

Scientific American.

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Stamping Patented Articles.

We have received a letter from a correspondent, stating that as the subject of stamping the word "patent" on articles is now attracting much public attention, he wishes to know if the law is complied with by a patentee who merely stamps the year in which his patent was granted, upon the patented article which he sells. The simple stamping or impressing the year in which the patent was granted, upon the article sold, does not fulfill the requirements of the law, and those who thus stamp their articles stand liable of being sued for a violation of Section 6, of the Patent Act of 1842. It says, "all patentees and assignees of patents hereafter granted, are required to stamp or engrave on each article vended or offered for sale, the date of the patent, and if any person or persons, patentees or assignees, neglect to do so, he, she, or they shall be liable to the same penalty, to be recovered and disposed of in the manner specified in the 5th section of this Act," that is \$100 for each article sold. Now what is the date of a patent? Not the year merely, (1848 or 1852,) but the day, month, and year, as recorded on the face of the patent. It is certainly a very plain question, and yet there are but very few patentees who seem to understand it or desire to live up to it; that is, judging from the number of patented articles sold with the inscription only of "patented 1852, &c." This law was made to inform the public when the patent for any article or machine would expire, and this cannot be done unless the very day on which the patent was granted is stamped or printed on the patented article or machine.

THE WORD "PATENT."—Although much has been done in this city recently, to those who illegally stamp unpatented articles with the word "patent" on them, we must say that the law is still openly and broadly violated every day in our city and other places. In almost every retail dry goods store in this city, cotton socks may be seen in its windows with the word "patent" printed on them. The merchants who sell them are quite ignorant of the law, and are innocent of any desire to deceive the public, but this cannot be the case with the manufacturers who print the word "patent" on these goods. They do it for a certain purpose, and that is to deceive the public into a belief that a patent has been granted for such articles, as being superior in some respects to others. Those who are openly violating the law by printing and stamping the word "patent" illegally on articles which they manufacture, cannot reasonably expect to escape its penalties long. If they would act wisely for their own interests, let them at once "cease to do evil and learn to do well."

Coal—Its Price.

The retail price of coal in the city of New York at present, is seven dollars per ton, and it is asserted by coal dealers that it will be as high as nine dollars in the month of August, and ten dollars in the month of November. This is a very high price for coal, nearly double from what it was three years ago. What may be the causes of such a great rise in the price of fuel we cannot tell, but we regret it greatly, for it must cause much suffering among the poor of this and other cities—north and east—during the coming winter. The wages of the miners have been raised during the present year, but that cannot be the sole cause, as the miners, we have been told, do not now receive more than seventy-five cents per ton—twenty-five more than they were paid last year—while the coals are higher by two dollars per ton. The inhabitants of New York City are entirely dependent on Pennsylvania for anthracite coal, and we suppose that as much as \$5,000,000 is paid by them for that fuel every year. No complaint was heard while anthracite was obtained at a fair price—from five to six dollars per ton, but at present universal sorrow is felt on account of its present and anticipated high price. When it is considered

that fuel is as necessary in our climate as houses and clothes, and as "the poor will never cease out of the land," we cannot but anticipate an increased amount of suffering among this class in our populous city. Some better means should be provided for bringing coal to New York direct from the mines. A railroad for that purpose through New Jersey, and running into the heart of Pennsylvania, will soon be opened, but it will not be sufficient to carry a necessary yearly supply. It is also time that some gigantic enterprise was projected for opening up the resources of the great western coal fields to the eastern seaboard. The anthracite coal fields of Pennsylvania—excellent though they be—are but specks on the coal map of our country, and so far, they have been our sole supply; the great western coal fields have been as yet sealed up to the Eastern Atlantic cities. How long this will continue we cannot tell, but we are positive that a great coal railroad to the Ohio Basin, is more of a necessity to New York City by itself, than the Pacific Railroad.

Which is the Best Water Wheel.

Since we published the letter on page 251, with the above caption, we have received a great number of letters on the subject from different correspondents. Every one of them takes exceptions to the conclusions of the author of that letter, who gives the preference to the under-shot wheel. We have not published any of these letters, from the fact that they have generally contained opinions similar to our own, and which have been already published in our columns. The subject of "which is the best water wheel," is pretty well understood, so far as the principle of applying the force of the water is concerned, but that letter shows that from bad construction, or application, of the best wheels in principle, the very lowest in theory may be made to give better practical results.

Anastatic Printing.

A correspondent, connected with the printing business in one of our Western cities, writes to us desiring information respecting the above named art. We have never seen it practiced, and we suppose it is but little used. We have been informed that it consists simply in moistening, with very dilute nitric acid, the print or sheet of letter press, &c., to be transferred, then laying it upon a clean plate of zinc, and passing it through a roller press. The acidulated water softens the ink of the print or sheet, which leaves a reversed impression on the zinc plate, and when an ink roller is passed over its face, the ink adheres to the lines of the impression, which gives a perfect fac-simile of the original copy to a sheet of white moist paper laid upon the zinc plate and passed through the press.

Report of the Board of Education of New York City.

We have received a copy of the Twelfth Annual Report of the Board of Education of the City and County of New York, and it makes us thankful for our Common School system. This system was first introduced into this city in 1843, when the first of such schools was erected. At the present moment there are 224 schools in the County—25 of them being devoted to the teaching of colored children. The whole number of children taught during the past year in all of these schools was 128,530, and the whole amount of money drawn for the purposes of education—including buildings, was \$518,902,17. No less than 25 evening schools were kept open for 14 weeks, for the benefit of young persons, who are compelled to labor during the day. The youth of New York City enjoy unnumbered privileges and blessings, as regards education, unknown to our forefathers.

A New Cutting Machine Wanted.

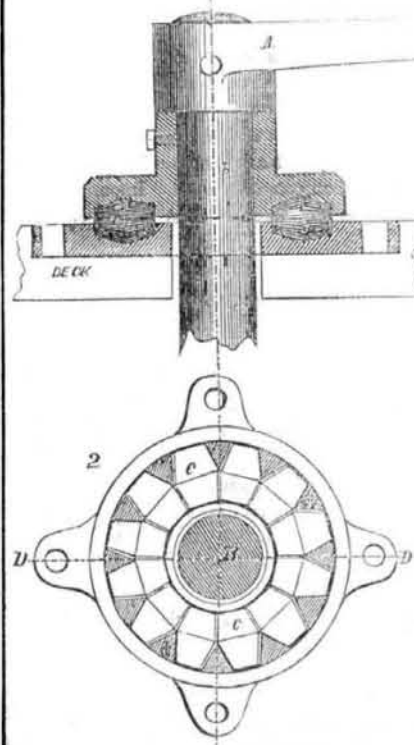
A correspondent writing to us from Anderson, Texas, wishes to call the attention of our readers to a machine which will soon be required in various parts of our country, for cutting and trimming hedges of the Osage Orange. These hedges require trimming in Texas, about every three months, and at the present moment a number of such machines might be

sold in that part of our country. For trimming hawthorn hedges a large pair of shears, about two feet long in the blades, are used in England, and one man can go over a considerable number of rods of hedge in a day.

Patent Anti-friction Roller Box.

The annexed figures are views of an improvement in anti friction roller boxes, for the bearings of shafts, &c, for which a patent was granted to George T. Parry, on the 2nd of Aug. last. Figure 1 is a vertical section of the improved box applied to the steering apparatus of a vessel, taken through line, D D, of fig. 2, which is a horizontal view.

FIG. 1.



The nature of the improvement consists in the employment of a series of rollers made in the form of double frustums of cones united at their bases, and adapted to run in grooves of nearly corresponding form made in the surfaces, between which they are interposed.

The inner frustums of the rollers and the corresponding parts of the surfaces of the grooves between which they are interposed, are made on bevels proportioned to the diameter of the rollers, and the grooves in which they run, such as would represent the pitch lines of bevel cog wheels of the same proportions.

This will insure the rolling of the rollers about a common center without slip, and to prevent the said rollers from being wedged outwards or forced out of their proper paths, the outer ends of the rollers are made of reversed frustums, with the surface of the grooves nearly of a corresponding bevel, so that when the rollers are in place between the two surfaces, they—the surfaces—shall be in contact with the inner frustums of the rollers throughout their length, but the said surfaces, instead of being in contact with the outer frustums deviate a little from it, by which combination the rollers are prevented from being forced out of their true path, and hence roll around, bearing the weight on the surface of the inner frustum, thus avoiding the practical objections to methods heretofore practiced.

A is the tiller, and B the shaft of the helm, which is secured to the top collar plate in any well known way; c c are a series of rollers, each of the shape of two frustums of cones united at the bases, and placed in recesses of corresponding form, made in the deck and the top-supporting collar plate of the helm—thus forming a box as shown in figure 2. The width of the roller grooves is a little more than the length of each roller, to allow them a little end play without coming in contact with the sides of the grooves. The inner frustums of all the rollers, bevel of the grooves, and the inner surface of the collar—like that of the step of any vertical shaft, should be on lines coinciding with the axes of the rollers and of the shaft, as in determining the pitch lines of bevel cog wheels, so that as the shaft is moved round and the series of rollers so

carried, they shall, by their conical form, travel in a circle of which the axis is the center. The outer frustums of the rollers are the reverse of the inner frustums and a little more abrupt, otherwise the surface of the grooves in which this part of the rollers run, should be slightly flattened, so that the outer frustums will run in contact with the surface of the grooves at the base, and be very slightly separated at the outer end. All the rollers thus made and arranged, travel round the axis of the shaft without slip, and the tendency to force the rollers out of the true circle, by the pressure upon them, is resisted.

Various plans of employing friction roller boxes for shafting, &c., have been tried and have failed, from faulty construction, unequal wear of rollers, and the principle of their arrangement. It is believed that this invention has provided against the faults of the other roller boxes which have been tried, and that it is a very valuable improvement, considering the range and extent of its application, as it is adapted for turn-tables on railroads, the shaft boxes of propellers, other kinds of shafting, cranes for elevating heavy weights, swing-bridges, lock-gates, &c. It has been satisfactorily applied to the U. S. Steam Frigate, the "San Jacinto," the steamship "Peytona," now running between the Sandwich Islands and San Francisco, and it has been adopted by the Reading Railroad Co.

The assignees of the patent are J. Rice & Co., No. 90 South Fourth street, Philadelphia, who are prepared to make iron turn-tables upon this improved plan, and from whom more information may be obtained by letter.

Georget's Disinfectant—Errata.

In describing the effect we saw produced by a new disinfectant in last week's paper, we mentioned that the inventor was desirous to engage with some one to bring his invention out, and advance the patent fee to secure the invention in this country. Mr. Georget has written us a note in reply to the paragraph alluded to, and disclaims any such desire, and adds if he wished a patent he could take it himself.

The erroneous statement which Mr. Georget accuses us of making, either arose from himself or his agent talking very bad English, or else he has changed his intention since he made the experiments alluded to, for we presented the matter just as we understood it, and felt considerable self-satisfaction in thinking we had done a foreign inventor a favor by gratuitously recommending his invention to public attention and patronage, but alas! our services were not appreciated, and instead of receiving the Frenchman's thanks, as we expected, he writes us as if he thought we intended to insult him.

Louisville Locomotive Works.

On page 271 we gave a brief account of the large machine works which had been established during the past year in the city of Louisville, Ky., by Messrs. Olmstead, Tenneys, & Peck, for constructing locomotives and cars. By an advertisement on another page of the "Scientific American," we perceive that this company not only make all kinds of rolling stock for railroads, but all kinds of machine tools, such as lathes, planers, drills, &c., and also castings of every description. Louisville is favorably situated to carry on extensive machine works. For steamboat-engine building, the mechanics of that city have long enjoyed an excellent reputation both as it respects practical skill and high intelligence.

Maryland Institute Fair.

We would direct the attention of our readers to the advertisement of the Maryland Mechanics' Institute, respecting its next Annual Fair in the City of Baltimore. This Institution has earned for itself a very high character, both at home and abroad, with respect to the gentlemanly deportment of its managers, and the enterprize of its members. Its Fairs have always been ably managed.

By the latest accounts from China, the revolutionists were within fifty miles of the capital—Pekin—and had possession of the Great Canal.