, or for breach of any of the bye-laws, the justices may, in addition to the penalty, suspend the person's license for any period not exceeding two months, or, in the case of a registered person, prohibit his slaughtering for a like period. There are further provisions dealing with second convictions and the use of slaughter-houses during the period for which a license is suspended or revoked, or during which slaughtering is forbidden. Section 131 gives power of entry to the authority's officers for purposes of inspection. Section 126 states that no place shall be used or occupied as a slaughter-house which was not in such use and occupation at the time of the passing of the special Act (in your case, I believe, the Public Health Act, 1875), and has so continued ever since.

There are, therefore, two classes of slaughter-houses:—

1. Those in use and occupation at the passing of the Special Act, and which have so continued ever since. These must be registered by the sanitary authority, but require no license.

2. Those not in use and occupation at the time of passing of the special Act. These slaughter-houses must not be used until they have been licensed by the sanitary authority. They must also be registered as well as licensed.

Even where these provisions of the Towns Improvement Clauses Act are in force, the sanitary authority has no control over the structural fitness of those slaughter-houses in use at the time of the passing of the special Act (Public Health Act, 1875), unless there has been a break in their usage; but they can control by bye-laws their cleanliness, ventilation, water supply, etc., and prevent cruelty therein.

Over those slaughter-houses, however, which require licensing the sanitary authority has control as regards structural fitness, and can refuse to license any old premises or new premises unless structurally they meet with the authority's approval.

With regard to this question of structural fitness, the Local Government Board, in a Memorandum

on Slaughter-houses, state that where a license is requisite the following rules as to site and structure should influence the decision of the sanitary authority upon each application for a license :—

1. The premises to be erected or to be used and occupied as a slaughter-house should not be within 100 feet of any dwelling-house, and the site should be such as to admit of free ventilation by direct communication with the external air on two sides at least of the slaughter-house.

2. Lairs for cattle in connection with the slaughter-house should not be within 100 feet of a dwelling-house.

3. The slaughter-house should not in any part be below the surface of the adjoining ground.

4. The approach to the slaughter-house should not be on an incline of more than one in four, and should not be through any dwelling-house or shop.

5. No room or loft should be constructed over the slaughter-house.

6. The slaughter-house should be provided with an adequate tank or other proper receptacle for water, so placed that the bottom shall be not less than 6 feet above the level of the floor of the slaughter-house. (This would be unnecessary in your district, where the water supply is constant, if every slaughter-house had company's water and an indian rubber hose.)

7. The slaughter-house should be provided with thorough means of ventilation.

8. The slaughter-house should be well paved with asphalt or concrete, and laid with proper slope and channel towards a gully, which should be properly trapped and covered with a grating, the bars of which should not be more than three-eighths of an inch apart. Provision for the effectual drainage of the slaughter-house should also be made.

9. The surface of the walls in the interior of the slaughter-house should be covered with hard, smooth, impervious material to a sufficient height.

10. No water closet, privy, or cesspool, should be constructed within the slaughter-house. There should be no direct communication between the slaughter-house and any stable, water closet, privy, or cesspool.

11. Every lair for cattle in connection with the slaughter-house should be properly paved, drained, and ventilated. No habitable room should be constructed over any lair.

I have quite recently re-inspected the slaughter-houses in the parishes of Keynsham and Brington.

First as to those in Keynsham Town :—These are ten in number, using the term Slaughter-house to include a "place used for slaughtering," "for sale." Not one nearly complies with the structural requirements of the Local Government Board, and, in many instances, when marked as complying with a certain requirement, this only means that I cannot say it does not do so, and

does not imply that it complies fully and satisfactorily. Only six out of the ten slaughtering places are really houses; the other four are open spaces, such as yards, and these are generally at a distance from houses. The slaughter-house occupied by A. W., of Temple Street, is filthy and, in its present condition, totally unfit for slaughtering. The ventilation is in most cases capable of considerable improvement, as are also many of the other conditions.

In Brislington Village there are two slaughter-houses, neither of which complies with the structural requirements, and both might be much improved as to ventilation and in other ways.

In both parishes the cleanliness, mode of disposal of blood, offal, manure, etc., are capable of considerable improvement.

Finally, I consider that the Towns Improvements Clauses Act, so far as it deals with slaughter-houses, should be put in force in these two parishes, because the conditions generally present in the slaughter-houses they contain are anything but satisfactory; but at present your Council has no power to interfere for the improvement of these conditions unless, and until, the houses become a nuisance to neighbours or the public; because the meat is prepared for sale under conditions likely to lead to its contamination; and because power to register or license such houses and to make bye-laws for their conduct will enable much improvement to be effected where the conditions are faulty. Some three or four houses will probably only be registered, having been in use before the Special Act was passed, but in many of the remainder, if not all, a license will have to be applied for, and then their structural condition will have to be taken into account.

LAW REPORTS.

SPIERS AND POND v. BENNETT.

Sale of Food and Drugs—Milk—Food Altered by Abstraction—Disclosure of Alteration—Sale of Food and Drugs Act, 1875.

THIS was an appeal by way of special case from the decision of a Metropolitan police magistrate, convicting the appellants of selling milk from which part of the fat had been abstracted without disclosing to the purchaser the fact of such abstraction.

It appears that the appellants, a firm of refreshment contractors, had entered into a contract with a dairy company for the supply to them of milk, the contract containing a warranty by the dairy company as to the purity of the milk to be supplied.

Under this contract a quantity of milk was delivered by the dairy company at a refreshment room of the appellants. A servant of the appel-

lants poured part of the milk from the can in which it was delivered into a churn which stood upon the counter, and from which the milk was drawn through a tap into glasses for sale to customers.

The churn was so constructed that no milk could be drawn from the tap until a knob had been pressed, and a "dasher" thereby caused to descend to the bottom of the churn, the object of this arrangement being to ensure that the milk and cream in the churn were kept properly mixed together.

The respondent, a sanitary inspector, purchased a glass of milk at the refreshment room. The glass containing the milk bore the following notice distinctly written on it in blue letters, "Not guaranteed as new or pure milk, or with all its cream. See notices." On the counter in the refreshment room, a few feet from where the respondent was standing when served, the following notice was exhibited: "Milk notice. Spiers and Pond (Limited) purchase all milk sold by them under a warranty of its purity and genuine quality, and take all possible precautions to ensure its supply to their customers in proper condition; but they are unable to guarantee it as either new, pure, or with all its cream, and (to meet the requirements of the Sale of Food and Drugs Act) do not therefore sell it as such."

The glass of milk so purchased was subsequently submitted by the respondent for analysis, and proved to be deficient in cream to the extent of 17 per cent.

The respondent thereupon preferred a complaint against the appellants under Section 9 of the Sale of Food and Drugs Act, 1875, charging them with having unlawfully sold milk from which the fat had been abstracted by skimming or otherwise to the extent of at least 17 per cent., without disclosing to the purchaser such abstraction or alteration.

At the hearing before the magistrate, it was stated by the respondent that he saw the writing on the glass in which the milk had been served for the first time while he was in the act of dividing the milk, for the purpose of fulfilling the requirements of Section 14 of the Act, but that he did not see the notice on the counter until his attention was called to it by the appellants' assistant immediately afterwards.

The magistrate found as matters of fact: (1) That the milk sold to the respondent had been delivered to the appellants under the aforesaid contract; (2) that the appellants had no reason to believe, at the time they sold the milk to the respondent, that it was otherwise than of the nature, substance, and quality demanded. He was, however, of opinion that the notices above described were only in the nature of a refusal to guarantee the quality of the milk, and did not, therefore, constitute a sufficient disclosure of the