PEPPER ADULTERATION.

BY F. WALLIS STODDART.

THE form of pepper adulteration described in a note appearing in an earlier number of this journal (*ANALYST*, xiv., 37), is still largely employed, but the "make-weight" now principally introduced appears to be steatite in fine powder, which is added to the pepper to the extent of 10—15 per cent.

The proportion of chromate of lead remains about the same, and can, I find, be detected more readily in the ash than in the chloroform residue; for the latter not only contains a good deal of pepper-starch, which interferes with the boiling, but also apparently some substance which renders the tests for chromic acid uncertain. One or two grammes of pepper yields excellent results when treated in this way.

The feebleness of the present Act is well illustrated by the powerlessness of the authorities to deal with this fraud; for, though the manufacturers are perfectly well known, and numerous convictions amongst their customers have taken place, as they do not reside in Bristol the local authorities decide they can do nothing with them; and, as in each case they openly offer to pay all fines and expenses, and, where necessary, even to save the wounded reputation by a small honorarium, they are not likely to lack business.

LAW NOTES.

BATTLE OF THE PHARMACOPŒIAS.—At the Bow Street police-court, on May 27th, Charles Ferdinand Keele, chemist, of Tottenham Court Road, was summoned for selling sal volatile not prepared according to the requirements of the British Pharmacopœia.—Mr. Smith appeared to support the summons; Mr. Forrest Fulton for the defendant.—On the 6th April, six ounces of sal volatile were bought at the defendant's shop for 3s. It was analysed by Dr. Redwood and found to contain less alcohol and less spirits of ammonia than were required by the Pharmacopœia Britannica. Some question arose as to the Act under which the summons was taken out, the Food and Drugs Act, and not the Pharmacy Act.—Mr. Fulton said it was matter of common knowledge that the new Act now before Parliament would incorporate the two Acts. His client was not a "compounder" of this drug, but simply a retail vendor. What he sold was also what was described as sal volatile, although under another name in the Pharmacopœia Londonensis.—Mr. Vaughan asked to have some professional evidence on which to go, and Dr. Redwood was then called. He was asked by Mr. Vaughan what sal volatile should be, and replied, "A solution, partly aqueous and partly spirituous, of carbonate of

ammonia, with certain essential oils of nutmeg, cinnamon, and lemon, thereby constituting a stimulating alkaline solution."—Mr. Vaughan: But in those ingredients I don't notice where the alcohol comes in.—The witness: Estimating it as a rectified spirit, there should be one-third.—Mr. Smith: But as a medicine, what is the most important?—Witness: The ammonia.—Mr. Vaughan: But what is the alcohol for?—Witness: To keep the oils in solution. In the present sample there was less than half what there should have been of alcohol.—Mr. Vaughan: What is the test?—Witness: The great test is the power of neutralising oxalic acid.—Cross-examined by Mr. Fulton: Sal volatile was first used in medicine in 1720. It dropped out of use until 1885. It was mentioned under another name in the last edition of the *Pharmacopœia Londonensis* of 1851. This sample was of the same specific gravity as the preparation mentioned in the *London Pharmacopœia*, and was practically the same preparation, but in witness's opinion the *British Pharmacopœia* entirely superseded all others, and all articles ordered in medicine should be prepared in accordance with its requirements. For instance, hydrocyanic acid (prussic acid) was double as strong in the *London* as in the *British Pharmacopœia*, and any chemist making up a prescription written with the intention of having the medicine made up according to the latter, might cause very grave results if he went by the former pharmacopœia.—The case was adjourned until June 1st, when Mr. Vaughan gave judgment as follows:—The summons against the defendant was for selling sal volatile which was deficient in alcohol and alkaline salt according to the acceptance of sal volatile as an article of commerce. Professor Redwood, both in his analysis and in the evidence he had given in this Court, distinctly stated that the article sold did not come up to the requirements of the *British Pharmacopœia* by one-half. This was not denied, and the next point to be considered was whether it was lawful to sell drugs prepared according to any other than the *British Pharmacopœia*. There really could be no question on this point, unless it was to be assumed that Acts of Parliament were to be entirely ignored, or taken as of no weight and non-existent. The evidence called for the defendant was simply that of the defendant himself, his manager, the wholesale chemist who supplied him, and the manufacturer. All these, he might say, were in the same boat, and he placed very little reliance on their testimony, for it seemed to him they were in ignorance of the Act of 1862. They might have acted on the knowledge which they previously possessed, but they did not themselves take the trouble to inquire into the present state of the law. He could not himself look at the Act without coming to the conclusion that any drug made up according to any other pharmacopœia than the *Britannica* was a violation of the Act; and in this view he was confirmed by the decision in the case of "*White v. Bywater*," wherein it was held that if a person asked for tincture of opium he was entitled to be supplied with it of the substance and quality mentioned in the *British Pharmacopœia*, and not with something of an inferior quality. The magistrate at Sheffield, in that case, at first dismissed the case, holding that in the absence of any special request for the drug according to the *Pharmacopœia Britannica*, the drug as described in other pharmacopœias could be sold. That was not the view taken by the Judges, who thought the magistrate ought to have convicted the defendant, and who sent the case back to him for re-hearing. He (Mr. Vaughan), therefore, could not entertain any doubt that the article in question must be held to have been not of the nature, substance, and quality of that demanded, and he was bound to convict. But, as he said before, if it could be proved that it was sold as it came from the wholesale manufacturer, he should hold it to be a case in which he could impose a nominal penalty. That had been proved, and he should act on his opinion. Before concluding, however, he hoped that this decision would have the effect of making all persons dealing in drugs remember that the provisions of the Act must be complied with, and that their drugs must be made up according to the *British Pharmacopœia*. He fined the defendant 40s. and 2s. cost of the summons.