

discovery worth the mention since the time of Mill. Ideas may have been born to those who have spent the night-watches with this method, but, if so, no one ever heard the children peep.

There are other protests which might be added. Economy is not an independent study; it is a dependent subordinate study, which first finds its true place when framed into the study of society as a whole. But says Mr. Hadley, "a scientific part is a better starting-point than an unscientific whole,"—a conclusion which he reaches after discussing the undulatory theory of light, and a conclusion which shows how dangerous it is to depend on analogy rather than on analysis. There is no such thing as a scientific treatment of one function of a developing organism which does not recognize the essential and permanent relations of that function to other forms of activity by the same organism. Nor are all economic truths 'authoritative and rigid.' Most of them are dependent and relative. There is no meaning in the science of history otherwise.

HENRY C. ADAMS.

CHINESE REVENUES AND SYSTEMS OF TAXATION.

THE pecuniary relations which China is now more rapidly developing with foreign nations, together with the greater demand for foreign capital, will make of interest the following account of her revenues and systems of taxation, for which the writer is indebted to an extended article in the late numbers of the Austrian *Monatschrift für den orient*.

At the outset many difficulties are encountered in the endeavor to obtain a just conception of Chinese revenues and resources, not from any dislike on the part of the government to hinder the acquirement by foreign nations of such knowledge, but because the details of the antiquated and involved systems are not understood by the authorities themselves, notwithstanding their earnest desire to introduce a thorough reform. The imposition and control of taxes rest wholly and absolutely in the hands of the central government, under the administration of the financial minister at Peking. What the revenues from any given province may be, the central officials, however, can give no definite information; a certain amount is demanded and usually obtained, but the details are left in the hands of the subordinate officers. The methods require an army of officials, who often make themselves enormously rich at the expense of the tax-payers. They are unusually crude in many respects, the outgrowth of old customs and habits, which, unfortunately, do not encourage much hope of improvement so long

as the ultimate authority rests, as it does now, absolutely in the fiat of the chief ruling power.

The chief disadvantage under which the taxation system labors consists in the fact that the raising of taxes is farmed out. The contractors bind themselves to furnish a certain quota or sum, but at the same time enjoy the monstrous freedom of levying what they can from the people, and placing the excess in their own pockets. This may not have been the original intent, but it has become so virtually. It is not in human nature to expect, that when, in any given year, a deficit has been made up from the contractor's own resources, the following year he will carefully account for every cash¹ that he may have received in excess. It thus results that there is a constant dispute between the central and provincial authorities. The former, for instance, may demand a sum of 50,000 taels, for the emperor's household expenses, from the salt director of some province, who calls heaven and earth to bear witness that he cannot furnish another cash without bankrupting himself; nevertheless he complies with the required demand, and grows old and fat in the bargain.

Such singular, one may say pitiful, systems for a nation in many respects so intelligent as the Chinese, furnish many erroneous opinions of the nation's poverty, although there can be no doubt that the government has been in a continual state of impecuniosity since the beginning of the present century, existing from hand to mouth, and not becoming involved in debt for the simple reason that it cannot. Had the government not found in recent years a new resource in import duties, to which indeed it was compelled to take recourse, it would have been reduced to very great straits.

Two notable events in the last few decades have contributed to bring about a partial revolution in the financial systems, viz., the Taiping rebellion, and the opening up of the country to foreign nations. The first caused the almost entire abolition of the old systems of land-tax over a large part of the empire; the latter opened up the new resource of import duties,—a source of income which, were it properly managed and husbanded, would soon exceed all the others together. Yet another development since the Taiping rebellion is the so-called arbitrary *likin*, or toll-tax, which has become a very important source of revenue. All these changes render the older accounts of Chinese revenues and taxation unreliable and incorrect for the real condition of affairs at present.

The state revenues consist in, 1°, the land-tax; 2°, inland and import duties; 3°, the salt-tax or monopoly; 4°, various smaller taxes and licenses

¹ 1600 cash = 1 tael = about \$1.43.

from pawnbrokers, merchants, etc.; 5°, inland transport duties, the *likin*, or toll-tax. Some other, unimportant, sources are the sale of offices, 'contributions' from wealthy citizens, etc.

As in all oriental lands, the land-tax forms the chief source of state revenue. At the close of the last century it furnished two-thirds of the entire Chinese revenue, but it has dwindled down so that at present it does not furnish more than one-third.

This tax is levied by a district chief directly upon the tilled land. In each smaller province there is an especial department for land registry, in which, in order to be legal, every transfer of land must be entered, and paid for by a certain fee. This registry shows what land and how much each piece shall be taxed. Unfortunately, a great looseness prevails in recording the sales and transfers of land,—a looseness which has now reached such an extent that it would be difficult and unjust to attempt its remedy. As a result, great irregularities prevail in the raising of the land-tax. This tax is collected by the provincial officers through the subordinate 'land overseers.'

The entire levied tax from this source, as given in the state almanac, amounts to about thirty-three million taels in silver, and four and a half million piculs¹ of rice, making a sum total of about forty million taels (\$57,100,000). This tax was very seriously affected by the Taiping rebellion, which desolated nearly half of the land, including the best cultivated part of the empire. From the effects the country was a long time in recovering, nor has it by any means fully recovered yet, a proof of which is afforded by the fact that several large cities in the neighborhood of Shanghai are yet in large part fields of extended ruin-heaps. From these circumstances it is evident that the figures, as given by the national authorities, are too high, illustrating the thorough unbusinesslike methods of the government. How much they are too high cannot be definitely said, but from an estimate of the actual differences between the returns of various provinces and the levied taxes for the same, they must be decreased by at least one-third. The central government, moreover, is continually called upon to furnish relief to different provinces suffering from famine, or from damages by storms and floods, so that scarcely a year goes by in which a million taels are not thus expended.

It is also difficult to estimate with accuracy the income derived from the tax on natural productions, the so-called grain or rice tribute. A portion of this is devoted to the sustenance of the imperial army, and, like all the other taxes, is

distributed unequally in the different provinces. There is a tendency to commute this tax by the payment of silver, but the monstrous abuses which such commutation opens up on the part of the officials is the greatest drawback. The total amount reaches about five and a half million piculs, worth seven and a half million taels (\$10,000,000). This, however, represents the sum received by the government, by no means what is paid by the people. An evidence of what the people are really compelled to pay will be best shown by the following incident. A foreigner was required to pay a certain toll-tax of 12,000 cash on a chartered junk, which he did, but demanded a receipt. This was furnished him, but only for 6,400 cash. The discrepancy not at all suiting his ideas of business, the owner applied to his consul for relief, who, after correspondence with the officials, ascertained that the latter sum represented the actual tax; the remainder, the cost of freight on the money, the loss and cost of melting the coin and transforming it into Peking taels, and various other expenses. One cannot but be amused at such exorbitant charges, though perhaps we in America are not wholly above reproach in similar charges on non-dutiable imports. The incident, however, only illustrates the condition of affairs over the whole kingdom. For every tael, for every picul of rice, there are added so many charges and counter charges, that the sum is more than doubled. A yet greater evil is the one already mentioned, by which every district chief or tax-receiver is allowed so much liberty in the imposition of taxes. The officers all receive like salaries and perquisites, but there exist vast differences in the value of the different posts. Each district chief must furnish a certain definite quota. The excess belongs to himself, not always to go into his private pocket, for the powers that be, whether city, state, or judicial, all come in for *douceurs*, and vice-kings, governors, judges, and commissioners all wax equally and enormously rich.

The average ground-rent for cultivated rice-land is about one dollar per acre. Of the eight hundred million acres of land in the empire, one-half is tillable; and allowing in the most liberal way for all contingencies, and estimating the average tax at less than half of that mentioned above, the amount paid by the people must reach one hundred million dollars, of which the government receives not over forty million. All the rest of this vast sum represents the cost of collecting and the aggregate stealings of the collectors.

The salt-tax or monopoly is one of the most peculiar, as it is one of the most important, sources of revenue. The empire, in its salt administra-

¹ 1 picul=100 catties=67.45 kilogr.=143.3 lbs.

tion, is divided into seven chief departments, each in control of government officers, and each possessing its own places for the production of salt. Each department has its own defined limits, and the salt manufactured in one cannot be transported or sold into another. The salt is obtained by evaporation from sea-water, or from that of salt wells and marshes; and there is no restriction as to the amount and the methods of obtaining it, except this important one, it can only be sold to the government officers at a certain price fixed by the directors. From the central depots the salt is distributed to the various provinces by the salt commissioners or dealers. The amount that will be consumed is estimated, and on this basis a number of perpetual, transferable certificates are issued, worth as high as fifteen thousand dollars each, each of which empowers the possessor to buy a certain quantity, not exceeding 3,760 piculs, at a certain price, to convey it whither he will in the department, and sell it at a fixed price. He cannot, however, dispose of it direct to the consumer. In every place of any size there are storehouses under the control of government officers to which it must be conveyed. Here he deposits it, first giving up his certificate, which he does not receive back till all the salt is sold. The dealer's profits are, of course, derived from his quickness in disposing of his goods. The system is a singular one, yet not such a bad one, were it properly managed. The chief drawback that it has is the small army of detectives required to prevent smuggling between adjacent departments, an illicit traffic caused by the very great differences in price that often prevail in contiguous provinces. This tax produces the government about nine and one half million taels, only a small part, however, of what it costs the people.

The income from duties has increased rapidly since the admission of foreign trade, and now reaches about thirteen million taels annually from foreign goods, with an additional four million from opium and inland duties. The office of collector of customs and duties, as in other nations, is one of the most desirable in the government service. Well it may be, for the perquisites and stealings usually enable the possessor to retire wealthy in two or three years. The collector of Canton, for instance, spends the income of the first of his three years of service for the acquirement of the post, that of the second year in presents, and in the third and last year lays by — about three hundred thousand dollars. Many of the directors in the other ports enjoy an income of from seventy-five to a hundred and fifty thousand dollars. As in the other taxes, the loosest of systems prevail. Every collector is required to furnish the govern-

ment a definite sum annually: whatever else he can get he has for himself. Even in those ports where the rates of duty are prescribed, and under the charge of foreign officers, he is not to be cheated out of his perquisites. The foreign officials have no control of the money received, which is paid over to the Chinese collector, who absorbs three-fifths, and places the rest at the disposal of the government. The central government has, however, recently expressed a desire to receive a larger share of the income: that it can fully reform the abuses is not possible.

The income from taxes on opium has very materially increased since the opening up of foreign traffic. The import duties are only moderate in amount, but, as soon as the opium comes into the immediate hands of the Chinese, it is taxed repeatedly, and to a much greater extent. About seventy thousand chests are brought in annually, each paying a tax varying from twenty to sixty taels. This income, though, is looked upon as an especial perquisite of the collector of customs, who absorbs the larger part of it.

Of the various smaller taxes, the least important are the ones on the transportation of tea to those provinces where it is not grown, and on mines. Those derived from the licensing of merchants and pawnbrokers are more important, especially from the latter, each of whom is required to pay a license of from one thousand to five thousand dollars, and yearly dues of one or two hundred dollars. Another source of income, that of the payment for registry in land transfers, would be important were the laws enforced, which they are not. The fees amount to three per cent of the sale-price, but they are often evaded by an understatement of price, or even by the neglect to record the sales at all, though non-recorded sales of land are illegal.

The most characteristic Chinese tax is the *likin*, a toll-tax, or duties on inland transportation. This tax has given rise to dispute on the part of foreign governments on account of its illegality, or, rather, perversion of international treaties. That it is illegal in any other sense cannot be said, for the simple reason that in China the highest form of legality is the emperor's decree.

This tax, which is of recent introduction and has only assumed importance within the last twenty years, is imposed upon certain classes of goods in their transportation across the country. An imperial decree authorizes the levying of it in any given province, whereupon a central provincial office and toll-stations are established, their number depending upon the amount and kind of traffic, averaging upon the most important thoroughfares, whether by land or water, one in about

every ten miles. The tax at each station is small, but, when the distance traversed is great, it may reach fifty per cent of the gross value. No definite control can be had over the income of these stations, as there is little or no check upon them. In fact, the officers in charge generally get what they can from the transporter, whose willingness to pay depends very much upon whether he can evade the tax by going round the station. Often the carrier and collector wrangle over the price, and finally settle upon one much less than first demanded. The data for estimating the sums derived from this tax are more reliable than those of any other. The minister at Peking gives between seventeen and eighteen million taels as the annual income from this source, and his figures are probably nearly correct. Of this amount, about one-half is derived from *likin* on salt and opium, the remainder from various other goods.

The entire amount of all the taxes which have been spoken of reaches the sum of sixty-eight million taels, or ninety-seven million dollars. The amount which each province has to furnish is estimated annually by the minister of finances. Should some extraordinary necessity, as famine or war, require larger contributions than are laid down in the annual budget, those provinces most likely to respond are called upon for additional amounts. When the last cash is exhausted from these sources, then recourse is had to extraordinary means, appeals to wealthy citizens, requests couched in such urgent terms that a disregard of them is perilous.

Not many reforms can be expected in China's financial systems. The absolute monarchical government, the hordes of mandarins who find their living in the present systems, and the yet general distrust of foreign advice and counsel, all hinder the empire from throwing off the shackles that now impede her every movement. S. W.

DRAWING IN PUBLIC SCHOOLS.

For many years past, those who are most interested in improving the elementary education of this country have been agreed that far more attention ought to be bestowed upon the art of drawing. Those especially who are interested in schools for manual training and in scientific schools have been firm in demanding that all young scholars should be encouraged, if not required, to attain some proficiency in this useful art. Many have insisted that drawing should be placed next in importance to reading, writing, and arithmetic,

Industrial and high art education in the United States. By I. EDWARDS CLARKE. Washington, U. S. bureau of education, 1885.

and have regretted that the children in public schools have been forced to give so much time to acquiring a familiarity with geographical nomenclature, when an equal amount of labor would have trained the eye to observe with minute accuracy, and the hand to delineate with truth that which the eye has seen. Notwithstanding this unanimity of opinion among those who are qualified to give advice, the schools of the country are in general far from doing what they ought, to provide instruction in drawing. Great advances have been made within the past fifteen or twenty years; and in certain schools, and even in certain groups of schools, good results have been attained. It is now most important that the experience which has been acquired, and the methods which have been successfully employed, should be ascertained, compiled, and promulgated in such ways as will secure the widest consideration.

For many years past, Mr. Isaac Edwards Clarke, of the Bureau of education, has been engaged in compiling such a report. Two or three times his work has been made ready for the printer; but its issue has been postponed for the lack, we believe, of adequate appropriations from congress. At length we have before us a volume of a thousand pages, distributed in four parts. There is, first, a series of papers by the author on 'The democracy of art;' then an account of the efforts which have been made to secure instruction in drawing in the public schools; third, a series of statistical tables illustrating the condition of art schools and museums; and, finally, an appendix, occupying four hundred pages, and including a great variety of reports, lectures, and schedules pertinent to the subject of art education. The work is very comprehensive, being evidently designed for very different sorts of readers, — those who are interested in the historical aspects of the subject, those who need to be persuaded of the importance of art education, and those who require to be enlightened in respect to methods of instruction which have been employed. By the use of the elaborate index, readers of all these classes may derive from this volume much useful information not otherwise accessible; but the author would have rendered an additional service if he had added with greater freedom his own critical comments upon the various plans which have been adopted. His preliminary essays reveal the mind of one who has long been familiar with the progress of the fine arts, and who has been accustomed to reflect upon their relation to the progress of society. He points out with clearness the influence of taste and skill upon the enjoyments, the trade, and the prosperity of the people. He touches with facility upon all the indications which are to be seen, especially