FOREIGN NEWS AND MARKETS.

The Steam Plow.—Mr. J. C. Williams, of Baydon, Wiltshire (England), recently lectured before the Hungerford Farmers' Club, and spoke in glowing terms of "Fawkes' American Steam Plow." He blamed British farmers for being so dilatory in adopting steam plows, when it had been so satisfactorily demonstrated that they were far more economical than horses. In all England only one hundred farmers have as yet adopted then, whereas all who cultivate 400 acres of land should now be using them.

An Independent Mechanic.—The Dundee (Scotland), *Advertiser* states that, at a recent meeting in Forres, to devise means for relieving the distress of the laboring population of the district, Mr. Stuart, cabinet-maker, recommended, in an emphatic manner, that money should only be given in exchange for labor. "I know the class," he said; "they are a proud-spirited, although at present a suffering class, and will do anything rather than be made beggars of. I'm as poor a man's among them, but dash my skin if can stand beggary." (Applause and laughter). This hint seems to have been acted upon. That's the talk!

Railroad Reform.—English locomotives, until quite recently were built without a house or cover for the engineer, but a reform in this line has commenced. Two new engines with houses like those on American locomotives have just been placed on the Stockton and Darlington line.

Lime Lights.—Two great Drummond lights have been put up at the ferry landings in Liverpool; they are said to illumine a large space with a brilliancy eqnal to the light of day.

Sheffield Steel.—There is a very good business doing in steel, for American orders, at Sheffield.

WEEKLY SUMMARY OF INVENTIONS.

STEREOSCOPIC CASES.

This invention relates to several valuable improvements in those neat and entertaining cases, whereby the arrangement of a number of pictures in the same case and the proper exhibition of the same is greatly simplified, and the cost of the whole case considerably reduced. The picture-holders consist simply of wooden bars and spring clasps in which one or two pictures can be inserted as desired. The pictures can be changed and adjusted quite readily, and the picture-holders are fastened to one or more bands, the ends of which are screwed to a rotary shaft in such a manner that one of the picture-holders after the other is brought before the eye-glasses. Glass pictures can be exhibited as well as paper pictures, and the pictures are always in good order, and can easily be changed. The inventors Messrs. Sealey & Lea, of 127 Elm-street, this city, keep constantly on hand a supply of these improved cases. They obtained a patent for this improvement last week, through the Scientific American Patent Agency.

GAS RETORT.

This invention consists in the combination with a horizontal cylindrical retort, having near one end an opening in the top for the introduction of coal or other solid material from which gas is to be obtained, and an opening in the bottom for the discharge of the coke or other residuum, of a screw fitted to the interior of the retort with a stem or head projecting through one end of the retort to enable it to be turned for the purpose of moving the charge towards the opposite end of the retort to where it is introduced and of drawing out the residuum. The credit of this contrivance is due to R. E. Harrington, of Newark, N. J.

HAY AND COTTON PRESS.

This invention consists in combining with an open head press box of a suitable size and strength, to resist lateral pressure, two movable followers, having a simultaneous movement to or from each other, which is to be imparted to them by an arrangement of ropes or chains, that are wound up in opposite directions on a shaft which is operated by a worm screw and wheel and suitable cranks or levers connected therewith; the worm screw is to be arranged in such a manner with relation to its wheel that it can be disengaged from the wheel for drawing apart the followers after each operation of the press; the whole, when combined, forms a light, simple, cheap, and efficient power press, requiring to be braced only against lateral thrust. The inventor of this improvement is David L. Miller, of Madison, N. J.

FIRE-PROOF SAFE.

This invention and improvement in the construction of fire-proof safes, consists in interposing between the inner and outer metallic walls of the safe, a sheet or sheets of metallic plaster-holding plates, which are swaged into alternating dove-tail elevations and depressions, so that when the filling of any antiphlogistic compound is put in, on both sides of this central wall, and allowed to *set* or dry, it will be attached firmly to the wall and will not detach itself from it by shrinking or settling as is the case with fire-proof safes of the present construction. This improvement was designed by John B. Cornell, of 143 Center-street, this city.

GRINDING MILL.

This invention relates to certain new and useful improvements in that class of grinding mills in which metal grinders are employed. The object of the invention is to obviate the difficulty hitherto attending the proper adjustment of the stationary grinder as well as to compensate for any inequality of surface attending an unequal shrinkage of the grinders in casting, also the obviating of injury to the grinding surfaces by casual contact when the mill is empty, and the feeding of the substances to be ground to the grinders with a speed proportional to the velocity of the running grinder, so that the feed will always be commensurate with the grinding capacity, whether the same be great or small. This device has been patented to William Stewart, of Philadelphia, Pa.

FURNACE.

The object of this invention is to employ gas or vapor of some volatile and combustible substance for the purpose of heating crucibles in a small portable furnace. The blaze of the combustible gas or vapor together with the necessary amount of oxygen is forced into the furnace and made to pass around the crucible, heating the same very effectually and with little expense. This furnace is particularly applicable to melt small quantities of gold or silver, and in places where gas is used, it will be found of great convenience. The inventor of the furnace, J. B. Marvin, of No. 91 Elizabeth-street, this city, obtained a patent for the same through the Scientific American Patent Agency. He manufactures these furnaces, and will be happy to give further information on the subject on being addressed as above.

CONTRIVANCE FOR LIFTING LADIES' DRESSES.

This invention consists in a novel system of cords, weights, stops and guides, combined with a waist-band, or its equivalent, to be worn inside of aladies' outer garment, for the purpose of enabling her to lift the skirts thereof all round, or in front or behind only, just as high as and no higher than she may desire, and to hold it up for the purpose of keeping it out of the dirt. William E. Stein, of this city, is the inventor.

AIR-HEATING FURNACE.

This invention relates to an improved air-heating furnace in which steam is employed as a heating medium. The invention consists in a novel arrangement of a fire-chamber, boiler, steam pipes and steam-chamber, placed within an air-heating chamber, and used in connection with a draught regulator and safety attachment, whereby a very simple, economical and safe steam air-heating furnace is obtained. The credit of this contrivance is due to Richard T. Crane, of Chicago, Ill.

GAS STOVE.

This invention consists in a certain novel construction and arrangement of the burner or grate, the heating surfaces, and the air passages of a gas stove for heating air for warming apartments or buildings, whereby a very copious supply of heated air, pure and uncontaminated by the products of combustion, is obtained with great economy of gas. The inventor of this improvement is E. A. Leland, of Jacksonville, Ill.

SAW.

This invention consists in having the saw provided with adjustable teeth, and portions of the under sides of the same and edge of the saw provided with a flanch of a width nearly equal to the cutting edges of the teeth, whereby the sawdust is discharged from the kerf and the choking of the saw and consequent heating of the same is avoided. This improvement was designed by James E. Emerson, of San Francisco, Cal.

FURNACE.

The object of this invention is to obtain a very simple furnace, that will be capable of being used as a boiler and evaporator in the manufacture of sugar and for other purposes. One that may be adapted to operations on a large scale and well arranged for the controlling of the heat, and the ready manipulation of the parts for that end. This device has been patented to B. D. Evans, of Mount Vernon, Ohio.

ISSUED FROM THE UNITED STATES PATENT OFFICE FOR THE WEEK ENDING MARCH 20, 1860.

[Reported Officially for the SCIENTIFIC AMERICAN.]

*** Pamphlets giving full particulars of the mode of applying for patents, size of model required, and much other information useful to inventors, may be had gratis by addressing MUNN & CO., Publishers of the SCIENTIFIC AMERICAN, New York.

27,507.—Stephen M. Allen, of Niagara Falls, N. Y., for an Improvement in the Treatment of Fibrous Plants:

I claim my new mode of treating fibrous materials, such as flax, hemp, jute, manilla, grass, sugar cane, &c.; the same consisting in subjecting them to the action of air charged or saturated with moisture or vapor, substantially as set forth.

27,508.—John Ashcroft, of Lynn, Mass., for an Improvement in Low Water Safety Apparatus for Steam Boilers:

I claim a fusible tube, D, or its equivalent, arranged in a pipe communicating with the boiler, as set forth for the purpose described.

26,509.—N. L. Babcock, of New Haven, Conn., for an Improvement in Breech-loading Fire arms:

I claim the combination and arrangement of the spring catch and hammer, whereby the detent, E, is securely held in place and forced home by the hammer, C, when constructed substantially in the manner and for the purposes specified.

27,510.—Geo. Bailey, of Buffalo, N. Y., for an Improvement in Printing Railroad Tickets:

I claim the printing of coupon tickets for railroads and other lines of travel, and numbering said tickets with their coupons in successive order or series, by one operation of the press, by means of an arrangement of a chase to hold the types for the ticket and its coupons and sets of numbering wheels corresponding to the ticket and coupons upon one press, operating so as to imprint the ticket upon a fillet of paper, properly fed along to receive said printing, as set forth.

I also claim the mechanism for feeding the paper under the types, in such manner as to perform likewise the operation of perforating or partially separating the coupons from each other and from the ticket, so as to be readily torn apart at the place of such perfortions—consisting of two rollers or cylinders, one of which is plain and the other armed with a series of rings having teeth upon them which press upon or pass into the other or plain roller, so that the points of the rings will cut through or perforate the paper and thus, by the act of perforation, secure the necessary grip to feed the paper, as described.

27,511.—E. Ball and M. L. Ballard (assignors to E. Ball), of Canton, Ohio, for an Improvement in Harvesters:

We claim the combination and arrangement of an adjustable steel spring cap plate with the heel of the cutter bar and the shoe which supports the heel of the finger bar, substantially as described and as shown in Figs. 1 and 2, of the drawings.

27,512.—James H. Banta, of Piermont, N. Y., for an Improvement in Joint Chairs for Railroads:

I claim the block, c, formed with the projection, 4, taking beneath the key, d, and the flange, 3, setting over the part, 6, of the chain, b, the whole constructed and acting substantially as set forth.

27,513.—A. C. Barstow, of Providence, R. I., for an Improvement in Cooking Stoves:

I claim the double plate extending from the bottom to the top plate and throughout the width of the stove, forming a partition chamber so arranged as to separate the fire-chamber from the flues, when said plate or chamber is provided at the top or thereabouts, with apertures or openings respectively for the admission to, and evacuation from, said chamber of external air, whereby a continuous and rapid circulation of fresh air is necessarily created and maintained through and by the heat of the chamber, for the purposes herein specified, in combination with the flue passages near the top and at either end of said partition chamber, by which three or more boiler apertures can be used on the front of a stove and over a comparatively small fire, and the heat be applied equally to each, and by which also when the heat has passed from the fire-chamber it is first applied to the ends of the oven where it is most needed.

27,514.—E. Bates, Jacob Weist, and Michael Weist, of York, Pa., for an Improvement in Shoemakers' Floats:

We claim the combination of the curved dog, D, with the float or rasp, E, springs, C C, and rod, A, when arranged and constructed as and for the purpose shown and described.

[This invention relates to an improvement in the tool used by shoemakers for raspingoff the ends of projecting pegs inside of boots and shoes, and which tool is technically termed a float. The invention consists in a peculiar means employed for admitting of the self-adjustment of the float and handle, and, at the same time, holding the float sufficiently firm in any position relatively with the handle that may be required in using the tool.]

27,515.—Robert Beans, of Johnsville, Pa., for an Improvement in Guard Fingers for Harvesters:

I claim forming the guard with curved wings, D, extending on each side to serve as braces, and forming a crotch in their rear above the body or depressed portion of the finger, leaving a space between the rear of the wings and the front of the cutter bar and the open spaces, d', on each side of the finger; the whole arranged to operate as described for the purpose set forth.

27,516.—John Bestwick, Jr., and Abner Alden, of Dedham, Mass., for an Improvement in Car Couplings:

We claim the combination of the rotating rubber cylinders, C and C', for directing and controlling link, D, substantially as described.

27,517.—A. J. Bell, of Greenupsburgh, Ky., for an Improvement in the Arms of Carriage Axles:

I claim, in the construction of an ordinary compound truss axle, A B C, making each of the arms thereof in two parts, a, b, and with an oil space, i, one of said parts being placed edgewise, vertically, and the other flatwise, horizontally, and both united together by a collar, h, and screw nut, j, substantially as and for the purposes set forth.

27,518.—Wm. H. Bell, of Washington, D. C., for an Improvement in Revolving Fire-arms:

I claim, first, The use of a hollow axial stem, D, furnished with a discharging device, E, in combination with a revolving fire-arm, substantially as and for the purposes set forth.

Second, The employment of a spring device, J', in combination with a guide box, K, for holding the primer securely in line with the nipples after it is elevated by the slide, and guarding it until the hammer explodes it, substantially as and for the purposes set forth.

Third, The combination of the barrel stop or dog, h, with the cock,