

tion in the amount of the component itself may render the determination of the drug only an approximate one.

So far as a general opinion can be given, it would be safe to say that where the presence of an active organic drug in a mixture had been definitely ascertained, in the majority of cases the analyst can, by one means or another, obtain a fair idea of its proportions, although sometimes he must be content with a rough approximation only.

THE DRUG MARKET.*

HARRY B. FRENCH, PHILADELPHIA.

Benzoic Acid. The first Democratic Tariff Bill proposed a duty on benzoic acid and the reduction of the duty on benzoate of sodium and the measure, as will be recollected, passed the House. If it had become a law, it would have had the result of taxing American manufacturers about 1c per lb. for the privilege of making benzoate of sodium. In other words, if both articles had been admitted free of duty, the American manufacturers would have been better off to the extent of 1c per lb. on benzoate of sodium than they would be under the proposed legislation. While this has been changed in the bill at present before Congress, it shows how injurious may be the mistakes that arise from ignorance or lack of due consideration.

Borax. The present duty on borax is 2c per lb. Under the proposed law the duty will be reduced to $\frac{1}{8}$ c per lb. In the face of this borax has been advanced in price. There are those who think that the effect of the removal or the reduction of duties from many articles will not only not reduce the price to American consumers, but may advance the price, because of a world-understanding.

Citric Acid and Oil of Lemon. Citric acid and oil of lemon have been extraordinarily high for the last few months. Oil of lemon is now selling at higher prices than ruled immediately after the earthquake at Messina. Citric acid has been selling in this country at a lower price than in England, although there is a duty of 7c per lb. Therefore, the present price is firmly maintained, notwithstanding the fact that in the new tariff bill the duty will be reduced to 5c per lb.

Opium. It has been thought generally throughout the country that opium and its products would be largely advanced in price, because of the proposed increase of duty. The present duty on crude opium is \$1.50 per lb. The proposed duty is \$3.00 per lb. The present duty on morphine is \$1.50 per oz.; the proposed duty is \$3.00 per oz. The present duty on codeine is \$1.50 per oz.; the proposed duty is \$3.00 per oz. The present duty on powdered, granulated, or dried opium is \$2.00 per lb.; the proposed duty is \$4.00 per lb.

Under ordinary circumstances, there is no doubt that this expectation would come true. It must be remembered, however, that during the last two or three years, Smyrna opium has sold at exceptionally high prices. The prospects for

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the present crop to be gathered in this summer are, at this time, exceptionally good, and it looks to us as if the price of opium in Smyrna would decline, at least as much as the advance in the duty. It is probable that very little additional opium will be bought in Smyrna or in London from now on for the reason that it is possible it might not arrive here in time to be entered at the present rate of duty. Therefore, under these circumstances, there might be no opium purchased for importation into this country for a couple of months. This might have some influence in advancing the price here and depressing the price in Smyrna.

Furthermore, the dealers in Smyrna will probably be able to obtain advances from the banks, owing to the close of the war, and will undoubtedly be reluctant sellers at low prices, as they will bear in mind the high prices obtained for several years past, which may postpone a decline at that port.

Our opinion is that opium and its products will not decline because of the proposed increase in the duties, but that much higher prices should not be expected, except the new crop be injured in some way.

Menthol. Menthol at this time occupies rather an anomalous position. The present duty is 25 percent, which, on the prices paid by most dealers, makes the cost about \$8.00 per lb. The proposed duty is 50c per lb. net. At the same time, the price in Japan has declined and is still further declining, owing to the large amount produced during this year and the prospect of a large new crop. The consequence is that dealers are selling stock on hand for from \$1.00 to \$1.50 less than cost. If the new tariff bill should not go into effect until September, we might see some high prices before that time, as spot stocks might become exhausted.

Asafetida. Asafetida has very largely declined in price during the past year. In fact, the cost has been decreased nearly one-half. The high-priced gum that has been sent into this market is soft and many buyers have objected to it on that account. The solubility test is very high, in some cases going up as high as 75 percent. The Government, however, has claimed that this solubility test is due to adulteration; that other gums are added to the asafetida in order to raise the percentage of solubility. In addition to the solubility and ash test, the Government has recently adopted a new standard, known as the "lead number," requiring the gum to show approximately a "lead number of 200," claiming this to be conclusive evidence of the absence of adulterations, such as galbanum and ammoniac. These two gums when added increase the solubility, but lower the lead number. The lead number test, however, is considered unreliable by a number of eminent chemists in England and America. (See "The Lead Number of Asafetida," *Chemist & Druggist*, May 24, 1913, p. 22.)

The whole matter is still in doubt. It is possible that the Government is right in its contention, but it is very questionable. In the meantime, importers experience great difficulty in importing this article.

During the warm months, there is also great trouble in obtaining powdered asafetida. There is no test for powdered asafetida in the Pharmacopœia (VIII), and the test required for the whole gum is arbitrarily applied to the powdered, and that powdered which answers the test for the whole gum is called "U. S. P.:" The requirements of the whole gum are that it shall test not less than 50 percent solubility and contain not over 15 percent of ash. We believe that in the next

issue of the Pharmacopoeia the ash content for the powdered gum will be made greater, as in powdering the gum the ash content is necessarily increased. The powdering of this gum is very difficult and we have been practically forced to powder it with magnesium carbonate. We had several thousand pounds powdered without magnesium carbonate, but in warm weather such a powder becomes lumpy and viscous, and we have had to have a large portion of it powdered over with magnesium carbonate. By great care, we have obtained a quantity of this re-powdered product that answered the requirements of the Pharmacopoeia for the whole gum. When powdered without magnesium carbonate the test ran up as high as 65 per cent solubility and only contained 10 to 13 percent of ash. When, however, it was re-powdered with magnesium carbonate, it tested only about 52 percent solubility and nearly 15 percent ash. In many cases it contained nearly 25 percent of ash. As a matter of fact, the ash content is of no importance, so long as the solubility test is of the proper standard.

Papain. Papain is now largely used in manufacturing tablets and is another interesting article. We imported a considerable quantity of papain and on examination found that it contained about 45 percent of starch. As there should be very little starch in precipitated papain, the starch was manifestly added as an adulterant. At the same time, we have not been able to find any papain that was not adulterated with starch, and we, therefore, sell this papain with the starch content marked on the label and also state the fact in our quotations. It is possible now that we have published the fact of this adulteration, that dealers abroad may conclude that they can get a proportionately higher price for pure papain, and will gradually, if not immediately, discontinue this injurious practice.

Copaiba. Uncleaned copaiba of the true South American variety, as sold in this country by the receivers in large drums, based upon LaPinnes' test, has been constantly advancing during the last few months. The new tariff proposes a duty of 10 percent ad valorem. The market value by the can of the genuine article is 55c per lb. The Hamburg variety can be still bought at 45c per lb. The attention of the Government has been called to this Hamburg variety, but they either have not given the matter attention, or have been unable to prevent the importation, for the reason that the product answers the requirements of the U. S. P.

Balsam of Fir. Canada balsam, which is official, has been unobtainable for some months of this year and has sold as high as \$14 per gallon. There is a variety of Oregon balsam obtainable, that is apparently equal and similar in appearance to Canada balsam, and cannot be told apart from it without testing. A great many people have thought that Oregon balsam was an artificial product, but this is not the case. It dries more slowly than Canada balsam and does not respond to the magnesium oxide test. It is to be hoped that in the new Pharmacopoeia it will be found advisable to make Oregon balsam of fir official. In the meantime, doubtless, many people are paying the price of Canada balsam and are receiving the Oregon product.

Balsam Peru. The Government seems to have been successful in refusing

admittance into this country of Hamburg balsam Peru and possibly, in a short time, only the genuine article imported from San Salvador will be obtainable.

Hyoscyamus Leaves. Whenever a crude drug is imported that tests less than required by the Pharmacopoeia, the Government can make such conditions as they desire. They may refuse admittance of the drug or they may permit its entry and use on such conditions as they think would protect the public. Henbane leaves is a startling example. The Pharmacopœial requirement is 0.08% mydriatic alkaloids. This is higher than can be commercially procured, at least so far as our experience goes. We have obtained samples of various offerings of henbane leaves that were quoted as U. S. P. quality and in every case we found that the test was far below the requirement of the Pharmacopoeia. We are not able to import henbane of U. S. P. strength except for manufacturing purposes, since the government has refused to permit us to take delivery excepting we give an affidavit to the effect that we will not resell any of this drug or use it except to parties by whom the product would be standardized. By this ruling, we were prohibited from filling any orders from retail druggists. We do not think the enforcement of this rule is justifiable, for the reason that U. S. P. henbane is not obtainable, but, worse than all, the Government has, in spite of repeated remonstrance, failed to enforce the rule at all the ports. Consequently, we import the henbane leaves for manufacturing purposes, and buy the leaves in New York City for selling to the retail drug trade, and this, notwithstanding that the leaves we import are, as a rule, of better quality than the leaves purchased by us in New York City.

Angostura Tonka Bean. The great consumer of Angostura tonka beans is the tobacco trade. The normal price is about \$1.00 per lb. Last year, owing to short production of several years, the price ran up to over \$6.00 per lb. We are not well informed on this article, but we understand that competition is caused by the respective price of rubber and other articles grown in the same countries. If, for instance, the demand for rubber is very great and the price high, labor is concentrated in producing rubber and the other articles, such as Carthagenia and Rio ipecac root and Angostura beans, are advanced in price because of lack of labor. If rubber declines, it is to be presumed that there will be a corresponding reduction in the price of the other articles. The price for the balance of this year will be very much lower, as the beans were offered in quantity at less than \$1.00 a short time ago. Recently, the price has been higher.

Cannabis Indica. The Pharmopoeia specifies that the female tops of the East India or Bombay cannabis indica be used. A very high tax is levied on every pound of the drug grown in India by the British Government, for the reason that it is used by the natives and is thought to be injurious. The product is being cultivated in America and, while not official, it is being used medicinally. Reliable pharmaceutical houses specify fluidextract made from the American product. There are several other varieties of the drug and large quantities are imported from Madagascar, but our experience would indicate that none of these other varieties has great value. The American product, however, possesses considerable value, and it is possible that it may be recognized as official in the new Pharmacopoeia. In the meantime, of course, no dealer has any right, legally or

morally, to supply a product from *cannabis indica*, except from the Bombay variety, without so specifying on the label.

Ergot. Ergot has ruled very high in price for some time past, owing to the short crop. We have been successful each year in obtaining a reasonable supply for our own manufacturing of the new crop of Spanish ergot, which has been proven by physiological test to be of excellent quality. The early part of the present spring, however, we had occasion to buy a few thousand pounds of Russian ergot. We obtained a well-known brand, thinking that in this way we would secure better quality. The physiological examination, however, showed that this ergot was inert. The writer has been informed that while Russian ergot is smaller than Spanish ergot, there is no intrinsic reason why Russian ergot should not be as active as the Spanish drug, and we cannot explain why these various lots proved to be inert.

Guarana. Guarana is a product of Brazil and is largely used in that country in the form of tea. Years ago, this article has sold as low as 20c to 30c per lb. In recent years, it has averaged a price of from \$1.25 up. The new crop is generally offered about June. Up to this time, the offerings have been very small and the lowest reliable quotation that we have heard was \$3.00 per lb. Unless conditions change, very high prices will prevail.

Barbadoes Aloes. There are many who argue that true Barbadoes aloes is not obtainable, but they are mistaken. There is a moderate quantity imported into this country regularly every year.

SMITH, KLINE & FRENCH Co., June 2, 1913.

CHINESE PHARMACY.

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There may be said to be two classes of drug stores in China, the strictly native shop, and the other invaded by the ideas of foreigners. Indeed, this division marks boundaries in all conditions in China. The strictly native shop would never be suspected of being a drug store by any one not acquainted with such places. However, after a short residence in China, to the interested, it becomes an easy matter to pick out the drug vendors as one passes in a rickshaw.

The native shops sell no liquids. No bottles are in evidence. No sign of the existence of foreigners is visible any place about the premises. Nicely lithographed cans are arranged neatly on the shelves with Chinese labels. Very many drugs are kept in wooden drawers, arranged exactly like the herb drawers of their more enlightened brethren in the States. Powders are kept in cans and jars. Chemicals do not enter very largely into their stock, which consists for the most part of vegetable and animal drugs. Their "back rooms" are well stocked with herbs in bundles, and flowers and seeds in bags.

In China all strictly native business houses open on the street without windows or doors. At night the entire front is closed with boards. This is also the prac-