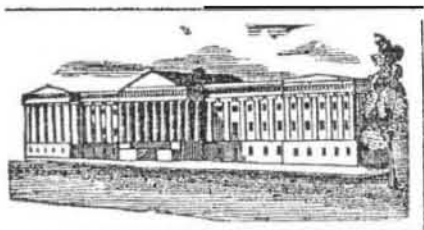

☞ Our weekly List of Patents and Designs contains every new Patent, Re-issue and Design emanating from the Department, and is prepared officially, expressly for the Scientific American, and forno other paper in the city, consequently other journals are obliged to wait the issue of the "Sci. Am." in order to profit by the expense to which we are subject, and of course must be one week behind. Those publishers who copy from this department in our columns, will, in justice to us, give proper credit for the same.

LIST OF PATENT CLAIMS

ISSUED FROM THE UNITED STATES PATENT OFFICE,

For the week ending June 25, 1850.

To S. Andrews, of Perth Amboy, N. J., for model for vessels.

I claim the forming a vessel with a scow shaped bow, having on its sides two wide keels running the whole or a part of its entire length and so constructed that a portion of the inclined surface of the bottom shall always be above the water at the bow, and this with or without the supplementary keels forming small channels, by which construction air enters at the bow in the manner set forth, and is retained under the bottom of the vessel for certain purposes described herein.

To A. M. Billings & T. A. Ambrose, of Claremont, N. H., for improvements in connecting and disconnecting hubs and axles.

We claim the method herein described, of securely fastening the hub of a wheel to its axle, or easily detaching the same therefrom, to wit, by means of the two sliding plates combined with the double scroll-shaped cam, in such a manner that by turning the said cam in one direction, the sliding plates will fasten the axle journal within the hub so securely that it cannot be unfastened by any jar or shock upon the wheel; and by turning the said cam in an opposite direction, the sliding plates will be detached from their hold upon the axle journal and permit the wheel to be detached therefrom.

To John A. Cleveland, of Charleston, S. C., for improvements in setting artificial teeth by atmospheric pressure.

I claim the air chamber, constructed and arranged substantially as herein above set forth and for the purposes described.

To M. C. Bryant, of Lowell, Mass., for improvements in looms for weaving cut pile fabrics.

I am aware that short intersecting plates have been used, but in those cases they were applied to hand looms, and did not extend through the reed, nor were they supported at their ends or protected, so that the warp threads could not catch upon them. I am also aware that an intersecting knife has been used, placed in the intersecting plates, therefore I do not claim these as being new, or of my invention,—but I claim, first, the use, in power looms for weaving cut pile fabrics, of intersecting plates, entering between the two pieces of cloth, and allowing the pile warps to cross and re-cross from one to the other. which extend through the reed, thereby forming on their upper surface a plane upon which one of the shuttles is supported in passing through the web, substantially as described.

Second, the continuing of the intersecting plates to the outside of the warps, by adding the within described false reed, or otherwise, for the purpose of supporting the ends of the intersecting plates and for guiding the warps by them, substantially as described.

To T. Culbertson & G. Scott, of Philadelphia, Pa., for improvement in Brick Presses.

We claim the method of preventing clay from adhering to the surfaces which make pressure on it or in which it is pressed or moulded by the application of artificial heat to such surfaces, substances as herein described.

And we also claim the method of elevating the followers of the mould for discharging the bricks by combining with the carriage of moulds a platform or carriage which slides on inclined ways, and which receives motion from a carriage of moulds, substantially in the manner and for the purpose specified.

To P. F. Ellicott, of Philadelphia, Pa., for improvements in Atmospheric Churns.

I claim a hollow staff, connected with a square or round hollow plunger, with a valve placed at the top, or at any point inside of said staff, said valve to be so arranged that when the said staff and plunger are raised, the valve will open; and when said staff and plunger are forced down the valve will close, and the atmospheric air in the plunger will be forced through the body of the milk or cream, by which operation butter will be formed, said staff dasher and valve to be used in any vessel containing milk or cream.

To G. H. Horn, of Boston, Mass., for improvement in Electric Telegraphs.

I claim the above described or improved Electro-caustic Telegraph, or application to telegraphic purposes, and substantially as specified, of heat generated by electric apparatus, or a current or currents of electricity passed through a fine platinum wire, or other proper conductors or equivalents therefor, as explained; the marks produced in or through the paper, or other material used in connection with the heated wire, being regulated in their length and number, so as to be characters or expressions of letters, figures or words, indicative of any message which it may be desirable to transmit, from the battery and of the telegraph, to the other end of the line, all essentially as set forth, or in the manner generally understood by telegraphic operation.

[The Patent Office has become mighty generous in granting telegraph patents lately. What's in the wind?

To J. G. Howard, of North Easton, Mass., for machine for forming washers and attaching them to carpet tacks.

I claim the spring nippers arranged on a vibratory arm, and having a tapering bore, formed one half in each of said nippers, for guiding the point of the tack to the centre of the washer. Also the combination of said nippers with the circular die, and vertical moving punch, arranged and operating, as above set forth.

I also claim a machine for preparing carpet tacks, consisting of the parts above stated, in connection with an adjustable feeding motion, composed of the double endless bands, ratchet and pawl, and parts which connect the same with the driving lever, as herein above set forth.

To A. L. Johnson, of Baltimore, Md., for improvement in the hinge of rolling iron shutters.

I claim constructing the hinges or joints of rolling iron shutters of thin slats of iron by having a bar or wire inserted within the coiled edges of the joint or hinge, to give strength and stiffness to the joint, said bar having its ends bent to prevent the several strips of iron composing the shutter, from sliding laterally on each other, and the projecting bent ends of the wire being covered by ears projecting from the ends of the strips and turned down, thus forming an even edge to the shutter, which will slide easily in the groove of the frame in which it is placed, the whole being constructed substantially as described.

To J. A. Whipple & W. B. Jones, of Boston, Mass., for improvement in producing photographic pictures upon transparent media.

We claim, first, the taking of Photographic pictures upon transparent media, by coating them with some suitable vehicle for the sensitive materials, substantially as set forth.

Second, we claim the process of preparing and using the sensitive coating or film upon surfaces, whether of transparent, translucent, or opaque bodies, substantially in the manner and for the purposes set forth.

[See Humphrey's Photograph, page 91.—Ed.

To A. Keagy, of Middle Woodburgh, Pa., for improvement in Cooking Stoves.

I claim the combination of flues with a single damper, so that by a single movement I cause the hot air to traverse once or twice entirely around the oven at pleasure, substantially as described.

To N. Myers, of Charlestown, Va., and F. C. Smith, of Harper's Ferry, Va., for improved arrangement of sash stopper.

We wish it to be understood that we do not claim the eccentric separately considered, nor its employment in connection with the window sash as a fastener, and to suspend the same, nor the strips when used as weather strips to make tight joints; nor do we claim the strips separately considered, but what we claim is placing the eccentric within the bar or stile of the window sash, in such a manner as to act upon a weather strip—instead of against the frame or casing of the window—the former being thereby firmly pressed against the latter, and all defacement of the window frame by the eccentric avoided, as described.

To J. R. Nelson, of Knoxville, Tenn., for improvement in mounting the knife of straw cutters.

I claim the placing of the pivot of the knife upon a spring, for the purpose of enabling the operator to give the knife a draw or sliding cut. The other parts are not claimed.

To N. Potter, of East Hamburg, N. Y., for machine for repairing roads.

I claim hanging the cutters for cutting off the ridges at the sides of the ruts, the scrapers for scraping the dirt into the ruts, and a roller for pressing and smoothing the road upon the same frame, all the said parts operating together in the manner and for the purposes set forth.

To C. Rodgers, of Montpelier, Vt., for improvement in the weed cutters of a cultivator.

I claim the combination of the bar with the weed cutter, in the manner and for the purpose set forth.

To T. R. Timby, of Cato-Four-Corners, N. Y., for improvement in water wheels, for increasing or diminishing their diameters.

I do not claim moving floats, as they have before been used on paddle wheels to move out and in on their arms, but I claim the double adjustable arm, constructed as above described, for expanding or contracting the size of the wheel, for the above specific purpose, so that the absolute diameter of the wheel and arms shall be reduced or expanded, to go within a suitable curve.

To John Underwood, of Montpelier, Vt., for improvement in self-acting cheese presses.

I claim the arrangement of four rollers and two wedges, in combination with the inclined planes (two) acting in the manner and for the purpose herein set forth in the foregoing specification, to produce a sufficient pressure upon the cheese or other article to be pressed.

To W. Upfield, of Lancaster, Ohio, for improvements in Boot Trees.

I claim the combination of the two sliding wedges and the right and left screws (two,) with the inclined planes or grooves (two), substantially in the manner and for the purpose above set forth, the screws being made to play within the groove, and being confined to its place longitudinally by the bar working in the groove.

To M. S. Watkins, of Somerville, Tenn., for improvements in Carriages.

I claim the combination of the open elliptical axle-tree with the sliding slotted frame attached to the body of the vehicle, and passing through the upper half of the axletree—and attached to the upper leaf of the elliptical spring placed inside of the axle-tree—the lower leaf of said spring being secured to the inner side of the lower half of the axletree, the several parts being arranged and operating in the manner and for the purpose herein fully set forth.

To H. Yaw, of Boston, N. Y., & T. P. How, of Buffalo, N. Y., for improvement in waste gates.

We claim a waste gate which is hung upon a vertical axis the lower part of which is made wider one side of the axis than it is the other, the side which is narrowest towards the bottom of the gate being sufficiently wider than the other towards the top, that the balance of the pressure of the water will change from one side of the axis to the other, and open and close the gate as the water rises and falls.

DESIGNS.

To J. E. Owens, J. Ebert, & E. G. Dyer, of Hamilton, Ohio, for design for stoves.

To W. Race, of Seneca Falls, N. Y., for design for stoves.

To W. L. Sanderson, of Troy, N. Y., for design for cooking stoves.

A company of New York and Maine men have purchased three hundred thousand acres of wild land in West Virginia, on the Guyandott river, and have sent on a company of workmen to erect six dams, with locks and piers upon the river to render it boatable.

Why Epidemics Rage at Night.

It was in one night that 4,000 perished by the plague of London of 1665. It was at night that the army of Sennacherib was destroyed. Both in England and on the continent a large proportion of the cholera cases, in its several forms, have been observed to have occurred between one and two o'clock in the morning. The "danger of exposure to night air," has been a theme of physicians from time immemorial; but it is remarkable they have never yet called in the aid of chemistry to account for the fact.

It is at night that the stratum of air nearest the ground must always be the most charged with the particles of animalized matter given out from the skin, and deleterious gases, such as carbonic acid gas, the product of respiration, and sulphuretted hydrogen, the product of the sewers. In the day, gases and vaporous substances of all kinds rise in the air by the rarefaction of heat; at night, when this rarefaction leaves them, they fall by an increase of gravity, if imperfectly mixed with the atmosphere, while the gases evolved during the night, instead of ascending, remain at nearly the same level. It is known that carbonic acid gas at a low temperature partakes so nearly of the nature of a fluid, that it may be poured out of one vessel into another; it rises at the temperature at which it is exhaled from the lungs, but its tendency is toward the floor, or the bed of the sleeper, in cold and unventilated rooms.

At Hamburg, the alarm of cholera at night in some parts of the city was so great, that on some occasions many refused to go to bed, lest they should be attacked unawares in their sleep. Sitting up, they probably kept their stoves or open fires burning for the sake of warmth, and that warmth giving the expansion to any deleterious gases present, which would best promote their dilution in the atmosphere, the means of safety were thus unconsciously assured. At Sierra Leone, the natives have a practice in the sickly season of keeping fires constantly burning in their huts at night, assigning that the fires kept away the evil spirits, to which, in their ignorance, they attribute fever and ague. Latterly, Europeans have begun to adopt the same practice; and those who have tried it, assert that they have now entire immunity from the tropical fevers to which they were formely subject.

In the epidemics of the middle ages, fires used to be lighted in the streets for the purification of the air; and in the plague of London, of 1665, fires in the streets were at one time kept burning incessantly, till extinguished by a violent storm or rain. Latterly, trains of gunpowder have been fired, and cannon discharged for the same object; but it is obvious that these measures, although sound in principle, must necessarily, out of doors, be on too small a scale, as measured against an ocean of atmospheric air, to produce any sensible effect. Within doors, however, the case is different.—It is quite possible to heat a room sufficiently to produce a rarefaction and consequent dilution of any malignant gases it may contain; and it is of course the air of the room, and that alone at night, which comes into immediate contact with the lungs of a person sleeping.

[The above is from the Westminster Review, and is no doubt perfectly correct. It is also well known that the heat of the body is about two degrees lower at night during sleep, than through the day. This may also account for much sickness, by people not being careful to keep on enough of clothing at night, in hot weather, to maintain the proper degree of heat necessary. In warm southern climates, a fine net enveloping the bed like a curtain, while it serves for a musquito bar, also answers the purpose of a health preserver, upon the principle of Sir Humphrey Davy's safety-lamp.—The question may justly be asked here, "is carbonic acid gas naturally a cause of fevers, cholera, &c.?" This no one can answer with a *yes*, for no analysis of the atmosphere, in places infected with disease, has yet been able to detect anything peculiar in it. Yet for all this experience and reason should not be lightly esteemed, and such we hold to be the substance of the article we have quoted.