Scientific American.

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More Encroachments on the Patent Office.

We learn from good authority, that, on the 22nd ultimo, the President of the United States, under the escort of the Secretary of the Interior, paid an official visit of inspection to the Patent Office building. The wily Secretary took advantage of the occasion to descant upon the pressing requirements of the Interior, the Land, and the Indian Departments, and then grew eloquent upon the unnecessary space occupied by the Patent Office, proposing to lop off a branch here, another there, &c., &c. The President is stated to have replied, in his bland and modest manner, that as far as he saw, the Patent Office appeared to need an extension rather than a restriction.

To this sensible view, we are sorry to say, he did not adhere. Yielding to the solicitations of the Secretary, and the plea that fire-proof space, for the preservation of certain important Indian papers, *must* be had, the President assented to the absorption of six of the Patent Office rooms, and they have, we are informed, been accordingly transferred. Thus was consummated another of those official outrages on the rights of inventors and the interests of the country, regarding which we have felt it our duty, of late, so bitterly to complain. New movements by the Secretary, placing the Patent Office more completely than ever under his thumb, and adding insult to injury, are now, we understand, in progress.

Under the laws of the Republic, the Patent Office, as it now stands, is almost an independent Department. Its chief is required to report the state of its affairs directly to Congress. It has ever been the desire of our statesmen to isolate it, as far as practicable, from politics, to relieve it from outside subservience, to promote its dignity, to increase its facilities, and in every way to encourage its growth. In its first organization it was nominally attached to the State Department, but was never regarded by any of the Secretaries of that branch of government as subject to their interference or control.

The law which created the Secretaryship of of the Interior, merely transferred the nominal connection then existing between the Patent Office and the State Department to the Interior Department. The Secretary of the Interior has never received, by statute, a single iota more of authority over the Patent Office than the Secretary of State formerly held. But, in the absence of a Commissioner of Patents, the Secretary of the Interior becomes his own lawmaker, and aspires to self-constituted powers. Ignorant of the wants of the Patent Office, and disregardful of the views of its officers, he assumes a control over it for which he is utterly unqualified by nature, and unjustified by right.

There is but one permanent remedy for this miserable state of affairs, and it consists in the absolute separation of the Patent Office from the Interior Department. If inventors will but rouse up, appeal to their Representatives, and show a determined spirit in the matter, this much-needed reform may, we doubt not, be triumphantly carried through the next Congress.

The Weight of Coal.

It is rather remarkable that the price of coal this season is about one dollar less per tun than it was last year. If it had been cheaper then it would have proven a greater blessing, because of the great numbers who were suffering for want of employment in all our cities, and were, consequently, less able to purchase winter fuel. We do not understand how one coal dealer can sell coal for half a dollar (and in some cases more) per tun less than another, but such is the fact. The dealer who charges the high price asserts that those who sell for less must cheat in the weight, and thus he makes an excuse for himself. This may be so, we cannot say; but we take this opportunity to tell our readers the same story we did last year, viz., that a tun of coal is not 2,000 lbs. merely, but 2,240 lbs., and every person should receive this weight, as it is the legal amount provided by law, and any seller giving less can be sued for fraudulent dealing. We are afraid that many dealers sell 2,000 lbs. for a tun; and we think that some high-priced sellers of coal are no more scrupulous about the exact weight than those who sell at lower prices. Last fall we directed the attention of our city authorities to this matter, and demanded some means for the public weighing of coal, in order to impose a healthy check upon those who might presume to deceive by false weights. Nothing has been done to carry out the reform in our city, but in Boston, on the other hand, as we have been informed, the city authorities have provided means whereby every buyer of coal can easily have even-handed and exact justice done to him, by demanding his coal to be weighed at public scales if he suspects he has not received the full amount.

Reminiscences of the Paris Industrial Exhibition. No. 2.

Clocks, Electric Apparatus.—It is now about five hundred years (according to the best information we can gather upon the subject) since the first clock was invented and put into operation; and for more than two hundred years their manufacture was carried on only upon a very limited scale. The kings and nobles of Europe were the only ones, during this period, who were able to support the luxury of a clock.

The invention is not due to a single mind. On the contrary, a great many men of genius have been successively engaged in rendering the clock what it is to-day, an almost unerring recorder of the passing moments.

The old mummy-looking wooden clock, "that ticked behind the door" when we were boys, made its appearance in Holland about 200 years ago; and within the past quarter of a century the clock has been reduced and simplified till it is no longer regarded as a curious machine. The farmer with his jack-knife and tweezers is no longer afraid to perform a surgical operation upon his diseased time-keeper; and that ghost of a "clock fixer" has disappeared from the public highway.

The clock has become an article of such common use for the dwelling and the office that we forget its value and importance. And it is interesting to reflect what great improvements have been made in this branch within a few years; and so cheap are they now that every family can support one or more *institutions* of this kind; and its tickings are suggestive monitors of man's mortality.

In the great French Exhibition the display of clocks was very grand, and we were surprised to find so many large clock manufactories in Paris. The traffic in this branch is immense; and no matter how poor or how rich a Frenchman happens to be, he is sure to have a good looking clock in almost every room in his house. The Yankees beat the French "all hollow" for cheap clocks. For fifty cents we can supply ourselves with time enough to last from 20 to 24 hours every day; but for beauty of finish and good style of casing, the French are in advance of us. The leading clockmaker in Paris is Paul Garnier. His workshops are a model of neatness and good order, and his skill as a manufacturer is unsurpassed; his clocks are used by nearly all the continental railway companies. Among his beautiful collection on exhibition we were particularly well pleased with some small traveling clocks of a parallelopiped form, having four crystal faces to show the time on all sides, and so constructed as to stand the roughest usage. The finest monumental clock we ever beheld was one placed over the American Department. It was encased in a splendid glass cover where every part of its works could be readily examined. It presented no special novelty in its arrangement of mechanism, but it exhibited the highest order of skill in workmanship.

Collin & Wagner exhibited some beautiful clocks, embracing a peculiar uniform movement, which was obtained by a differential pendulum and two friction cones. The escapement consisted of pallets actuating a horizontal ratchet wheel, and the regulating movement was produced by the friction cones. This clock was provided with a style which traced out a straight line on the co-ordinates and abcissa of a cylinder, thus giving evidence of its uniform movement.

Electric clocks were exhibited in great abundance, but they were more remarkable for beauty of construction than for anything specially novel. No essential improvements seem to have been added to them since 1852. In that year the beautiful electric clock of Detouche & Gobert, in the Exhibition, was illustrated in the Sci. Am., Vol. 8, page 24.

The Electric Telegraph is now becoming very generally employed in Europe, and it is gratifying to our countrymen to know that Morse's American system is generally adopted. Certain restrictions, unknown in this country in the use of this wonderful invention, exist on many parts of the European continent, and it is thus made an instrument in the hands of Governments, and not as a means of social and commercial promotion. In France, all messages to be sent by telegraph must be submitted to the Government authorities at the stations, who have full power to refuse or permit their transmission. In Prussia there are special signs for the use of the officers of the army, and also for civil functionaries, differing from each other, and understood only by them.

Paul Garnier, of Paris, exhibited a telegraph "commutator" of very ingenious construction, intended to be used with Morse's telegraph. Instead of operating the key by hand for sending messages in the common way, the message was composed beforehand, and disposed helically along a cylinder, which is provided with two thousand keys, made of some non-conducting substance, and according as they are arranged on the cylinder they effect the breaking and closing of the circuit and write the message. The operator turns a small winch, and his message is written a thousand miles distant, in dots, dashes, and spaces, with the greatest rapidity. We witnessed a dispatch of two hundred and ten words transmitted by this apparatus in one minute. The mere idea thus ingeniously carried out by M. Garnier, as applied to the Morse telegraph, is undoubtedly new; but it was substantially applied to Bain's telegraph in 1847, as published in the Sci. Am. Vol. 3, page 273.

Bain composed his messages on strips of perforated dry paper, which opened and closed the circuit. These strips were run between rollers by simply turning a small winch, and thus the message was sent buzzing through the wires at a great rate. We are very glad the same principle has been applied to the Morse telegraph. Like the famous revolver, the commutator is previously supplied with a number of charges ready for action at the moment required.

Perhaps the most distinguished maker of telegraph apparatus in France is M. Breques. He exhibited quite a number of beautiful signal dial telegraphs, such as were in general use in Europe a few years since, but are now bending before the superior American system. M. Garnier had an eye, no doubt, to the future of the Morse telegraph in Europe, when he applied his genius to the construction of his "commutator."

Express Charges on Models.

We would advise inventors who are shipping models to us by express, to send us their receipts of pre-payment of freight charges. We are often called upon to pay charges on boxes when they are delivered, and upon informing the inventor of this fact he has sent us a receipt showing that the charges were prepaid.

Express companies ought to be more careful or honest in their accounts. This attempting to collect the freight charges the second time is a very mean business, and is carried on to a great extent, it is time it was abandoned.

Machine for Re-sawing Boards.

Pearson Crosby, of Fredonia, N. Y., has applied to the Commissioner of Patents for an extension of the above important patent for seven years from the original date, which expires on the 2d of November next. The case is to be heard on the 22d of this month. Parties who have opposition to make to the extension must appear at the Patent Office at that time.

The art of gilding, plating, and electrotyping is practiced in this country with great perfection. P. J. Clark, 14 Fifth street, Pittsburg, Pa. has sent us a medalion likeness of Henry Clay. It is an elegant piece of work, and reflects great credit upon Mr. Clark's skill in this beautiful electrotyping art. We thank him for his highly prized gift.

Great Fair of the American Institute.

The Twenty-seventh Annual Exhibition of the American Institute opened at the Crystal Palace, New York, on the 4th inst., and is now in the highth of its glory.

The old Institute has done well this year. Young go-ahead America has ruled in her councils. Dropping from her Committee lists some of her oldest old fogies, and appointing in their places younger men, of energy and discrimination, she has taken a stride far in advance of any of her previous achievements.

The display this season is a splendid one, creditable, in the highest degree, to all the parties concerned in its realization. It is true that the Palace building, stripped of its many partitioned compartments, with their rich and splendid linings, and their crowds of rare and wonderful objects, products of every clime, does not present such a vast and diverse array of attractions as were once gathered within its walls; it is true that the present display by no means fills up its allotted space, and that the visitor has ample room to walk around each particular object without the least danger of being jostled by the crowd; still, the collection of industrial specimens is a very large one, and possesses peculiar interest from the fact that the whole, or nearly the whole, is of American production.

The success of the present exhibition leads us to believe that, if proper steps were taken, there would be no difficulty in annually filling an edifice as large as the Crystal Palace, from top to bottom, with magnificent specimens of home industry and genius. Would that there were some national organization of this sort, whereby each State might be separately represented, and the manufacturers, mechanics, and artizans of all might assemble to vie with each other in honorable contests for superiority of skill and perfection of results.

The Mechanical Department.

The mechanical department of the exhibition will first claim our attention. In glancing over it we were struck with the general novelty of the machines there shown, and the large number of recently patented inventions now, for the first time, publicly developed. There is a marked absence of several of the old stereotyped features of former Fairs, to wit—steam engines of common construction, noted only for beauty of polish; iron planing machines and lathes, with which everybody is familiar; dusty grist mills, having no special novelty, &c. Such-like articles, that have hitherto usurped the most conspicuous places, are made to stand one side, and in their lieu we have fresh improvements, of novel form and peculiar characteristics.

Motive Power.

The motive power which gives life to the whole machine room is derived from six engines, of which four are driven by steam, one by gas, and one by a combination of steam and air, called by its inventor the Cloud Engine. The two last are intended as substitutes for steam. Of the four steam engines, the larger one is of the horizontal kind—12 horse power—exhibited by Tyler & Co., of Springfield, Mass. Its only peculiarity is in its truss frame, which has great strength, with a comparatively small weight of metal.

Oscillating Engines.

There are three portable steam engines and locomotive boilers, the engines being constructed on the oscillating plan, and placed on top of the boilers. They look, for all the world, like monkeys on horseback. Notwithstanding their odd appearance they are very effective. Two of them are from the well known manufactory of Geo. Vail & Co., Morristown, N. J. The other is a new invention, by Mr. J. A. Reed, of this city, and is now for the first time exhibited in this country. It is called the "Chronometer Oscillator," owing to the perfect regularity with which it moves. This improvement was illustrated in the last number of the Scientific American; it was also patented in Europe through the Scientific American Patent Agency. One of these engines is at work in the Parisian Exhibition, where it has greatly attracted the notice of European engineers. It seems to be a highly valuable invention.

Gas Engine.

Our attention is next fixed upon the "Ignition Engine," invented and patented by

Alfred Drake, M. D., of Philadelphia, Pa. This is the first exhibition of the machine; the apparatus consists of a horizontal cylinder of 16 inches diameter, with piston, crank and a large fly-wheel—the whole resembling in size and appearance a steam engine of say 25 horse power.

Everybody has heard how gas accidents sometimes occur in great cities like New York, —how the pipes in apartments are sometimes accidentally left with their stop-cocks open,—how unwitting persons enter with lighted candles, and explosions ensue,—how vaults under the street, becoming thus charged with gas, have blown up with tremendous force, attended with loss of life and property.

Mr. Drake is a philosopher after the Franklin school. He proposes to harness up this rampant power, and put it to a useful service. He admits a mixture of gas and air into his cylinder, and then touches it off with a hot iron. An explosion is the result, and the piston is driven to the other end of the cylinder. This operation constantly repeated gives rotary motion to the fly-wheel. "It is well known," says the inventor, with correctness, "that certain gases and vapors, when mixed with definite proportions of atmospheric air, form inflammable compounds, which burn rapidly or explosively when fired, the heat evolved occasioning a large increase of bulk, or an expansion.

When a mixture of one part of coal or illuminating gas with nine or ten times its bulk of atmospheric air is confined, as in the cylinder of an engine, and then ignited, a great pressure is exerted by the expanded products of the combustion in every direction. This," continues Mr. Drake, "is the power which actuates the "Ignition Engine," which may be described, in fact, as an air engine, using fuel in a gaseous form in its cylinder, and dispensing with a separate heater, furnace, smoke-pipe, &c."

We should need an engraving to convey a clear idea of the internal parts of the machine. As a mechanical curiosity, it is certainly interesting to look upon. But so far as economy or practical utility is concerned, it is to be classed with Ericsson's chimera.

Mr. Henry Meigs, Recording Secretary of the Institute, in his address at the opening of the Exhibition, delivered a dreadful broadside against our old friend Steam, and at the same time heralded, with a loud blast, the advent of this new gaseous substitute. Only hear him: —"Look at the Ignition Engine, sought for these hundred years, to be rid of that terrible boiler, whose burstings have killed more human beings than were killed at the capture of Sevastopol. The inventor, Dr. Alfred Drake, of Philadelphia, now here with his engine, forms the gas as fast as it wanted, and injects regular measured charges of it into his cylinder, where it ignites by means of a small piece of iron, which is kept hot. The ignition of the gas forms the requisite vacuum, giving the weight of the atmosphere only for power, and not by expansion, so that the danger from explosion is nothing. Space is saved, and in all things a saving is made of probably forty per cent. Here is a great triumph of mechanical skill, entirely subject to your will. Not like that tremendous steam boiler which has so often struck horror into the minds of men, like the destroying angel."

It is barely possible that if the inventor employs for his attendants a few aeriform individuals like Mr. Meigs, he may be able to secure a supply of gas so cheap as to effect, with his engine, a saving, as claimed, of forty per cent. over steam. But should he be reduced to the necessity of distilling his gas from coal, he will find that all his savings are overbalanced by loss. Our city gas companies, we opine, will never have occasion to enlarge their capacities in consequence of the introduction of the above contrivance.

The Cloud Engine.

This is a patented invention by Wm. Mount Storms, of this city, and is now for the first time publicly exhibited. Its peculiarity consists in the introduction of a portion of cold air with the steam in the cylinder, whereby it is claimed that a saving of 73 per cent is gained over the use of simple steam. The engine exhibited at the Palace is a small one on the horizontal plan, having a cylinder of 6 inches diameter and 14 inches length. Estimated power, six horses. It has nothing externally to distinguish it from the common steam engine, except that on one side there is an extra pump which forces in the required supply of air. This pump is surrounded with a water jacket to keep it cool. It is a matter of importance to have the air cold when it enters the cylinder; hence the air passes from the pump into a reservoir, where its temperature is further reduced, and then to the steam cylinder. The proportion of air employed to steam is one-third. The air is first let in, and its valves closed, then the steam. There is no change in the exhaust.

The name Cloud Engine is given from the fact that the steam, when it combines with the air in the cylinder, instantly assumes the form and color of fog—the same, in short, as steam when it is discharged into the atmosphere.

The inventor claims, as stated, a gain of seventy-three per cent. over simpl esteam. This we are told is a proven fact, of which there is abundant witness; the tests having been carefully made with a 30-horse engine.

The inventor's theory as to the *why* and *wherefore* of this gain is said to be, briefly, as follows:—Between cold air and hot steam there is a strong affinity, electrical in its nature. The globules of simple steam are solid, that is to say they are not hollow. When air is introduced, as in the engine, a sudden change takes place, and hollow vesicules are formed, occupying greater relative space—in other words, increased expansion takes place.

The engine at the Palace had only been running for a short time when these notes were made, and no opportunity had been given to test the economy or power of the machine.—We shall, hereafter, examine it more critically. If it will accomplish all that the inventor claims, it is certainly a remarkable discovery. Several times while we were looking at it, and when it was working at a pretty rapid pace, the air valve was opened, so that no air passed into the cylinder, but discharged into the atmosphere. The result, in every case, was an immediate falling off in the speed.

Stone Dressing Machine.

The American Stone Dressing Co., of this city exhibit, for the first time, one of their full-sized Steam Stone Dressing Machines—Eyre's patent. The reader will find engravings illustrative of this invention in Vol. 9, Scientific American. Its operations at the Palace attract large crowds of spectators, who evince astonishment at the rapidity of its movements and the excellence of its work. In outward appearance the machine resembles an iron planing machine, the stone being moved on a traveling bed. The cutting is done by means of series of chisels held above the stone at an angle to its surface, just as a workman holds the same tool when at labor. Behind the chisels there is a strong cylinder, having projections upon its periphery, similar to the barrel of a hand organ. As the cylinder revolves, these projections, like so many hammers, play upon the butts of the chisels, and drive them on to the stone with great force. Ornamental work, such as cornices, fluted columns, &c., may be done with the same facility as plain dressing. The machine shown at the Palace, although not of the largest dimensions, strikes, we are told, 28,000 blows upon the chisels per minute, dresses 1000 superficial feet of stone per diem, and saves the labor of fifty or more men. Larger machines have correspondently increased advantages.

Rope Machine.

A very interesting and curious specimen of mechanism is the patented rope machine of Harris, Stott, Richmond & Dutcher. This apparatus condenses the long old-fashioned rope walks into a space five feet square, makes ropes of every kind and variety, from every species of material, of every size, from bed cords to men-of-war cables. One of these machines, attended by a boy, turns out, we are informed, the ordinary inch manilla rope of commerce at the rate of some thousands of feet per diem, accomplishing the labor of seven or eight operatives. Nor is this all.—The quality of the article produced is superior to the hand made, since the tension of each thread and strand is more even. Some of the finest specimens of rope we have ever seen were done by this invention. The improvement is now on exhibition for the first time. The patent is owned by the Troy Rope and Cordage Co., Messrs. Briggs, Draper & Church, agents, Troy, N. Y.

[Our notices of the Fair, and its many interesting objects, will be continued in our next issue.

Gunpowder, Percussion Powder, and their Substitutes.

[Concluded from last week.]

There are, however, certain detonating compounds which contain no oxygen, nor any other supporter of combustion, but which are easily caused to undergo an internal change, and to resolve themselves into gaseous products. The most remarkable of these are certain substitution products of ammonia—the so-called ammoniurets of gold and other noble metals, and the so-called iodide and chloride of nitrogen. The iodide is a black powder, which, when dry, will explode on the slightest touch of a hard substance, and even sometimes by a sudden concussion of the air near it. Its composition has been examined and found to be always N.H.I.2. The chloride is a still more dangerous substance, since it explodes with the greatest facility under water. It is an oily liquid, discovered simultaneously, in 1811, by M. Dulong, in France, and by a young English chemist, Mr. Burton, of Tonbridge. Mr. Gladstone's analyses gave as its composition N.2, H, Cl.5. The qualities requisite to render an explosive practically useful depend, of course, on the purpose to which the explosive is to be applied. If it be merely for the production of an instantaneous flame, in order to ignite some other body, those compounds which are exploded by percussion have a great advantage. Percussion caps of various kinds were exhibited—those intended for muskets being filled with a mixture of equal parts of fulminating mercury and chlorate of potash, fixed by a varnish; those made use of for cannon being charged with two parts of chlorate of potash, two of native sulphuret of antimony, and one of powdered glass, which last appears to be practically a beneficial ingredient, although it takes no part in the chemical action. Caps made of fulminating mercury and collodion, bronzed over, were also shown. Explosives, however, are generally intended for blasting. Most of the compounds previously described explode too rapidly, and produce a very powerful local effect. If employed in fire-arms they would tear or strain the gun, and not propel the ball any great distance. Gunpowder, if tightly compressed, as in a fuse, or a port-fire, burns comparatively slowly; the necessary rapidity of explosion is given to it by granulation; and this can be modified according as the different purposes for which it is manufactured require. Supposing an explosive to have the necessary propulsive power, a very important quality is safety—safety in the process of manufacture, and in its subsequent keeping and handling. This practically excludes the use of all those compounds which are exploded by a blow. Gunpowder requires a temperature of 600 deg. Fah. to ignite it; and this gives it a great advantage over gun-cotton, which is fired by a heat not much exceeding that of boiling water.

It is a desideratum that the explosive should not be injured by wetting. In this respect gunpowder fails, while gun-cotton, and several of the substances previously mentioned, suffer no injury by being soaked in water and dried again. Good gunpowder, however, is not materially affected by the ordinary damp of the atmosphere. Nitrate of soda, though it contains a much larger amount by weight of gas-forming constituents, cannot be substituted for nitrate of potash in the manufacture of gunpowder, partly because the resulting mixture is hydroscopic. The complete combustion of an explosive is another desideratum. In firing cannon a considerable portion of the charge of gunpowder is always lost, by being blown out unburnt; but this is the case to a much greater extent with gun-cotton. It is important, also, in respect to fire-arms, that the products of combustion should not foul nor corrode the piece. Gunpowder leaves a considerable residuum, which has to be sponged out afterwards, but it is an alkaline salt, and has little effect upon metal. Gun-cotton, on the contrary, leaves no residuum; but the piece remains filled with the highly corrosive red nitrous fumes, which have an acid re-action. Cheapness is, of course, an important element in comparing the practical value of different explosives; but the calculation must be made not according to the weight, but according to the propulsive force of the various substances. This review of the qualities requisite in an explosive shows that gunpowder is admirably suited to such a purpose, on account of its great propulsive power with little local strain, its great safety, both in manufacture and use and its cheapness. It has two disadvantages its being spoiled if wetted, and its leaving after explosion, a quantity of solid matter. It is evident that most of the fearfully explosive substances with which chemistry has made us acquainted, are perfectly inapplicable to the projection of balls. Mixtures containing chlorate of potash, though good in some respects, are dangerous. Gun-cotton is the only substance that puts forth, just now, any great pretensions as a substitute for gunpowder. Its propulsive force is somewhat about three times that of an equal weight of powder, and it has some other advantages, coupled, however, with serious disadvantages. The Austrian Government has lately put it very fully to the test of experiment; and that they have been to some extent satisfied of its value, is attested by the fact that a considerable number of cannon, of great thickness of metal about the breech, have been formed expressly with the object of employing it. It is said to be a modification of gun-cotton which is used. In England, experiments have sometimes been made with this material, and it is said to have been employed with advantage for filling shells; but on account of the many accidents that have occurred with it, it finds little favor at present with our military authorities.

Economy of Oil on Railroads.

We have received from Edward H. Jones, Master Mechanic on the Albany and Utica Division of the New York Central Railroad, his monthly report, giving the quantity of oil used and the miles run by engines during the past month (Sept.) The saving of oil during the past month is wonderful, amounting to nearly one-eighth over the previous month. In Aug. 46,675 miles were run, using 2904 pints of oil —16 miles to the pint. In September 48,305 miles were run, using only 2,554 pints, or 18 91-100 miles with one pint. One engineer of a freight train, D. Apps, has increased his run seven miles to the pint of oil; another, John V. H. Beech, has increased the run 17 41-100 over last month. These are certainly astonishing results, and exhibit what carefulness can do in one line of economy.

Singular Robbery and Large Reward.

Some time last month the American Express Company was employed to convey certain boxes of specie, each alleged to contain $25,000, from the Land Office, Dubuque, Iowa, to the U. S. Sub-Treasury in New York. The boxes were of peculiar shape, iron hooped, and sealed with the Government stamp. They were duly delivered at New York, the seals apparently untouched, and the whole without the least indication of having been meddled with; two of them were found, on opening, to contain leaden balls instead of specie. The Government demands the restoration of $50,000 by the Express Company. The latter declares that the boxes were delivered in the exact condition received but it is willing to pay the loss on the substantiation of contrary proof. In the meantime the Company has offered a reward of fifteen thousand dollars for information that will throw light upon the fraud.

New Locomotives.

The Central Railroad Company has just ordered up six more locomotives. They will be built at Schenectady, and will have a sufficiency of power to go forty miles an hour "with one hand." These machines will cost twelve thousand dollars each; a large expenditure, but one warranted by the immense business which comes to this, the greatest thoroughfare in America. The Hudson River Railroad Company is also getting four new engines built for the passenger business. The Albany and Boston Company is getting three new machines at Lowell. These orders speak well for the fall trade, and show that the anticipations made in July, are being very rapidly realized.—[Albany Knickerbocker.