



NEW YORK, JULY 15, 1848.

Congress and Patent Rights.

We have received not a few communications lately, relative to the action of Congress in extending Patent Rights. All of these communications are from persons who have suffered from unjust taxation by agents of Woodworth's or Blanchard's patents. We have been requested in some instances to publish these letters, but have refrained from doing so because we believe that no good would be accomplished by their publication. An exhibition of wounded feeling or injured interest, is not exactly a theme to rouse public attention to existing evils. Facts—plain, unvarnished facts—are the sturdy things that cannot be refuted. We cannot denounce Congress for extending patent rights. If the people send men there to pass laws that inflict punishment upon the people, who is to blame but those who send them? That there is great injustice done sometimes by Congress to inventors, especially by neglecting the Patent Office, is a well known and crying evil, but then whose fault is that? The people's. Why send men there that talk more and do more for party and personal interests, than for the advancement of science and the encouragement and protection of inventors' rights. One letter says, "it appears as if money can do any thing in our country and with our laws." We do not believe this.—We believe that moral principle is superior to wealth in its most potent form, in this country especially. It only wants an exhibition of moral power in our people upon any question to carry it to a triumphant consummation. Money no doubt may place barriers in the pathway of exact justice and right, but moral influence can remove all such barriers out of the way. Let our people then exert a moral influence upon those questions that affect their interests, and success is not problematical.

There are some important patent suits pending respecting Blanchard's patent. We will be able in a few weeks to give some information relative to the issue.

The Iron Mines of Nova Scotia.

There is perhaps no country in the world richer in the ores of the more useful metals than Nova Scotia. Beds of the most valuable coal are found a few feet below the surface along with iron ore and limestone, the very requisites of a great iron manufacturing country. Possessing such valuable internal mineral resources and outwardly the best fishing ground in the world, it might well be supposed that this colony of Great Britain would be one of the brightest jewels in the British diadem, at least in proportion to its extent. It undoubtedly has the best natural resources of any of the British colonial provinces, and being so near to England, with a continued open navigation, she might, were not all the Ministries of England wretchedly ignorant of these things, be one of the best and most useful provinces under the British crown. That she is not so, is well known, not perhaps to the great blame of late governments, as to the heartless policy of previous ones. The iron and coal mines of Nova Scotia would long since have famous in the eyes of the world, only that they were bartered away for the smile of a courtesan to the late brave Duke of York—whose gallantry was proverbial, as the inhabitants of Acadia know full well to their sorrow, or else her minerals would never have been made a present of to him to pay off his mistresses debts, and thus allowed to fall into the hands of a monopolizing company that has been a canker on the prosperity of that beautiful colony.

We are glad to perceive that the eyes of the Acadians are opening to the evils under which they have labored, but not like old Rip, do they perceive a new world around them—but

they must make one. No doubt that time will come and England will endeavor to make amends for past evils.

We perceive that Robert Mushat, a man famous as an iron manufacturer and smelter, has lately brought into notice, through the columns of the London Railway Gazette, the superiority of the Nova Scotia iron and steel ores, and he asserts that they are superior to the Swedish or any other for the manufacture of steel. He says of Britain, "The opportunity now presents itself to shake off this dependence upon foreign nations for a supply of this essential commodity; and, from her own colony of Nova Scotia, England may, if she chooses, henceforth look for her supply of steel or steel-iron. From an examination of the samples of iron ore forwarded to me by the Londonderry Mining Company, I am enabled to pronounce that no ore of equal excellence has hitherto been discovered in the United Kingdom; nor have I met with any that will bear comparison with it from abroad; and this has recently been confirmed to my mind by a series of experiments, from which it has resulted, that cast-steel of the most perfect quality can be produced at once by simple fusion from this most remarkable iron ore. I am aware that this assertion may appear startling, and that it may excite a sneer among the veteran steel makers of Sheffield; but I am about to furnish the Londonderry Mining Company with samples of bar and cast steel, which shall not suffer by comparison with that prepared from the best Swedish marks; and I shall be happy to convince any doubting steel maker, by ocular inspection, of the ease and facility with which the Londonderry ores can be, by one process, converted into cast-steel of first rate excellence, and this company possesses inexhaustible supplies of iron ore, whose quality is unrivalled. Coal, charcoal, limestone and building materials, are all in abundance on the spot—while the climate is temperate, and the facilities of transport very great. From the nature of the ore and from the results obtained in India from using hot blast in a charcoal furnace, I am very confident that 120 tons per week could be produced from a blast furnace 7 feet diameter at the boshes, and 24 to 28 feet in height, blown with heated air. Pig iron thus prepared, would take the precedence of the Scotch iron in the American markets; and it might, I believe, be manufactured at a cost considerably lower. For the purposes of steel making, the ore might either be at once converted into cast steel by fusion, or bar steel and cast steel might be manufactured from it by the ordinary methods. The mineral, called ankerite, in the Londonderry mines, is the celebrated spathose, or steel ore; and it may be observed that, in every locality where spathose iron ore—i. e. carbonate of protoxide of iron—is found, rich veins of lead ore invariably accompany it, and, in general, zinc and copper—the copper ore being in the state of carbonate, which is the most simple and favorable for the operation of smelting."

We are glad to call attention to this subject. We have a number of subscribers in Nova Scotia and New Brunswick, and as the time when the trade of this whole Continent will be reciprocal, is not far distant, the development of the resources of one part must be a benefit to all.

Mechanics.

When a mechanic, by his industry or skill, or by a fortunate combination of circumstances, which confer no honor on himself, emerges from obscurity and poverty, and rolls amid all the luxuries of uncounted wealth, he often seeks to forget his origin, in deference to the blind prejudices of society, and the dictates of a perverted and flattered heart, worse than cowardly, denies himself to his great family kindred, and turns up his pampered nose at the mere mention of a mechanic, the facts speak stronger than words. Why should mechanics, who combine and exhibit in their diversified range, the highest and most plastic energies of genius, on whose laborious, never-tiring skill, wealth and luxury depend, and to whose power pride is subservient to its swelling "pomp and circumstance," be treated as inferior beings among the mass of humanity? Merit should be the passport to so-

ciety and consideration; and the state of society will be artificial and disordered until merit shall be thus respected. We will admit that the interior estimation in which mechanics are regarded, is to some extent attributable to their own fault. They do not sufficiently respect themselves. They do not assert and properly defend their rights. Let them, as a class, bestow more attention on themselves—cultivate a greater dignity and polish of manners, and attend generally to those minor accomplishments which constitute, in the eye of a correct, not a sickly taste, the true gentleman. They will thus commend themselves as the representatives of that skill and genius which they exhibit in their various departments, and be respected as such delegates, unencumbered by factitious impediments. We think we see in the movements of the age a progressive tendency to their elevation. It is not the Agrarian principle of equality in spite of dollars and cents! It is founded on the recognition of the internal man, in whatever guise he may be found—the valuation of the jewel in the midst of repulsive incrustation—the discernment of the true ore, though deeply imbedded in the common earth. It is the test of equality to which the great Scottish poet alludes—

"The rank is but the guinea's stamp,
The man's the gold for a' that."

The operation of our democratic institutions is helping on this moral consummation. It is planting on every side free public libraries, and other means for the development and improvement of the mind and heart, and offering all facilities, in spite of the disparities of external advantages, to achieve an equality with the highest standards of mental and moral excellence. We say then to the mechanic, lift your eye to the standard, and keep it in view. Do your part in the movements of the day, and compel, by your efforts, the recognition of your just position.

Burning of a Railway Bridge.

The London Sun gives the following account of the burning of a Railway bridge, which was in the course of erection over the river Usk in Wales. The bridge was built of wood 400 yards long and was completely destroyed. The workmen engaged in completing the central arch, which was an immense pile, consisting of several tons weight of timber and iron bolts, were busy at work driving in the bolts when one man used a bolt which had been heated to an extraordinary degree. This immediately ignited the adjoining timber, which being highly kyanized or "pickled," was like gunpowder to ignite. The man had a bucket of water at hand, as was always usual, but it was useless: for in less time than we have written the last five lines, the flames leaped along on each side from the centre to each end of the bridge, and the whole extent was in a terrible blaze in a moment. The men with difficulty escaped with their lives. A team of trains were passing at the time, with the horse put to their utmost gallop, were obliged to dash through the flames to escape.

The screams of those who saw the first terrible conflagration were awful. The whole town rushed to the great stone bridge adjacent, and hundreds of "navvies," carpenters, masons, laborers, tradesmen, and gentlemen, were quickly on the spot; but it was of no avail. The town fire-engines were brought but they were syringes contrasted with the awful flames bursting from the surface of the piles, the rails, the arches, and in fact, wherever the fire could lay hold of wood to burn. The timber work was so enormous that it took a considerable time to burn any portion wholly away; while the patent composition used to preserve the wood lent assistance to the flames, which rose up with blue and black smoke, filling all the heavens. At about nine o'clock, the ponderous work of the central arch, having lost its abutments in the fire gave way with a terrible crash, and soon after this had fallen in, portion after portion gave way, until, with the exception of here and there a solitary black and charred fragment, with some portion on the banks, the whole of this magnificent work was wholly destroyed. The river was black with burning wood which fell into it; and the tide being receding, the banks became strewn with en-

ormous pieces of half burnt wood, like the coast after a wreck. The bridge was almost completed, and cost upwards of \$100,000 in the erection.

Bentz's Unbranning Machine.

As we have received a great number of communications respecting Mr. Bentz's Unbranning Machine, the following communication will at once satisfy the public, who are anxious to see a description of it published. It is well known that if an invention is published in any periodical prior to application for a patent in England, it will effectually preclude the granting of one. It is a contemptible and barbarous law, but while it is law, it must be complied with.

BOONSBORO, Md., June 30, 1848.

Messrs. Munn & Co.

GENTLEMEN.—On my return I found on my desk your esteemed favor of 25th inst., and contents noted. It would give me pleasure to give you the particulars of the "Unbranner," as you request, but I am debarred from doing so at this time, from the fact of just having taken steps to secure the patent in England and Colonies. You are probably aware that as soon as an invention is published in England it vitiates such patent there, and to have it published in your valuable paper would at once bring it before the British public, and give me some difficulty. As soon as I obtain my patent there (which will now be shortly,) it will give me pleasure to communicate through the Scientific American, all the facts connected with this subject, which I doubt not will be interesting to your numerous readers. I am very truly, yours, &c.

S. BENTZ.

Something of a Curiosity.

A short time ago, there was found at Kitting, Armstrong, Co., Pa., a gun barrel, in the trunk of a hemlock tree, the barrel passing through the tree nearly horizontally, and almost grown in. The barrel was a little more than three feet in length. It had a square breech and fluted to the muzzle, which is also what is called 'bell-muzzled'—differing from any style of gun now in use, or which has been used within the recollection of the 'oldest inhabitant.' It had the appearance of being an elegantly finished article, its sights being gold, and breech pin pure silver. How it came there, and how long it has been there are the questions which elicit solution. It must have been lost or left there before the tree commenced its growth; but how long before, and by whom no one can tell or surmise. The age of the tree, judging from the number of grains in it, on either side of the heart, is 110 years, and yet, strange to say, the gun bore but very slight evidences of rust or decay. When found, the breech was just above the surface of the ground, and the muzzle slightly imbedded in the earth. It was loaded with a ball.

Scientific American—Bound Volumes.

The second volume of the Scientific American, bound in a superb manner, containing 416 pages choice reading matter, a list of all the patents granted at the United States Patent Office during the year, and illustrated with over 300 beautiful descriptive engravings of new and improved machines, for sale at this office—Price \$2.75. The volume may also be had in sheets, in suitable form for mailing—at \$2.

The back Nos. of the present volume may also be had upon application at the office.

THE SCIENTIFIC AMERICAN.

Persons wishing to subscribe for this paper have only to enclose the amount in a letter directed (post paid) to

MUNN & COMPANY,
Publishers of the Scientific American, New York City

TERMS.—\$2 a year; ONE DOLLAR IN ADVANCE—the remainder in 6 months

Postmasters are respectfully requested to receive subscriptions for this Paper, to whom a discount of 25 per cent will be allowed.

Any person sending us 4 subscribers for 6 months, shall receive a copy of the paper for the same length of time