

AMERICAN claims to be performing, though indirectly, its share of the work. We are doing what we can to gather and disseminate a knowledge of what has already been accomplished, to guard inventors from the waste of time in the pursuit of discoveries already made, and to stimulate them in their beneficent work of carrying the human race onward to a still higher civilization.

#### THE PROPOSED NEW TARIFF.

The intense excitement of the public mind respecting the absorbing question of our national unity, has caused one of the most important measures ever introduced into Congress to receive very little public attention. This is a bill which contains provisions for a complete revolution of our present tariff system. It was introduced during the last session of Congress, passed the House, went to the Senate and was referred to the appropriate committee who reported it for action, with several amendments, on the first of this month.

The present tariff is based upon *ad valorem* duties; that is so much per cent according to the value of the goods. This is a varying tariff, for as the prices of the goods rise and fall, so does the tariff. Thus allowing a certain article, say woolen cloth, to be charged an *ad valorem* duty of 24 per cent, if the price per yard is one dollar, twenty-four cents of revenue will be paid for each yard; if the price falls to 90 cents per yard, the revenue derivable for one yard is 21.60 cents; if it rises to \$1.20 per yard, the duty will be 28.80 cents on each yard.

The proposed new tariff is as complex as the present one is simple. It proposes specific duties on some species of goods, and *ad valorem* duties on others; and it also divides foreign products into a greater number of classes. For example, the present duty on foreign iron is uniform, and 24 per cent; the new bill, on the other hand, is prolific with diversification. The following are a few examples taken from it:—

Cast iron and wrought iron nuts, &c., pay....	\$25	per	tun.
Boiler iron and hoop iron .....	20	"	"
Bar iron .....	15	"	"
Railroad iron .....	12	"	"
Pig iron .....	6	"	"
Iron wire, certain sizes .....	\$0.75	per	100 lbs. and 15 p. c.
Do. do. ....	1.50	"	15 "
Do. do. ....	2.00	"	15 "
Anchors .....	1.50	"	"
Iron pipes .....	50	cts.	per 100 lbs.
Wrought iron for locomotives, &c. ....	5	cts.	per lb.
Sheet iron, smooth .....	2	"	"
Tubes, tacks, &c. ....	2	"	"
Iron castings, not specific .....	25	per cent	ad val.
Chains of certain sizes .....	25	"	"
Screws .....	30	"	"

It will be observed that the above duty on wrought iron for locomotives is \$12 per tun.

The bill also proposes great changes in the duties on worsted and woolen goods. The *ad valorem* duty on carpets is 24 per cent; the new bill places the duty on the square yard; thus, velvet carpets worth \$1.25 per square yard are now to be charged 40 cents per yard; Brussels carpet 30 cents per square yard, and ingrain, 20 cents, &c. On woolen cloth the present duty is 24 per cent; the new bill proposes a duty of 12 cents on every pound weight of some cloths, and 20 per cent *ad valorem* duty additional—a compound tariff.

We have only given a few examples of the changes proposed by the new bill, for the purpose of rendering its nature clear.

Another important feature in this bill is the virtual abolition of the Bonded Warehouse system. By the present system, foreign goods may be imported and placed for three years in a government warehouse without paying duty; and they can at any moment be withdrawn and re-shipped abroad. Great quantities of goods are imported from Europe and kept in these warehouses until favorable opportunities occur for our merchants to ship them for trading purposes to Cuba, Brazil, China, Africa, &c. These warehouses have made all our seaports entrepôts for foreign goods; they have been the means of affording a large carrying trade for our shipping. Any merchant can also import goods and place them in bond without paying duty until they are sold, or are about to be sold; or they may be sent back, if they are not saleable. The new bill proposes that goods shall only be allowed ninety days in warehouse without paying duty—a charge almost tantamount to a destruction of the warehousing system.

The New York Board of Trade has adopted a remonstrance against the bill, and quite a number of our manufacturers are opposed to many of its features, as they believe it is too radical and complicated.

#### UNPRODUCTIVE CONSUMPTION OF WEALTH.

When a dollar's worth of powder is placed in a cannon and burned, the only products are noise and smoke, and these have no commercial value—they are not wealth—the consumption of the value that was in the powder is unproductive consumption. If a man's house, worth \$5,000, is burned down, this amount of wealth is consumed, without any corresponding reproduction, and the wealth, not only of the owner, but of the community and of the world, is diminished to this extent. While an industrious man is wearing out a pair of boots, he is engaged in producing as much wealth, either in the same or some other form; but while an idle spendthrift is wearing out a pair of boots he is not producing a corresponding amount of value, and he is consequently diminishing the wealth of the country. A man, however, who is living in idleness on the interest of his money, is not necessarily impoverishing the community. On examination, it will be found that what is called *money* at interest really exists in the form of manufactories or machinery or stocks of goods, or cattle, or plows, or some other form of property, which, in the hands of active men, is aiding in the production of wealth. The man who accumulated it, and has loaned it to these business men is not living on the community when he is living on his interest. By means of the tools which he has made the community is producing an increased amount of wealth greater than the quantity which he consumes. But the spendthrift who is living on his capital is impoverishing the community. He is consuming wealth without any corresponding reproduction. This is the case also with gamblers, and thieves, and all who do not earn an honest living, either by their exertions or by their capital. When a man is producing more wealth than he consumes, in other words, living within his income, he is adding to the wealth of the world; and when a man is consuming more wealth than he produces, in other words, living beyond his income, he is diminishing the wealth of the world.

#### AMERICAN COAL.

There is no better test of the advancement of our country in manufactures and commerce than the quantity of coals which are annually raised from our mines. Judging by this standard, the coal product of our mines for 1860 affords us a most cheering and delightful evidence of the great progress our country has made since 1850. In that year, the anthracite coal product was 3,321,226 tons, while in 1860 it was no less than 8,131,234 tons, thus showing that the quantity has been more than doubled in ten years by 1,488,962 tons. By late statistics we learn that the annual coal product of England is about 60,000,000 tons—an immense quantity; but we are rapidly marching up to this measure, as in 1820 there were only 305 tons of anthracite raised in all the United States.

In addition to the above quantity of anthracite, there were probably also as many as 4,000,000 tons of bituminous and cannel coals raised from our mines last year. We have not been able to obtain statistics of these, and so far as we have inquired, there are no reliable means of getting accurate statistics; but when we reflect how much bituminous coal must be consumed in such an iron-manufacturing city as Pittsburgh, Pa., and that this fuel is now very generally employed on the Ohio and Mississippi steamboats and in some of our Western cities, the quantity must be very large. And when we also take into consideration the great quantities of cannel coal which must be mined for making oil and gas for cities, we are perhaps warranted in fixing the annual coal product of the United States for 1860 at about 12,000,000 tons. Success to the coal trade; our best jewels are our "black diamonds."

THE LARYNGOSCOPE.—Dr. Otto Füllgraff, manager of the Homeopathic Dispensary, No. 59 Bond-street, this city, has shown to us a useful little instrument of his contrivance, for examining the throat. It consists of a highly-polished steel mirror about the size and shape of a thumb nail which he places in a handle at any angle desired, to reflect such portions of the throat as it is impossible to reach by direct rays. Any physician possessing ordinary mechanical skill can easily make an instrument of this kind, and it will be found very useful at this season, when so many are suffering from throat difficulties.

#### PASSAGE OF THE PATENT BILL.

Our readers will remember that a bill to amend the Patent Laws passed the Senate during the last session, and, having originated in that body, it was sent to the House, where it was amended in several particulars, and passed on the 7th inst. From a synopsis of the amendments, which we append, our readers will observe that one of the amendments provides that there shall be no extension of any patent when the Commissioner is satisfied the net profits are \$100,000. This provision we hold to be very unjust, because it makes no discrimination between the value of inventions, and the genius and expense incurred in bringing them to perfection. In our next issue, we shall have something more to say upon this subject. In the meantime, the bill goes to the Senate for concurrence in the amendments:—

WASHINGTON, D. C., Feb. 7, 1861.

The Senate bill, in addition to the act to promote the progress of the useful arts, passed the House to-day with sundry amendments; one of which provides that there shall be no extension of any patent when the Commissioner is satisfied that the net profits are \$100,000. All laws fixing the rates of fees to be paid, and discriminating between the inhabitants of the United States and those of other countries which shall not discriminate against the inhabitants of the United States are repealed, and in their stead certain rates established. The Commissioner is authorized to dispense in the future with models of designs, when the designs can be sufficiently represented by drawings.

DEATH OF DR. J. W. FRANCIS.—We regret to record the decease of Dr. John W. Francis, of this city. The sad event occurred on the 8th inst., after a lingering illness. At his death Dr. Francis was 72 years of age, all of which had been spent in New York, where he was born in 1789. For quite a number of years he had been considered an encyclopedia of anecdote, relating to New York manners and customs of years long since departed. He was highly educated in his profession, and was a prolific writer of much ability on medical subjects. His tastes, as well as his profession, led him to become acquainted with all the most noted literary characters in this country, and many of the most distinguished Europeans. His memory was prodigious, his conversation gifted, his heart genial and his tastes cultivated. He was a genuine old Knickerbocker, highly esteemed as a public man, a private citizen, a physician and a man of letters.

DEATH OF DR. ALFRED FREEMAN.—We also regret to notice the decease of Dr. Alfred Freeman, of this city, on the 8th inst., at the age of 68 years. He was one of the most celebrated homeopathic physicians in America, and was distinguished in his profession for great ability and successful practice. And while he was greatly honored in his profession, he was also estimated by all who knew him as a good man—a Christian. He has left behind a large circle of relatives and acquaintances, who do not sorrow without hope, for they believe that his spirit has gone to "the better land."

MCCORMICK'S PATENT EXTENSION.—A joint resolution has passed both Houses of Congress extending the time for the Acting Commissioner to take testimony relating to the extension of McCormick's patent on reaping machines. Those opposed to the extension petitioned for this resolution. The hearing before the Commissioner was to have taken place on the 11th instant, and further time had been refused to the opponents of the patent, which patent does not expire until the 23d of October next. Such an early hearing for an extension was unusual.

AFTER some hesitation, we have decided to make room for the reply of Professor Sprague to Professor Silliman, but we respectfully remind the learned disputants that, as they agree exactly in regard to facts and principles, and are contending only about the meaning of a word, though the discussion might interest that very small number of persons who make the study of philology a speciality, it will hardly be deemed of primary importance by the great mass of the readers of the SCIENTIFIC AMERICAN. If, therefore, these gentlemen favor us with further communications, we shall be more likely to consider them acceptable to our readers if they are directed to the elucidation of some principle, or the plain and simple statement of some new fact in science.

SOMEBODY says—Cork screws have sunk more people than cork jackets will ever keep up. We believe it.