Scientific American.

Inbentions. Aew

Bending Sheet Metal.

Solomon G. Booth, of New York City, has invented an improvement in machinery for bending or corrugating sheet metal, to make the beams known as "Montgomery's Patent Sheet Metal Beam," or for forming, on sheet metal, corrugations of greater depth than can be formed by any means now in use. The machinery employed consists of a swage and die, and the nature of the invention consists in forming the die in two or more parts fitted to work one within the other, so as to make the corrugations of any required depth, without breaking or in any way injuring the sheet metal. It also consists in a certain arrangement of the mechanism which operates the dies whereby the different parts of the die are enabled to be conveniently brought into operation successive ly upon the metal. A patent has been applied

Stone Sawing Machinery.

Joseph Greely, 2nd, of Nashua, N.H., has applied for a patent upon an improvement in machinery for sawing stone, which consists in the employment, as a saw for dividing stone into slabs, of a disc or plate of metal, which has a series of burrs of a thickness more than one-half of the thickness of the plate, sunk in opposite sides thereof, so as to be flush with it, and attached thereto by screws or other devices, which pass through their axes. These burrs are so arranged that all protrude the same distance beyond the periphery of the disc, and when caused to rotate by being moved in contact with the stone they cut it away to the width of the disc to which they are attached, thus dividing it.

Improved Planing Machine.

Joseph Osgood, of Brockport, N. Y., has invented an improvement in planing machines, which consists in the use of an elastic face attached to each cutter stock, and so arranged as to press upon the board to be planed, and prevent the cutters from working too deep into the board or plank. These elastic faces yield so as to allow any slivers or shavings to pass from the cutting edge of one cutter to that of the other, thus preventing the board from being marred, as is often the case when the stationary mouth-piece is used. The cutter stocks are rendered adjustable, so that they may surface equally boards varying in thickness. The inventor has applied for a patent.

Bee Hive.

Dewalt Fouse, of Williamsburg, Penn., has invented an improvement in Bee Hives, consisting in placing three sections on top of each other and holding them together by ledges serving to render the joints between them watertight. The bottom boards of the lower section are inclined so as to allow the dirt and refuse of the hive to be more readily discharged. The sections are separated by slats from each other, the top section consisting of four small boxes having no bottoms. Either section can thus be removed independently of the other. The inventor has taken steps to obtain a patent.

Prairie Plow.

Gardner A. Bruce, of Mechanicsburg, Ill., has invented an improved Prairie Plow, on which he has applied for a patent. His improvements consist in connecting the axles of justed freely, and upon which the adjusting lever'is sustained. This rod passes loosely up through the beam, being connected to the adjusting lever by a loose joint, which allows the axle to have the necessary movements in the path of a horizontal circle, independent of the beam and lever, while changing the line of draught or turning curves.

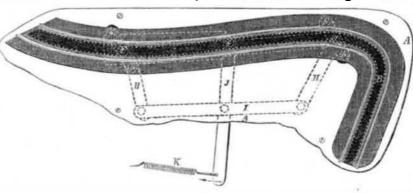
Improvements in Piano Fortes.

G. L. Wild, of Baltimore, Md., has invented an improvement in Pianos and other musical instruments of a similar kind, on which he has applied for a patent. The invention consists in the use of screws, or screws and levers combined, instead of the ordinary tuning pins, and intended to overcome the difficulty.

in so arranging said screws, that the necessity of winding the strings upon them is avoided. A loose ferrule is placed upon the lower por- or Telegraphic Clock, the object of which, is tion of the screw for grasping the string and to secure a uniformity of time at railroad staalso for preventing the string from coming in tions. As we shall publish an illustration of contact with it, and wearing it as the instru- this clock soon, we defer a description until ment is being tuned.

Alex. Hall of Ohio, has invented an Electric

IMPROVED ATTACHMENT FOR PIANOS.---Figure 2.



The engravings herewith presented are illus- thus regulate the tone. These clamps, which trations of Albert T. Corliss' improvement in constitute the novelty of the invention, and the Pianoforte Attachments, denominated by him | principal part of the mechanism by which they the Swell Mute Attachment, a notice of which was published by us four weeks since.

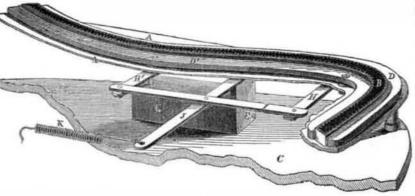
a plan view. The same letters refer to like

The object of this invention is to hold the tone of the instrument in perfect subjection to the performer, and produce effects on the piano corresponding with the effects produced by the actly under the center of the bridge; and each swell on the organ-the crescendo and diminu-

a piano; B is the bridge, and C the bottom of the case. D D are clamps so arranged within pass through openings in the sounding-board. the instrument, and so controlled by suitable By moving the levers the two clamps are remechanism that the performer may, at pleasure, moved entirely from the bridge so as not to cause them to press upon both sides of the touch it, or are made to press with equal force bridge and hold it in such a manner as to control the vibration of the sounding-board, and The two levers have such a relation to each

are operated, are all supported by an iron elbow-piece, E, and a standard, F, both secured Figure 1 is a perspective view, and fig. 2 is to a block, G, which rests upon and is secured to the bottom of the case. The elbow-piece, E, carries an upright-pivot, a, which forms the fulcrum of a horizontal lever, H, and the top part of the standard, F, forms the tulcrum of another lever, H. Both of these fulcra are exof the levers is connected by the pivots, b b, on opposite sides of and at equal distances from A represents part of the sounding-board of its fulcrum, with the two mutes, D D, which are supported by the levers, whose pivots, b b, upon it.

Figure 2.



other that when connected together by a link- them draw the mutes away from the bridge. It rod, I, they move together and cause all parts is intended to be connected with a pedal so that of the mutes to bear the same relation to the the performer may at pleasure cause the mutes bridge. The link rod, I, is connected at about to bear upon the bridge with any required highly eulogistic of the invention."-[Ex. the middle of its length with a horizontal lever, amount of pressure. J, whose fulcrum is a pivot, c, secured in the elbow piece, B. This lever, J, has a coiled employed in the manufactory of Andrews & spring, K, applied to it in such a way as to pull Robinson, Portland, Maine, at which place all it in the direction of the arrow shown in fig. 2, communications of inquiry should be addressed and thus operate upon the levers, H H, to make to him.

Tenoning Bedstead Rails.

T. R. & G. Bailey of Lockport, N. Y. have ting the tenons on bedstead rails, on which the mortise more secure.

Gas Burner.

Andrew Mayer, of Phil. Pa. has applied for a patent on an improved Gas Burner. The novelty of the invention consists in the mode of arranging and fitting the regulating valves, which are applied to gas burners to regulate the flow and consumption of the gas. Owing to the minuteness and delicacy of these valves, it has always been difficult to apply them to the burner in such a way as to have their per-

The inventor is a pianoforte maker, and is

Reaping Machine Sickles.

We have received a letter from Henry Green, invented an improvement in machines for cut- of Ottawa, Ill., in which he states that he is the inventor of the form of sickle referred to by the wheels upon the beams, loosely with it and they have made application for a patent. The by James M. Thomas, in his communication, the adjusting lever, by means of a jointed re- invention consists in a peculiar arrangement of which appeared in the "Scientific American," volving rod, over which the beam can be ad- a cutter and chuck, to facilitate the operation on page 107, and not B. Murray, as therein staof tenoning bedstead rails, and to give the ted. He has sent us a sketch of this sickle, and tenon a form which shall render its lock with says, "they have been made in this manner for but the building was destroyed in a short time, three years."

Singular Phenomena.

The "Belfast Journal" says that in a portion of the Penobscot River, a short distance above Prospect Ferry, where the river widens to the breadth of about a mile, a great commotion was discovered in the water several months and stones and earth seemed to be thrown up of seven to a depth of fourteen fathoms. A sul- precarious state of his health.

phuric gas is emitted from the water during its periods of Commotion, and it is said that two distinct shocks of an earthquake have occurred since the commencement of the phenomena. These disturbances are undoubtedly of volcanic origin, though the phenomenon is very remarkable for this region.

Regulation of Public Clocks in Boston.

Prof. Horsford, of Cambridge, Mass., has proposed to the Common Council of Boston, a new plan for regulating "time-pieces" in and about Boston.

On the cupola of the State House of Boston, which is fortunately so high that a signal made at its top, with a properly colored object of moderate magnitude, may be seen from many points, and by steamers and vessels leaving the harbor, and from the surrounding suburbs and country, embracing an area of some ten miles radius, it is proposed to erect fixtures for dropping a dark colored ball, every day, at noon precisely. At five minutes before noon, the ball is to be run up to the top of its rod, and there secured by a device. At noon precisely, the ball is to be relieved by an electro-magnetic apparatus, designed by Messrs. Farmer & Batchelder.

Accurate time is sent from the Cambridge Observatory, to Boston, twice every week, and a plan like that recommended, has been found of great utility in London, where similar signals, are employed in the Strand.

Documentary History of New York.

We are indebted to Henry S. Randall, Esq., State Superintendent of Schools, for a copy of the "Documentary History of New York."-This is a great favor to us, as it contains much matter of deep interest, relating to the history of steam navigation, and we are confident that no paper in our country has more claims to this kind of donations. We were indebted to Dr. O'Callaghan, the able historian, for some of the proof sheets of this work relating to Fulton's first steamboat, during the time we were publishing articles on steam navigation, for this he will ever have our gratitude, and Mr. Randall we will ever regard as a true friend to the spread of useful information, as we shall have frequent oceasions to refer to these volumes in order to convey useful and rare information to

A Secret Telegraph.

The Olympic Academy of Vicenza, Venice has publicly declared the invention of Termeschini, by which messages may be transmitted secretly, to be perfectly successful. The results of the inquiry show:

"First, that the apparatus of Termeschini may be applied to Morse's telegraph; secondly, that when the dispatch is sent secretly it can only be received so, any fraud in that respect being subject to immediate detection; thirdly, that secrecy may be suspended or applied at pleasure. The report of the commission is

[Wonderful invention truly. "When the dispatch is sent secretly it can only be received so." This is bright. Are not all telegraph messages sent and received secretly. The operators at both ends of a line, by an understanding, can transmit, at any time, a message understood by themselves only.

The Fire Annihilator Again.

Secretary Dobbin, of the Navy Department, with Commodore Morris and other distinguished gentlemen were present to-day at the Navy Yard, to witness the trial of Phillip's Fire Annihilator. A wooden building near the yard was set on fire and the Annihilators applied, thereby showing that no reliance can be placed upon these instruments to extinguish a confla-

We copy the above from the "Sunday Dis-

Commander Ingraham.

Capt. Henry W. Morris has been detached since, so that the surface was much disturbed, from the rendezvous at New York and ordered to proceed to the Mediterranean to relieve from the bottom. This upboiling still continues Commander Ingraham, in command of the at intervals, and experiments show that at least sloop-of-war St. Louis. The return of Commanfect operation insured, but this invention is an acre of the river bed has sunk from a depth der Ingraham to the Statesis occasioned by the