Scientific American.

ESTABLISHED 1845.

MUNN & CO., Editors and Proprietors.

PUBLISHED WEEKLY AT NO. 87 PARK ROW, NEW YORK.

O. D. MUNN.

A. E. BEACH.

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VOL. XXXVIII., No. 13. [NEW SERIES.] Thirty-third Year.

NEW YORK, SATURDAY, MARCH 30, 1878.

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ter carrier offices.

culties. It provides that newspapers and other periodical has applied in her manufactories, she has failed to train her publications shall be registered yearly, and that thereupon own people in inventiveness; the result is, that Switzerland, the same may be sent at a uniform rate of two cents per of all civilized countries, is the most backward in the adaptapound or fraction. The periodical must be regularly issued, tion of every skillful appliance in every part of her economic at stated intervals, designed for dissemination of public in- life." formation, formed of printed paper sheets, and published from a known office.

THE BEST WAY TO ENCOURAGE INVENTION.

In every discussion of the question of invention and its relations to human well being, it is assumed as a fact indisputable that it is a good thing to encourage invention. After the worst has been said against the incessant changes incidental to the activity of inventors, the common sense of all civilized men assents to the assertion that, in the aggregate, the labors of our inventors have been enormously beneficial, and that there is no reason to suppose that the time will come when invention will cease to be beneficial. The only ing the good work.

On the one side are those who hold that the simplest, most direct, and honest method is to recognize the inventor's exclusive right to the products of his thought and labor, and to place such intellectual property, for a definite time at least, on the same legal footing that other sorts of property enjoy; and in proof that this system does produce the effect desired the friends of patent rights point to the inventive inventions of all other nations, have not enabled the factories activity developed in this country under the working of such a system.

The objectors say no; the result observed is due to other causes. Necessity is the mother of invention. A race of inventors has sprung up in this country because they were needed. Human labor was scarce and high. A new country was to be conquered and brought under cultivation. Wide fields demanded rapid means of sowing and harvesting. A scanty population and distant markets demanded greater themselves and their processes in the hope of reaping the refacilities for rapid transit. A high ideal of life demanded a thousand new elements of gratification; and to supply all able, hold out before our artisans as incentives to invention. these demands a thousand new machines and processes had to be invented.

To a great extent all this is true, and much more might be said in this direction; but there is in all this no proof that proved most productive of good results. without the encouragement the patent laws afforded the TECHNOLOGY.—Description of the United States Mint, Philadelphia, Pa., and the method of Coining Money. The Receiving Room. Deligner States Mint, Philadelphia, and the method of Coining Money. The Receiving Room. Deligner States States. The Melting Room; the Melt; the Assay. Assaying Gold. The Subrating Room. The Losses. Rolling. The Technology of the Paper Trade. Lecture IV. By WILLIAM Revolving and Stationary Boilers. The Sinclair Process. These lectures treat of every department of Paper Making; the various materials, as hemp, espartor, rags, wood, etc; beating, bleaching, boiling, sorting, and all other processes, with practical instructions, and descriptions of the best machines.

Orange and Stationary Boilers. The Sinclair Process. These lectures treat of every department of Paper Making; the various materials, as hemp, espartor, rags, wood, etc; beating, bleaching, boiling, sorting, and all other processes, with practical instructions, and descriptions of the best machines.

Orange and Stationary Boilers. The Melting Room; the Melti; the Assay. Assaying Gold. The States Month of the States Mint, Philadelphia, personal treatment of life in this country have been precisely paralleled in northwest passage was enough to justify to the masses the cost Northern Asia. Over a large part of Russian Asia the climate is similar to that of our Northern States, wherein inventors have been most prolific. Its vegetable productions are very like ours. Our familiar forest trees abound in the value of Arctic expeditions. Both these objects failing, in the worder remained only the possibility of glory to be won, or 3 illustrations.

Petroleum Oil Gas for Lighting Passenger Cars.—The Bitumen of Judea Process. most of the alleged demands for invention would have been Yankee pioneer. His inventions-where are they? He ciate. quickly adopts the railways, telegraphs, and other products of living of the civilized world; the Cossack, under similar natural conditions, open to the same natural necessities, endowed with the same natural gifts, has conquered a maghis influence upon civilization is nil.

> But the Cossack is of a different race, it may be objected. lunder American influences, the least intelligent of the least quick retort was, "What of that?" Meteorology was then

> inventive race in the world, the Chinese coolies, become A new bill providing for the better classification of mail inventors, as our patent records show. "Ah!" our objector matter and rates of postage thereon will soon be submitted continues, "that is the point. The surrounding influences, to Congress. The general principles on which the measure of education, newspapers, and the rest, make all the differis based are that the Government should encourage the dis- ence here. The Cossack has had none of these; nor to so

> Well, then, let us look at the Yankees of Europe-the Swiss. They are of our own race. They are a free people. gent. The facilities they offer their youth for industrial what may be sent, and fix the postage rate; that the postage | long ago adopted the very means of anti-patent "encouragehas there been left to the natural laws of free trade and The essential object is to secure uniformity, and thus to open competition, so-called; that is, the open piracy of the obviate the constantly varying regulations or interpreta- inventions of all nations. The Swiss have not allowed intions of the present postal laws relative to newspapers and vention to be "hampered" by pre-existing claims. They periodicals made by different officials. These, when involv- have not allowed inventors' royalties to increase the cost of ing discrimination as to the class of periodicals, are apt to their manufactures. And the result is—unrestricted and be vexatious and rarely to meet with general acquiescence, unrivaled progress in the arts? Wide awake mechanics and while they leave room for doubt or error which may easily clever inventors? That ought to be the result, if the antibecome oppressive to those whose business largely depends patent theorists are in the right; but such is not the result. upon the mail service. At the same time, the law as it now As Professor Shaler has so pertinently observed: "Despite stands presents many anomalies, as, for instance, the fact that the remarkably advantageous position of Switzerland, the a monthly weighing just over two ounces, published in any natural vigor and capacity of her people, and their adof the large free delivery cities, pays \$240 postage per thou- mirable system of public education, there have been disadsand subscriptions in the city where published, while but vantages in connection with this plundering system (cf reabout \$50 postage is charged on the same if sent to any serving the power of using all inventions without payment other part of the country, with free delivery at all other let- therefor) that give us another proof that, in the long run, honesty is the best policy. All the while that Switzerland The bill before us seems well adapted to meet all diffi- has been trusting to outside training for every invention she

> The impolicy of their course has lately come home to them with alarming force. For centuries they have led the world in the art of watch making; yet to-day American watches as good as their best can be sold at their doors for less money than they can make them. "Our well developed mechanical imagination has so organized the labor and the machines used in this branch of manufacture, that the advantages derived therefrom outbalance the vast advantages of Swiss labor. Our labor is double or more, our taxes double or more. our interest about double that of Switzerland; we have no traditional skill; nevertheless inventiveness conquers them all. Yet the inventiveness used in this work is but a very small part of our vast store of this priceless product of point of difference is in regard to the best means of further. | imaginative labor that has been created for us by our patent system."

All the conditions favorable to invention, that can exist in any country in the absence of patent rights, have been at work in Switzerland; but the Swiss have failed to distinguish themselves as inventors. All the conditions favorable to successful competition with the manufactories of other countries, with the privilege of using without paying for them the of Switzerland to maintain their original supremacy. They have fallen behind because their artisans, lacking the stimlus to invention which patent rights afford, have fallen behind their brothers in this and other countries. They do not improve themselves; they do not improve their means and methods as ours do; they are not so fertile in resources, inventive, creative. And however high their technical skill may be. they cannot compete with men who are ceaselessly improving wards which patent rights, and patent rights easily obtain

There may possibly be better ways of encouraging the arts and sciences, but so far as human experience has gone the simple recognition of an inventor's right to his creations has

A POPULAR PROJECT.

Dues Process.

The Bitumen of prairies. Its soil is as fertile as ours; its minerals abundant; some indefinite promise of advantage to science to be gained Justea Process. and its recent conquerors have many of the characteristics through polar observations. For the first the public cared of our own people. An American traveler styles the Cossack little; for the second it was at best very doubtful whether the Yankee of Asia. He is energetic, thrifty, ingenious, the profit would justify the cost. And to the pertinent queshandy with tools, can turn his hand to anything, and is tion, What is the use of spending more money and risking mentally as bright as the average Yankee. His necessities— more lives in that direction? the advocates of Arctic exploranatural necessities—have been as numerous as those of the tions had little to answer that the unscientific could appre-

> But now, thanks to weather warnings, a significant change of Western invention, but adds no new ones. Our inventors, has come over public feeling on this point. The most pophave revolutionized the industries, the commerce, the modes 'ular project in Congress and out, at this time, is Howgate's scheme for the scientific exploration of the regions about the North Pole. Committees of both Houses of Congress have made reports decidedly favoring the project, while promi nificent country, but he lives much as his fathers lived, and nent commercial and scientific men everywhere have expressed their approbation of the undertaking.

> Formerly when scientific men insisted that polar observa-True enough; but invention is not a matter of race. Brought tions might be helpful to the science of meteorology, the