himself, with comparative ease, if he will consult his reference works. Such work makes him a better pharmacist, gives him a more accurate and practical knowledge of chemical processes and the chemistry of what chemicals he handles. In fact, there is no line of work so conducive to the actual thoroughness of the pharmacist as this. It enables him bettter to understand the action of one chemical upon another, and to forecast results of combinations ordered in prescriptions, and often to save physicians from serious error. Again, it gives a clear and more practical insight into the arithmetic of chemistry, and in every way conduces to the benefit of the pharmacist. And the good which comes from this line of work is the advantage it is to the apprentice. He thus becomes familiar with working-methods, and it is of great advantage to him. Seeing practical demonstrations of what pharmacy should be, he is better able to appreciate the teachings of the schools.—*Western Druggist.*

Facts About Opium.

ITS PRODUCTION IN ASIA MINOR.

Our readers who purchase opium will no doubt be interested in the following particulars :—Opium is perhaps the most interesting, the most valuable, and the most famous product of Asia Minor. This substance, which resembles a resinous gum, is extracted from the capsules of poppy-heads. Incisions are made in the capsules after the fall of the flowers, and the juice which runs from them is then dried and made up into blocks of various sizes. These are covered with leaves, and sent in special bales to the market of Smyrna. The poppy is usually cultivated in the central regions of Asia Minor, on firm soil of sandy or chalky clay, richly manured. Several sowings are made throughout the course of the year, but these are grouped under two general denominations, the autumn and the spring crop. The autumn sowings are begun towards the end of the month of September, and produce the greatest part of the harvest. The seed is sown in fields which have been ploughed or dug up, and when the plants have appeared a great many are destroyed, in order to assure to each plant a clear space of about 75 centimetres. The earth ought to be stirred and hoed three times over before the time for picking the poppy-heads has come. After the month of November the snow almost always covers up the young plant, which is thus preserved from frost and the severity of the winter until the snow melts, that is to say, until March. It then grows vigorously until it becomes from 1 to 1½ metres in height. Each plant produces from 5 to 30 globular capsules, which are generally oval in form. The flowers are large, solitary at the top of the ramifications, and composed of four or five petals set in the form of a cross, and crumpled until they expand. They are of all shades from white to red. When the capsule is ripe it takes a pale yellow tint. This is the moment for making the incisions. They are always made at sunset ; the juice, which oozes from them in the form of tears, is collected next morning at dawn, in shells. It is then dried and moulded into the form of blocks, which are wrapped in leaves of the same plant. From its first appearance until the moment of harvest the plant is exposed to all the intemperance of the weather, excess of rain or drought, of cold or heat, violent winds, &c., and these are peculiarly liable to injure it on the nights which precede the incision of the capsule. The seed is sown two or three times in spring, between the beginning of February and the end of April. This crop requires greater uniformity of weather, especially frequent rains. The consequence is, that the spring sowings are more delicate, and their product is sensibly inferior to that of the autumn crop. The blocks are left to dry, and are then arranged in high baskets, containing about 75 kilogs., with certain leaves which have the property of keeping the opium in good condition, and of preventing the leaves from sticking to one another. The bales are then forwarded to Smyrna and Constantinople, to be sold there to exporters. Turkish opium has produced during the last fifteen years an average of 6,000 bales. One single year, which was absolutely exceptional, produced 1,100 bales. But this year we have only 3,000, a figure just as abnormal as the preceding.

THE VARIETIES AND VALUES OF OPIUM.

These are the various varieties of opium and their respective values :—

Malatia, Tokat, Zileh. — Quality extremely fine, and of a paste much appreciated by Chinese smokers for its delicate flavor. Amount of morphine very small, varying from 8 to 11 per cent. which is only obtained by means of a special selection.

Boghadich.—The best quality of Turkish opium, paste delicate and fine, greatly appreciated, especially by the smokers of Central America.

Yerli.—All opium which is grown in the neighborhood of Smyrna is called Yerli. It is less valued than that of Boghadich, but is rich in morphine. This is the quality which is used for drugs and medicine.

Chaue.—This kind is so like that of Yerli that it may be included in the same category.

Salonica.—The cultivation of opium at Salonica is of relatively recent date. It has greatly extended, and produces about 800 bales per annum, half of which, of very fine quality, is more appreciated than even the Boghadich.

Karatrissar.—This is the district which produces the most opium, and which supplies, on a large scale, the trade of England, America, and Holland. The quality of this variety is very good ; the morphine varies from 9 to 12 per cent.

Adath.—Average quality brought from all parts of the interior. The Turkish word "adeth" means "usual" It represents the ordinary type, which is easily sold for China and America, and the amount of morphine is almost uniformly 9½ per cent.

Chinquti. -This name is given to a quality of opium from various parts of the interior. It is opium mixed with foreign matter, it contains morphine, sometimes to the extent of 9 per cent.

So so. Under this name are designated those opiums which are bought in the condition in which they arrive from the interior. There is a mixture of five kinds and of Chinquti. The morphine is from 9 to 11 per cent. It should be noted that mouldy opiums of bad appearance, which are rejected, are often found figuring afterwards in the category of the "So so's."

THE PRICE OF THE DRUG.

The maximum price of opium of late years has been 40 francs the kilog., and the minimum price to which it has fallen 18 francs ; but this last only occurred once, and lasted but a very short time. In any case we are very far from that period when this article, which used to play a preponderating part in the export trade of Smyrna, sometimes reached very high prices indeed.

The price used to go up and down, producing great profits and serious losses. But the speculative spirit which used to mark the opium trade has entirely disappeared ; the variations of price are slight, and only follow the normal law of supply and demand, in consequence of the extent of the crops and the requirements of the consumer.—*Foreign and Colonial Importer.*

Tapioca.

Tapioca at one time was a favorite article for speculation, says the *New York Journal of Commerce*, but the disastrous results attending the operations of recent years have taken the spirit completely out of the old-time plungers, it being a difficult matter now to influence attention from large operators, and the jobbing houses also are seemingly indifferent as to whether they carry any considerable quantity of the goods in stock or not. The consumption of the article is probably greater to-day than ever before, large quantities being used in the manufactures, in addition to the extensive sale as a food staple. Prices are indeed low, though there has been some recovery from the extreme point touched during the period of the greatest depression which prevailed last year. Pearl, since sago disappeared from the market, is now given the preference by most buyers.—*Ex.*

TO INCREASE THE SOLUBILITY OF BORAX -The addition of a small amount of sugar greatly increases the solubility of borax. It will also rapidly liquefy a solution of gum arabic which has become gelatinous from the presence of borax.