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WHAT CAN BE DONE FOR INVENTORS.—ADVICE GRATIS AND ADVICE FOR PAY.

For the information of our new subscribers, we would state that it is the custom, at the office of this paper, to examine models or drawings and descriptions of alleged new inventions, and to give written or verbal advice as to their patentability, without charge. Persons having made what they consider improvements in any branch of machinery, and contemplate securing the same by Letters Patent, are advised to send a sketch or model of it to this office. An examination will be made and an answer returned by early mail. Through our Branch Office, located directly opposite the Patent Office in Washington, we are enabled to make special examinations into the novelty and patentability of inventions. By having the records of the Patent Office to search, and the models and drawings deposited therein to examine, we are enabled to give an inventor most reliable advice as to the probabilities of his obtaining a patent, and also as to the extent of the claim that it is expedient to set up when the papers for an application are prepared. For this special examination at the Patent Office we make a charge of Five Dollars. It is necessary that a model or drawing and a description of the invention should accompany the remittance.

The publishers of this paper have been engaged in procuring patents for the past sixteen years, during which time they have acted as Attorneys for more than FIFTEEN THOUSAND patentees. Nearly all the patents taken by American citizens in FOREIGN countries are procured through the agency of this office.

Pamphlets of instructions as to the best mode of obtaining patents in this and all foreign countries are furnished free on application.

For further particulars as to what can be done for inventors at this office, see advertisement on another page, or address

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WAR AND TAXATION.

War may justly be regarded as the greatest of all curses; but its influence on a nation is not necessarily debasing. Few events rouse and elevate the nation so much as a just and patriotic war. It raises the tone of public morality and destroys the sordid selfishness and degrading submissiveness which so often result from long-protracted peace. Such was the Dutch war of independence against the Spaniards; such the German war against the aggression of Louis XIV., and the French war against the coalition of 1792. Such were the wars of the Revolution and of 1812. Dr. Lieber very justly inquires, "Whence do Americans habitually take their best and purest examples of all that is connected with patriotism, public spirit, devotedness to common good, purity of

motive and action, if not from the daring hand of their patriots of the Revolution?" The government of the United States—the most kind and paternal on earth—a government that never injured unjustly a single citizen entitled to its protection, was ruthlessly and wickedly assailed by a band of ambitious conspirators who sought its overthrow; and millions of loyal citizens declared, in the stirring words of the patriot Jackson, "the Union, it shall and must be preserved." These burning words were earnestly uttered by their author, and in seizing them as the rallying cry for the great emergency now upon the country, their meaning is intensified a thousand fold. This is attested by the fact that more than 600,000 loyal hearts are now in arms to defend that stirring utterance to the death, and the best blood of the land has poured forth freely in devotion to it. These noble men cannot be armed, fed and clothed without money, and the government must sink to ruin unless the people patriotically submit to taxation to uphold it. Our people are unused to taxation, but they must submit to it cheerfully unless they are willing to see their heritage ruined forever.

We present herewith the following abstract of the tax bill which is now before Congress, as reported by the Home Committee of Ways and Means. Let us all make up our minds to meet its demands without grumbling; and labor and pray the more earnestly that the cause of the present trouble may speedily come to an end.

The bill provides for the appointment by the President of a Commissioner of Internal Revenue, with a salary of \$5,000 per annum, his office to be in the Treasury Department, with a suitable number of clerks.

The country is to be divided as the President may direct, into convenient collection districts, with an assessor and collector appointed by the President for each district, who shall have power to appoint such deputies as may be necessary.

The bill provides for a duty on spirituous liquors of 15 cents per gallon; ale and beer \$1 per barrel; stem or leaf tobacco 3 cents per pound—to add, when manufactured, 5 cents, and on cigars 5, 10 and 20 cents per pound according to value; on lard and linseed oil, burning fluid and coal oil 5 cents per gallon; refined coal oil 10 cents per gallon; gas, per 1,000 feet, 25 cents; bank-note paper, 5 cents per pound; printing paper 3 mills per pound; soap 5 mills per pound; salt 4 cents per 100 pounds; sole-leather 1 cent per pound; upper leather one-half cent per pound; flour 10 cents per barrel; all other manufactures 3 per centum *ad valorem*; on railroad passengers 2 mills per mile of travel; commutation tickets 3 per cent.; steamboat travel 1 mill per mile; omnibuses, ferry-boats and horse railroads 3 per cent on gross receipts from passengers; advertisements 5 per cent on amount of receipts annually; for the use of carriages annually from \$1 to \$10, according to value; gold watches \$1; silver watches 50 cents; gold plate 50 cents per ounce; silver plate 3 cents per ounce; billiard tables \$20; on slaughtered cattle 50 cents each; hogs 10 cents each; sheep 5 cents each. Licenses—For bankers \$100; auctioneers \$20; wholesale dealers \$50; retail dealers in liquors \$20; retail dealers in goods \$10; pawn-brokers \$50; rectifiers \$100; brewers \$50; hotels, inns and taverns graduated according to rental from \$5 to \$200; eating houses \$10; commercial brokers \$50; other brokers \$20; theaters \$100; circuses \$50; bowling alleys \$5 each alley; wholesale peddlers \$50; other peddlers from \$5 to \$20; coal-oil distillers \$20. Income—3 per cent on all over \$600, deducting the income derived from dividends, &c., which are taxed separately; interest on railroad bonds and dividends of banks and savings institutions 3 per cent.; payments of all salaries of officers in the civil, military or naval service of the United States, including Senators and Members of Congress, 3 per cent.; legacies and distributive shares of personal property of deceased persons from 1 to 5 per cent, according to the degrees of relationship; and stamp duties on all kinds of legal and commercial paper, all patent medicines, telegraphic messages, and all goods by express.

An explosion of three barrels of petroleum took place in Wright's varnish factory, Philadelphia, on the 27th ult. It was being boiled in a varnish kettle as a substitute for turpentine.

INDIA-RUBBER ROLLERS FOR WRINGING MACHINES.

Considerable interest is manifested as to how far india-rubber rollers can be used for wringing machines without infringing existing patents. We find upon an examination at the Patent Office that there are sixteen patents on which flexible rollers are used, dating back to 1845—the first of which we have any knowledge was a patent granted to H. Hogan, of Brandonville, Va., July 5, 1845, for a washing and wringing machine. The inventors say, "the rollers of the wringer may be covered with linen or other material to give elasticity." The English patent of W. S. Underhill, dated May 25, 1857, covers broadly the use of rubber or other elastic material for rollers for wringing machines, as will be seen from the following copy of his claim:—

I claim the improvement in wringing machines, by making one or more of the rollers used in such machines of vulcanized india rubber or other elastic or resilient material, or covering such rollers with elastic or resilient material, as before fully set forth and specified.

A patent was granted to Elliot Dickerman, of Richmond, Vt., April 10, 1860, and re-issued Jan. 8, 1861, for a combination of elastic rollers with rigid rollers at their backs. The claim reads thus:—

I claim, in machines for drying clothes by compression between rollers, employing, as one or both of the rollers, for acting upon the clothes, a rubber coated or equivalent elastic and non-absorbant roller, A, so mounted in a suitable framing, B B, that the compression of the elastic material on that side which is acting upon the clothes is attended by a corresponding compression of the elastic material, against a roller, D or E, on its opposite side, as and for the purpose set forth.

After a careful examination at the Patent Office we do not find that any patent has ever been granted in this country which covers broadly the use of india rubber for this purpose.

THE GREAT LONDON EXHIBITION.

It is announced in recent foreign intelligence that the Great Exhibition building in London is completed, and has formally passed from the hands of the contractors into possession of the Royal Commissioners. Owing to the extraordinary state of the country, and the refusal of Congress to appropriate money to facilitate the objects of the Exhibition, the American Department will make comparatively a poor show. Nevertheless, there will be several articles in the Exhibition of which our countrymen will have occasion to feel a degree of just pride. Even under the most favorable circumstances, we could not expect to compete with European nations, owing to the fact that we are so far away. The interests of our exhibitors will be carefully guarded by Mr. Joseph E. Holmes, who is the acting agent of the American Commissioners appointed by the President. Mr. Holmes is a thorough-going practical man, and will do everything in his power to sustain the honor of our country and promote the interests of our exhibitors. He was Superintendent of the Machinery Department of the Crystal Palace Fair held in this city in 1853, and performed his duties with fidelity. Mr. Holmes will act as special correspondent of the SCIENTIFIC AMERICAN; and our readers may expect to gain from his observations much useful information, especially in the department of machinery.

COLORED CANDLES FOR ILLUMINATING PURPOSES.

Wax candles are made of different colors, but they all emit a white light. Why may not candles be manufactured by introducing certain chemicals into the material from which they are made so as to show a variety of colors, such as blue, red, green, &c. ? By arranging such candles in tasteful groups, beautiful effects may be produced in illuminating buildings. The time, we predict, is not far distant when we shall have occasion to rejoice over the settlement of our national difficulties, and then will be the time for a general rejoicing and illumination throughout the country. If some ingenious chemist will devise a way of embracing a cheap chemical with any of the material used for illuminating candles so as to render the light emitted from them of any desired color, we predict for him a fortune for his discovery.

THE work of gun-making is crowded to such an extent at the Springfield, Mass., Armory, that all the daylight is used, and over \$5,000 worth of gas was burned during the last quarter.