## THE TARIFF AND THE CRUDE DRUG.\*

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Our early customs legislation seems scarcely to have noticed medicinal articles. Rum, an early source of British-American tax dissention, had in colonial days not reached its present medicinal demand. Excited Bostonians turned their harbor into a decoction of caffeine with no prescience of Dr. Wiley and without noting the cardiac symptoms of the startled codfish though the exploits' effect on the heart of the young country is a matter of record. Early tariff lists, both Colonial and post-Revolutionary, bore little resemblance to the detailed schedules since worked out under the marvelous development of modern manufacture, commerce and lobbyism. While the trade in healing substances is ancient as commerce, medicinal duties in the days of Washington and Adams would have yielded but a negligible revenue. The colonists, without regret, perhaps, had largely abandoned the crude and inaccessible European materia medica, and had adopted, and largely increased by experiment, the Indian medicinal lore. Articles of prominence in their tariffs were those chiefly concerned in the bitter commercial rivalry between Americans and their relatives across the seas. A jealous Parliament favored English textiles and manufactures with little or no duty, but laid heavy burdens on sugar, molasses, spirits, and tobacco of intercolonial trade. In developmental days under independence—and, indeed, in much later times—tariffs grouped themselves largely around three basic American industries—cotton, wool and iron.

On July 4, 1789, was passed the first Tariff Act of the United States under the Constitution. Under this Act drugs, except "dyeing woods and dyeing drugs," and medicines were taxed without specific mention at 5% ad valorem. Under the next act, that of August 10, 1790, "Anniseed" at 10 % ad valorem enjoys the distinction of being the only drug product specifically mentioned (if we except those more commonly used as spices) and has held a position, with frequent change both of orthography and duty, in nearly all detailed succeeding Acts. "Dyeing drugs," so necessary in the developing textile industry, were taxed 5%, and "medicinal drugs, except those commonly used in dyeing," being perhaps considered more of a luxury, paid  $7^{1/2}\%$ . Balsams, at 10%, first appear in 1792, and gum arabic and gum senegal, at  $7^{1/2}\%$ , in 1816. In 1825 castor oil drew a specific duty of 40 cents per gallon, and camphor, crude and refined, was assessed 8 cents and 10 cents per pound, respectively.

The Act of July 14, 1832, includes in its free list the first detailed tariff enumeration of medicinal commodities. It included such articles as opium, gum arabic, camphor, Peruvian bark, chamomile flowers, cantharides, gamboge, ipecacuanha, sarsaparilla, "assafoetida," henbane, manna, senna, nux vomica, and about thirty others. Medicinal drugs not thus specifically favored paid 12½ od valorem.

In 1841 the medicinal free list was virtually repeated, and the unlisted drugs rose to 20%. Opium now paid its first duty—75 cents per pound. In 1846 nearly all medicinals suffered impositions of from 5% to 30%, gum benzoin, bitter apples, and "boucho" leaves being among those newly listed. From that date to 1870 few drug products were free from some form of duty. They were for

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the most part, evidently, treated as pure revenue articles; being wholly produced abroad, there was no question of "protection of infant industry;" legislators had to deal only with the possible reaction of the ultimate consumer, who probably suffered inappreciably from the tax he did not see.

During the emergency period of the Civil War rather drastic duties were imposed on many essential articles. Ergot, 20 cents; aloes, 6 cents; manna, 25 cents; mastic, ipecac, jalap, and cardamom seed, at 50 cents per pound, are examples. Later these high duties, with all others listed, were raised 50% for a short period.

In the "protective" tariffs of 1870 and 1872 drugs, as needing no protection, appear in detailed array on the free lists, where they have since, for the most part, maintained their position. The latest Act, that of 1913, alone of those of recent date, singled out for specific rate a few drugs of large import. Ergot, 10 cents; gentian, 1/4 cent; sarsaparilla, 1/4 cent; licorice, 1 cent; and buchu leaves, 10 cents per pound, are of chief importance aside from the narcotics, which will be mentioned later. Possibly the large use of some of these in proprietary medicine had some part in bringing them to the notice of our legislators. Unsettled commerce conditions of years since render it difficult to trace any effect of these duties on import volume; doubtless such effect has been negligible, inasmuch as the cost of most crude drugs is but a minor part of the expense of medicinal manufacture. In case of buchu, normally highest in price of these products, the duty was immediately followed by an almost equivalent drop in import values. Inasmuch as America dominates by far in the buchu market, it appears that our importers found a way to make the foreigner stand the loss, whether or not the American consumer was made aware of it.

The Free List of the present enactment bears a "basket clause" adopted in slightly different form from a previous tariff as follows: "Drugs, such as barks, beans, berries, buds, bulbs, bulbous roots, excrescences, fruits, flowers, dried fibers, dried insects, grains, gums, herbs, leaves, lichens, mosses, roots, stems, vegetables, seeds (aromatic, not garden seeds), seeds of morbid growth, and weeds;....." Under this, it would seem, few medicinals could escape inclusion. Elsewhere, however, in the alphabetical order of the free list, occur by name many other botanical and animal drugs. The only apparent effect of such listing is to secure free entry for shipments of such drugs ground, as the latter would otherwise be subject to the analogous basket clause of Schedule A, which imposes a 10% duty on drugs in advanced condition. Some drugs thus listed are of first-rank importance—cinchona, nux vomica, ipecac, and jalap, for instance. Of the Scriptural "Balm of Gilead," however, no import has been noted in recent years; present-day events would indicate, indeed, that there is no longer "balm in Gilead." Also, the average pharmacist would be greatly troubled by a call for "salep or salop."

## TARIFF HISTORY OF THE NARCOTICS.

The tariff history of opium and coca leaves and their derivatives and compounds presents many points of interest. The more recent legislation on these articles, drawn up as it was before the enactment of the Harrison Narcotic Law, was evidently designed to restrict traffic in these dangerous drugs, although,

incidentally, it produced a revenue larger than that yielded by all other imported drug products combined.

Opium first emerges from the category of "Drugs and Chemicals" on the free list of 1832. In 1842 a specific duty of 75 cents per pound was imposed, no doubt solely as a revenue measure. Four years later with many other drugs, opium was placed on an ad valorem basis at 20%. In 1857 this was decreased to 15%. During the late fifties our opium imports reached a figure of 100,000 to 150,000 pounds annually. This consisted largely of smoking opium, consigned to Pacific ports, ostensibly for the use of the Chinese. It was quite evident, however, that the seductive vice of "hop" was rapidly spreading among the white race. An effort was now made to tax only medicinal opium on a revenue basis, and to place a prohibitive duty on the smoking variety. In the early sixties medicinal opium paid first \$2.00 and later \$2.50 per pound, while the smoking grade was placed on an ad valorem basis, first at 80% and later at 100%. These impositions stopped open smoking opium trade almost wholly, but an enormous smuggling business soon developed. The tariff of 1870 placed the medicinal opium duty at \$1.00, and that of smoking opium at \$6.00 per pound. This also was a reduction, inasmuch as the smoking opium then sold at about \$10.00. At this rate annual legalized importations of 50,000 to 70,000 pounds were entered; in 1883, when increased rates were anticipated, they rose to 298,000 pounds.

During the discussion of the next two tariffs there was a popular demand for the exclusion of smoking opium. This was no doubt increased by the Chinese-American treaty of 1880, by the terms of which Chinese subjects resident in America were forbidden to import the drug. The Tariff of 1883 first graded opium according to its morphine percentage; that containing less than 9% of morphine, from which smoking opium was manufactured, was forbidden entry, yet that prepared for smoking was allowed to enter at \$10.00 per pound. Medicinal opium paid only \$1.00; evidently the enormous abuse of this drug dawned but slowly on our legislators, inasmuch as under a later tariff it was allowed free entry. Both low-grade and smoking opium were again permitted entry in 1890, and both entered enormously, both above-board and underground. After the passage of the Pure Food and Drugs Act of 1906, its provisions forbidding the import of "drugs dangerous to the health of the people of the United States" were utilized to prevent the entry of smoking opium. The entry of low-grade and smoking opium was, in effect, prohibited by other legislation in 1909, though for some legal or traditional reason, obscure to the layman, its mention is still included in the Act passed four years later, which is still in force. The present rates on medicinal opium-\$3.00 per pound on the crude grade and \$4.00 on the dried or powdered drug-may have been placed thus high in an effort to limit importations, in view of the wide-spreading illegitimate use by addicts. Neither examination of import statistics nor consideration of the actual tax per narcotic dose indicates any alleviation of the abuse of opium through taxing its entry. Prior to the War, from 400,000 to 500,000 pounds entered annually; from ten to twenty times the per capita amount used by other civilized nations. Fortunately the Harrison Narcotic Law and the recent War Revenue Act have provided machinery, imperfect though it may be, for removing narcotic regulation from the purview of the Tariff.

Coca leaves, of course, are a much more recent addition to our materia medica. The duty of 5 cents per pound of 1909 was raised to 10 cents in 1913. Coca leaves seem never to have gained notable narcotic use in North America, though this may be due to the comparative availability and more rapid effect of their more easily concealed alkaloid than to legal regulation of their use. It may here be noted that the high duty rates on opium and coca alkaloids have, under normal conditions, provided a virtual American monopoly for domestic manufacturers.

## THE QUESTION OF PROTECTION.

Protection for the crude drug seems never to have found a place in our Congressional political economy. The reason is not far to seek. Direct competition between American and foreign medicinals has heretofore been almost non-existent. Cinchona from South America and Java, opium from Turkey and Persia, licorice from Southern Europe and the Levant, gentian from Austria and France, nux vomica from India—of the great staples none were grown in America. America herself stood without a rival in ginseng, hydrastis, cascara sagrada, podophyllum, and other indigenous medicinals. If European buckthorn, Indian or Alexandria senna, or Curação aloes affected the market for American cascara, the conflict was not sufficiently visible to arouse protest.

While the non-existent grower could need no protection, the wide-awake manufacturer was not slow to claim it. Few articles beyond the crude stage enter duty-free. Prepared medicinals are graded chiefly by their alcoholic or narcotic content. The important cinchona alkaloids and strychnine, in spite of repeated pleas, receive no protection, whereas alkaloids in general are favored by a 15% ad valorem. A basket clause like that already referred to imposes a 10% duty on drugs ground, powdered, or otherwise advanced. A duty of this type would certainly seem ample to exclude expensive ground drugs, but not to deter the entry of many cheap products of this description. Probably the general prejudice against foreign-ground drugs on account of their liability to adulteration operates in general more efficiently than the duty to hinder the import of commodities which the average consumer buys chiefly on faith.

But in recent years the situation has changed in part. The past generation's bulky materia medica has been decimated by science, which has little regard for tradition. Some medicinals have held their ground, and extended it. Never until to-day was there such a demand for products of demonstrated worth. Not to mention the rapid strides of opium and coca, which we "view with alarm" though we recognize the essentiality of these drugs, there is world-wide and insistent call for such drugs as cinchona, nux vomica, ipecac, belladonna, digitalis, hydrastis, and many others. Even before the stimulus of war was applied, American scientists and agriculturists—not that the terms need be separated—had produced the chief solanaceous plants, and also digitalis and cannabis, on an experimental or limited commercial scale. The War, cutting off our normal supplies of these drugs, enormously increased their price, and naturally the interest in their production, even before our own national Army was created to call for supplies.

According to Dr. W. W. Stockberger, of the Bureau of Plant Industry, to whom the major credit for putting this industry on its present basis is due, in

1918 belladonna, digitalis, cannabis, henbane, calendula, and sage were commercially produced in this country; the first three named even in oversupply. Culture of stramonium, valerian, santonica, pyrethrum, and several native drugs has also been reported. This cultivation has not been of easy development. Scientific knowledge, agricultural skill, expensive hand labor, high-priced land all these are needed, as many ill-prepared enthusiasts discovered to their financial loss. Even with these essentials, failure after failure has been caused by unsuitable soil or climatic conditions, by insect pests, or by disease. More than a mention of the chief difficulties of the drug cultivator is beyond the scope of this paper. Others, from bitter experience, have recounted them. But if failures have been numerous, successes have been brilliant. The application of agricultural science, especially that of genetics, to the culture of medicinal plants is in its early infancy. But the achievements of American growers in developing highly potent strains of belladonna, cannabis, and digitalis, are a matter of record. The future of the industry, nevertheless, is a matter of doubt. Successful agricultural methods are many fold more costly than the careless, ignorant collection of wild plants by old men, women and children who form the drug-collecting classes of Europe. While quality must in the future be valued more than in the past, American drugs, despite their superiority, cannot maintain a paying price in the market under a renewal of pre-war conditions. The production of medicinal products, from the sowing of the seed to the packing of the finished product, is worthy of the highest intellect and the best trained skill. Intellect and skill, in this age, demand and deserve a high reward. If one calling does not yield it, another will. The profession which fails to feed its workers will presently be a dead profession—though it may not be wholly a deserted one. If the three-fold partnership of agriculture, pharmacy and medicine is to continue best to serve the public weal, no partner must be starved. If our newly begun scientific drug cultivation is to lapse, America will again be at the mercy of the outside world for drugs needful to the public health. Our past experience should be enough of that.

With arguments such as these, the plea for protection will no doubt project itself into the maelstrom of the next Tariff revision. What the outcome will be no one can tell. The commercial insignificance of the industry may tell against it, for it can supply little eloquence of money. The alarm of increased cost of medicine is sure to be raised against it. This can well be met by graphically showing the actual increase per medicinal dose contingent upon a protective duty. High protection, in items of such limited commercial demand, will be certain to defeat its own ends by stimulating oversupply. But if American medicinals are to win the leadership of the world, intelligent domestic production of all possible basic materials must in some way be secured.

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