

chase from the said grocer. Accordingly a small quantity of each of his two qualities was obtained. The difference between them was only the difference in the retail price; the arrowroot was adulterated to the extent of between 30 and 40 per cent. of sago meal. In justice to the grocers as a class it should be said that the investigation was then extended and samples obtained from ten other establishments; these samples were all pure and of good quality. Linseed meal may sometimes be found to have an admixture of starch, and at other times, especially when old, it may contain large numbers of a mite (*Tyroglyphus siro*). Powdered cantharides is also found sometimes to harbor mites, as is also saffron, especially when kept in a moist condition in tins. About ten years ago a friend sent a quantity of colorless powder from the bottom of a tin in which he had kept his saffron, of which he used considerable quantities. His suspicions were aroused as to the possibility of having been supplied with an adulterated article. The microscope at once revealed the nature of the powder; it consisted of innumerable mites, their eggs, and the debris of dead ones. Insects are much more common in the stock of the druggist than is generally supposed, and would be much more generally detected if the handy microscope were brought into use.

Another direction in which the microscope is rarely turned is towards the filtering papers. The nature of the liquids which a pharmacist has to filter is so various that it is of considerable importance to him that he should use filtering paper composed of suitable material. A microscopical examination will reveal such differences in the composition of the filtering papers in the market that he will be tempted to consider the whole question of filtration from another standpoint than that of price—namely, that of efficiency.

Besides the utility of the microscope in the immediate concerns of the shop, which have been merely indicated in the foregoing remarks, there is the wider application to the concerns of the community at large. This is a work the pharmacist is pre-eminently fitted to undertake. No other class of professional men has the same opportunities of acquiring so extensive and varied a knowledge of the minutiae of vegetable and animal substances. Medical men are generally very glad to avail them-

selves of the opportunity of sending urinary deposits to a skilled microscopist; and a pharmacist may, with a very small expenditure of time and money, soon make himself so proficient as to meet all the demands of his medical friends, and thus earn their gratitude and perhaps something more tangible. In many commercial centres where textile fabrics are handled there is a constant need for assistance in discovering the component parts of fabrics. Merchants are often dependent upon tricks, which have no scientific basis, to guide them in appraising the value of the textiles they handle. Whenever they can obtain demonstrative evidence of the presence or absence of certain fibres in their fabrics, they are quick to appreciate the help. This is a field of usefulness the pharmacist who live in the proper districts should at once annex to his domain. The characters of cotton, silk, wool and linen, as seen under the microscope, are easily apprehended. Now that lustrous-cellulose, mercerised cotton and weighted silk are so common, the aid a pharmacist can render by the use of his microscope should have a distinct commercial value.

The microscopical examination of articles of food, such as coffee, cocoa, flour and tea can very well be undertaken along with the general work of the pharmacy. In the case of coffee, cocoa and flour, when the characteristics of the tissues of the genuine materials are mastered, the detection of adulteration is easy, and the substances used for falsification are so few in number that it soon becomes easy to name the adulterants. Where tea is concerned, the microscopical examination may entail somewhat more trouble, as in some instances it may be necessary to make sections, and in all cases a careful investigation of the venation is required. There are, however, several works published which will help the microscopist over these difficulties very quickly.

The examination of water has been purposely avoided, because it demands expensive apparatus and a certain amount of technical training, outside the ordinary curriculum of the pharmacist. There is no reason why the investigation of deposits in potable waters should not be undertaken by the pharmacist; but unless the bacteriological character of the water is also ascertained, such an investigation is of little value. The phases of microscopy that have been exhibited here are just those which should com-

mend themselves to the pharmacist who is willing, without any extra training or any increase in laboratory equipment, to turn to account the reserves of his scientific knowledge.

A Handsome Interior.

In no other line of business, possibly, it is as much of an actual necessity that the store and all its fittings should present an attractive and if possible a strikingly handsome appearance, as in the modern drug store. Cleanliness, brilliancy, modern fittings and a tastefully arranged stock all serve to attract buyers. The illustration given below is of the interior of the drug store of A. L. Holstead, in the picturesque town of Moncton, New Brunswick. Mr. Holstead is proud, and justly so, of his place of business which is certainly a most attractive one and a credit to the proprietor.

Trade Levities.

The faculty of terse and forceful speech is ordinarily an advantage, but occasionally a man gets hoisted by his own epigram. A hustling New Yorker, who was recently established in a branch of the oil business, had set out to get the patronage of a certain firm. The head of the concern was reluctant to make a change.

"The oil we have been getting has not been unsatisfactory," said he, "and I fail to see why we should make a change. Are there any extra inducements you can offer? How do you propose to improve on the old quality?"

"In this way," was the prompt answer. "I propose to give the business my personal attention. I intend to put some of my brains into every barrel of oil we send out."

The rejoinder pleased the old gentleman, and he became a customer.

A few months later the hustling man was obliged to make a journey, and in his absence, through some oversight, the quality of oil was allowed to deteriorate. It was quickly noted, and a letter now on file in the office records one of the protests. It reads:

"Gentlemen: When we were induced to use your product we were assured that Mr. Blank put some of his brains into every barrel of oil. We deeply regret to observe that Mr. Blank is threatened with paresis."—*Washington Star*.