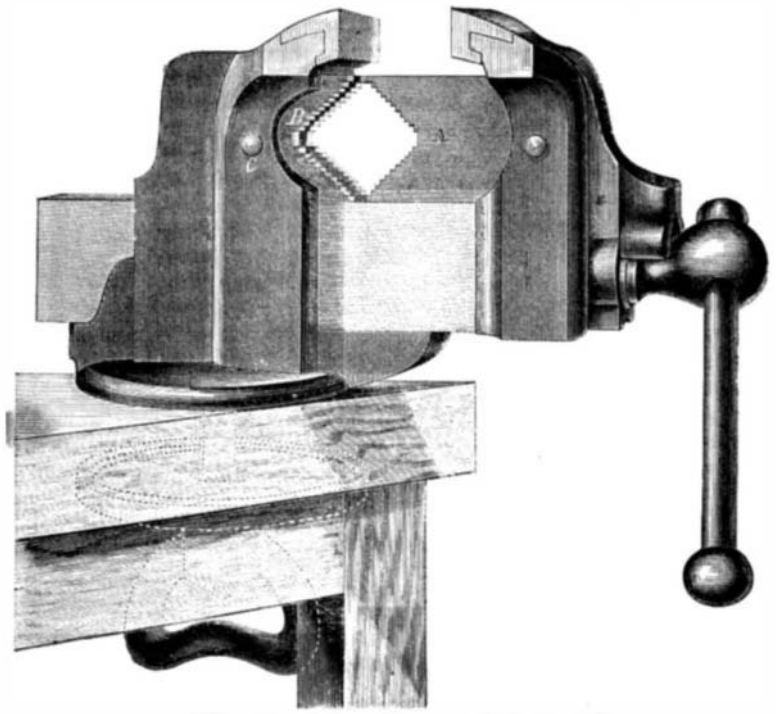
Improved Combination-pipe Vise.

Gas fitters, plumbers, and metal workers generally, know how difficult it is to hold a pipe in a common vise with parallel jaws. The surfaces in contact are so small that the pipe is often squeezed flat, somewhat, before it will hold at all, and is always a source of annoyance. If a thread has to be cut on a large pipe, it is almost impossible to hold it without jamming or defacing it. The same is true where a pipe has to be cut off.

In this engraving a useful modification of the common vise is shown. It is simply a set of dies, A and B, fastened to the vise jaws by pins, C, and sliding in each other. By this means the vise can be used either for pipes or other common work. The jaws are serrated, as shown, and will take a pipe three and a half inches in diameter. These vises can be swung around in any direction, being attached to a swivel bolt, as shown; they are made of different sizes.

This is an extremely useful tool, and was patented through the Scientific American Patent Agency on August 1, 1865, by H. B. Dart. For further information address N. B. Smith & Co., assignees, No. 634 Broadway, New York.



DART'S COMBINATION-PIPE VISE.

Machinery for Rice Culture Wanted.

Mrs. Jane Pringle, of Georgetown, S. C., who owns two thousand acres of rice and cotton lands, desires to call the special attention of inventors and patentees to the necessity which now exists in the rice districts of the South for certain labor-saving machines. The following extract from Mrs. Pringle's letter will explain the kind of machinery wanted:—

"There are three machines which will save labor and be immensely advantageous to the rice-planting interests, if successfully carried out. These are, a machine for thoroughly cleaning ditches; one for sowing rice, which shall not make the lines sowed too compact, but which shall scatter the grain a little in sowing so as to allow room to tether as it grows. A cradle or other instrument to reap with, is of imperative necessity; the diff[illegible]s, the rice heads are so heavy that, as the sc[illegible] strikes the stalk, it being top-heavy, falls and sheds the rice on the ground, which, besides the loss, injures the next crop in the form of volunteer rice.

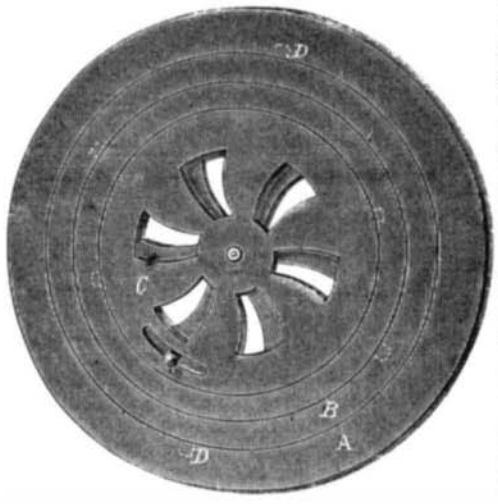
"The machines referred to would be of vital importance to us as substitutes for expensive free labor of an intermittent character."

Pneumatic Dispatch.

Recently, a small goods train was driven through the company's tube from the central station in Holborn to the terminus at Euston station, passing beneath Holborn, New Oxford street, Tottenham court road, Hampstead road, and Drummond street on to the Euston station, a distance of about two miles, having some sharp curves on approaching the Northwestern station. The width and hight of the tube were 4 feet 6 inches respectively, rails being fixed in it for the carriage wheels to run upon. At the central station in Holborn two tubes were carried beneath the footway and ground floor of the building; one connecting Euston station with the central station, and the other being intended to connect the latter with the post-office in St. Martin's le Grand. This tube has only been carried to Holborn hill. In the Holborn station the back portion of the building was occupied by three boilers, each of which could be worked up to a pressure of 30 pounds per square inch. As a rule only one boiler will be worked at a time, though all three could be used if necessary. Between the boiler room and the arrival and departure platform is the engine room, fitted with two 24-horse power engines, which work the shaft of the circular disk or fan, 22 feet in diameter. This revolving rapidly upon its axis, having inclosed air chambers, could be used either for propelling the laden trains forward by atmospheric pressure behind them, or for drawing them back through the tube by forming a partial vacuum before them. The trucks of goods, accompanied by one of the attendants, were blown through the tube to Euston in about five minutes, showing the ease with which a portion of the goods and parcels traffic of the metropolis would shortly be conducted. Wheatstone's telegraphic apparatus was used at the stations, and was found to act well. The entrances to the tubes in the stations were opened or closed as required. In the stations there were two main lines of rails being, 3 feet 8½ inches. There were also two traversing platforms for shifting the trucks from one part of the station to another. The Duke of Buckingham, the chairman, and some of the directors of the company, were blown from the Holborn station, under the supervision of Mr. Rammell, the engineer, through the tube to Euston, which distance was accomplished in the short space of five minutes. The tube between Holborn and Euston station is now complete, and ready for opening.—*London Times.*

LOSIE'S [illegible] THIMBLE.

This engraving represents a new invention intended to be used where stove pipes pass from one room to another or into the walls of rooms. As it sometimes happens that stoves of different sizes are put in the same room, according with the tastes or convenience of parties occupying the premises, the hole for the pipe, if not made so that it can be varied at will, must be enlarged or reduced. This is a work of much time and trouble, and is wholly obviated by the use of this device. It is merely a casting, A, with a series of rings, B, fitting each other as the cover of a stove does. Each aperture, covered by these rings, fits a pipe of a certain size, so that by merely removing one ring, or adding one, as the case may be, the pipe hole can be graduated at will. When the stove is taken down in summer the hole is closed by a register valve, C, which serves to ventilate the room. The dotted lines, D, indicate cleats which hold each ring in place, so that they cannot fall out. The article is very cheap, and the inventor will supply castings to dealers, or sell exclusive rights. Circulars sent to any address on receipt of stamp. For further particulars address T. M. Losie, Elmira, N. Y., by whom it was patented through the Scientific American Patent Agency on Feb. 14, 1865.



LOCK UP THE THROTTLE VALVE

We notice occasionally, in looking over our exchange lists, casualties arising from persons getting on locomotives and running away with them. Here is a case in point:—

"A curious incident occurred recently at Kane Station, on the Philadelphia and Erie Railroad, as related in the Williamsport *Bulletin*. A locomotive was standing on the track while the engineer was at breakfast. An Irishman, to gratify curiosity, stepped on and opened the valve, letting on a full head of steam. For a moment the rush of steam drove the wheels around so rapidly that the engine stood still, and the Irishman jumped off. Then, with a bound, away it went down the road at the rate of seventy or eighty miles an hour, for about three miles, when it ran into two cars loaded with lumber, scattering them like chaff, at the same time smashing itself into a useless heap. No one was killed, but it was our opinion that the Irishman ought to have taken the ride and the chances of the engine, smash and all."

This accident cost the company thousands of dollars. If a passenger train had been in the line, instead of two empty cars, no amount of money could have paid for the loss of life. "An ounce of preventive is better than a pound of cure;" the throttle valve should be locked up by some simple device, so that the engineer could put the key in his pocket. The arrangement should be secure, and such that the lever could not be budged unless released. This lock would be an insurance against mischief by accident or design, and be adopted by railroads generally.

A Feat in Boiler Making at Hartlepool.

The screw steamer *Wearmouth* is being fitted up with new boilers, just now—"under high pressure," at least as to the speed with which they have been constructed. The result has been one of the most expeditious pieces of boiler making we have heard of in the district. Within 16 days from the boiler plates being put into the hands of a batch of efficient workmen, under the superintendence of Mr. George Duncan, an experienced Clydesdale manager, at the Hartlepool Ironworks, the boiler was completed, tested with 48 lbs. to the square inch water pressure, and again with 25 lbs. steam, ditto, and declared perfect. Persons who know anything of boiler making, or who have observed the labor incident to building a boiler 13 feet 4 inches, by 13 feet 6 inches by 10 feet 6 inches, adapted to a marine steam engine, to be heated with four furnaces, will know that this is indeed a feat of rapid execution; and it is creditable alike to foreman and workmen to say that the work has been done by time, and not by "piece."—*Stockton and Hartlepool Mercury.*

"No-ink Pen."

We exposed this petty swindle on page 216 of our present volume. The swindler at that time operated in the name of Morton. We are beginning to hear of him again; he has now assumed the name of Blake, and seems to be again plying his trade with renewed vigor. We wish to state distinctly that we never recommended a "No-ink Pen" in our paper, and that the whole thing is a cheat. We hope the rascal may be apprehended.

THERE were 23,000 persons weighed on the scales at the Boston Mechanics' Fair. The average weight of men was 141½ pounds; average weight of women was 124½ pounds. The largest man weighed 293 pounds. The largest woman weighed 274½ pounds.