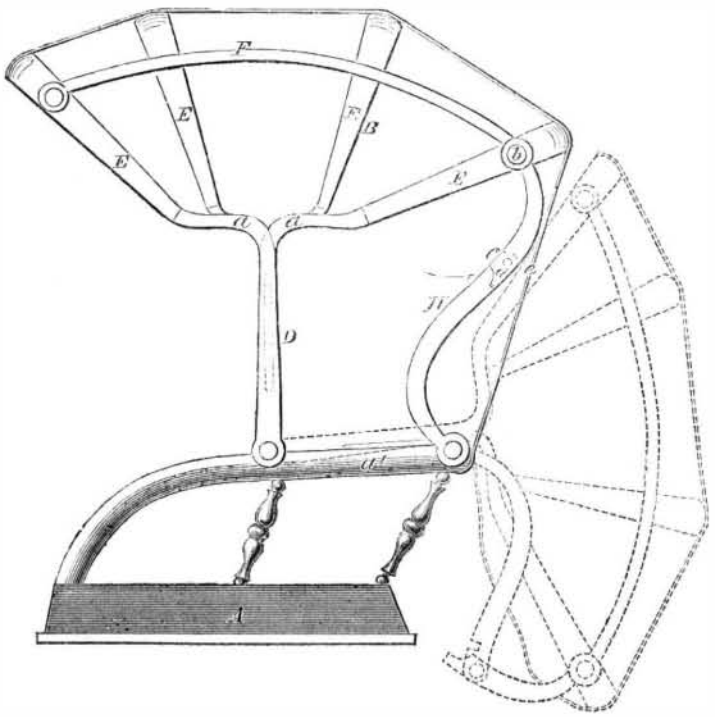
smallest iron steamer that sails the seas. Our judgment thus expressed is simply formed from reading the above extract, and from being acquainted with Mr. Klines' patent, which was secured through the Scientific American Patent Agency, in England, France and Belgium, in August 1858. There may be some difference between the two compasses, but the above description would nearly answer for them both. Mr. Klines' compass was on board the *Adriatic* when she made her voyage to Liverpool two years ago, and it could then have been viewed by Mr. Grey and other persons; it has also been used in the *Africa* (Cunard steamer), and on the *Vanderbilt*, and has been found perfectly reliable in all these cases. The Winans' cigar iron-steamer, on which no common compass was reliable, has also been fitted with one of these instruments.

BOYDEN'S CALASH TOPS FOR VEHICLES.

Railroads and steamboats are doubtless great conveniences for business-men whose aim is to be moved from one place to another in the shortest possible space of time; but if a man wants to enjoy riding, let him get a free horse and a soft-spring chaise or buggy, and bowl along on a smooth gravel road. Under such circumstances, how convenient it is to have a top that can be dropped back easily out of the way!



BOYDEN'S MODE OF SETTING CARRIAGE-BOWS.

The accompanying engraving represents, perhaps, the simplest of all contrivances for this purpose. A represents the seat of the carriage, and *a'*, the arm at its side. From about the middle of the arm a short horizontal rod extends outwardly from the carriage, having attached to it, by a rolling joint, the upright rod, D, which is forked, or divided into two branches, at its upper end At the other side of the carriage is a similar arrangement, and the bows, E E E E, are bent over aud fastened firmly at their ends to the branches of the rod, D, and may be strengthened in their position by the curved bar, F. When the top is up, it is held in position by the jointed braces, H, one at each side of the carriage, the joints being so constructed as to bend in only one direction, that indicated by the arrow, the upper part of the brace having a projection, *d*, which comes against the lower part and serves as a stop. The position of the top, when thrown back, is represented by the dotted lines, by which it will be seen that it does not fold, but remains expanded back of the seat.

The advantages claimed for this arrangement are economy in construction, greater facility in raising and lowering the top, and increased durability of the material of which the top is made.

The patent was granted to Pardon Boyden, of Sandy Creek, N. Y., on the 29th of March, 1859.

INTERESTING PATENT SUIT

A patent case in which considerable interest was manifested by inventors and patentees was decided in this city, before Judges Nelson and Ingersoll, on the 26th ult., and judgment declared last week. The case was a motion for a new trial on the grounds of legal error having been committed by the Court in a former trial held to recover damages for the infringement of Frederick H. Bartholomew's patent (of June 20, 1854, for an improvement in water-closets) by Nathaniel Sawyer, and others. The jury awarded the damages of $3,000, on the trial at law; and the appeal now made was to get a new trial on the ground that the Court had in the former case ruled that no description in any printed publication of the thing patented could avoid the patent, unless such description was prior in point of time to the invention of plaintiff, and so charged the jury. The defendants claimed that the Court erred in so ruling and charging the jury; and that the Court should have ruled and charged the jury that if the thing patented had been described in a printed publication, before the application of the plaintiff for a patent, that this would void the patent though it might have been after the invention of the plaintiff.

Owing to some very peculiar facts developed in this case, we will add some more information relating to it, than the mere statement of the results. The question of law involved was this:—Can the use abroad, or the public description of an invention in a foreign journal, render an American patent for the same thing invalid, if the use and description have been made prior to the time when the American inventor applied for his patent? Our law, according to the decision of the Courts, is that such use abroad, and such publication cannot invalidate the American patent, unless they ante-date the period of the invention—not the date when the patent was applied for. Thus, in this case, the patent was only issued in June, 1854, while an engraving and description of a similar device had been exhibited in 1851, in the Crystal Palace, London, and in the same year it was brought out to this country. It was proved on the trial, however, that Mr. Bartholomew invented his improvement in June, 1850, and upon this proof, which ante-dated the foreign publication and description, the patent was sustained by the Court. Upon a casual examination this would seem to conflict with the decision of Judge Story, on page 730, Vol. 1, Robb's Patent Cases, in which it is stated: "Our law also requires that the use or sale should not only be with the knowledge of the inventor, but that it should be *before* his application for a patent." But the plain meaning of this is, that a thing must have been on free use and sale, with the *consent* of the patentee, to make his patent void. The patent law of 1836, Section 6, is clear upon the point of publication; no printed description of an invention can invalidate a patent unless the publication ante-dates the time when the improvement was invented, not the time when the application was made for the patent.

In reference to this feature of the patent law, Judge Ingersoll in his decision says:—"It has been urged that the proviso of the 15th section gives a different rule on this subject. That proviso is as follows: 'That whenever it shall satisfactorily appear that the patentee at the time of making the application for the patent believed himself to be the first inventor or discoverer of the thing patented, the same shall not be void on account of the invention or discovery, or any part thereof, having been before known or used in any foreign country; it not appearing that the same or any substantial part thereof had before been patented or described in any printed publication.' It is claimed that the time referred to by the terms, 'having been before known or used in any foreign country,' is the time when the application for the patent was made; and that the terms, 'had before been patented or described in any printed publication,' refer also to when such application was made, and not to the time when the original invention or discovery was made. If there were any doubt as to the construction which the proviso should receive, if considered by itself, the true construction of it would be free of doubt when considered in connection with other sections and with the whole scope of the act; viewed in such connection, it must be held that the time referred to by the terms above cited was the time when the original invention or discovery of the patentee was made, and not the time when he presented his application to the Commissioner. Any other or different construction of this proviso would be in conflict with the whole scope of the act, with the plain and clear enactments of certain parts of it, and would make several of the sections irreconcilable with each other."

The court denied the motion for a new trial, after hearing argument; the judges being of opinion that no error of law had been committed in the ruling during the former trial. A few days subsequently to this decision, Judge Ingersoll granted an injunction against Sawyer and others.

On the 15th ult., an important patent case was also tried in Philadelphia, before Judge Grier, in which the parties were the New York Wire-railing Company against Walker & Sons, Philadelphia. The application was for an injunction to restrain the defendants from manufacturing wire fences, as it was an infringement on the patent of Henry Jenkins, granted Feb. 13, 1849, and assigned to the complainants. On hearing testimony, the judge ordered that an injunction issue till further order of the Court, to extend only to making, using or selling to others to be used, beyond the eastern counties of Pennsylvania, to which the defendants claim title.

A GERMAN INVITATION TO AMERICAN INVENTORS.

MESSRS. EDITORS:—We beg to express our best thanks for your kindness in publishing our letter of June 23d, concerning cheap sewing-machines. The publication of that letter has produced the effect desired; for various interesting communications from the United States have come to our hands, as well as advices of some specimen machines having been forwarded to us. As soon as these reach their destination, they shall be submitted to an impartial trial, and we shall not fail to answer all the letters that have been addressed to us.

Earnestly intent upon making our industrial classes acquainted with all sorts of progress in manufactures and commerce, in every country, we shall feel much obliged if you will invite all manufacturers and inventors in your great republic to communicate with us, respecting useful improvements and new inventions which they may have succeeded in effecting, to whatever branch of manufacture or production they may belong. And in return for this favor, we wish it to be remembered that, if at any time you are desirous of securing information on matters of business in Germany, we beg you will dispose of us without reserve.

Signed (for the Board of Trade and Commerce of the Kingdom of Wirtemberg): STEINBEIS.
Chief Commissioner.

Stuttgart, Sept. 7, 1859.

HOPKINS'S CAM PRESS.—In our description of this press, Sept. 24th, by a slip of the pen, we said that the upper disk is turned faster than the lower one by having one more tooth. It should manifestly have been one tooth less than the lower disk. The patent was issued August 23d, to Thos. R. Hopkins (assignor to himself and R. E. Robinson), of Petersburg, Va., see page 157, present volume of the SCIENTIFIC AMERICAN.