

Mr. Benjamin F. Sherman, of Ballston Spa, N. Y., has patented an improved hydrocarbon furnace, having the bottom of its combustion chamber made with a series of longitudinal pockets containing asbestos or analogous absorbent material, with perforated oil pipes embedded therein, and with alternating air chambers rising between said pockets and communicating below with the portion of the furnace corresponding to the ash pit, the said air chambers being perforated at the top and surmounted by inclined hoods or sheds which deflect the currents of air down upon the surface of the saturated asbestos.

Mr. Louis Graf, of Van Buren, Ark., has patented a process for producing colored photographs on linen or analogous material, which consists in the employment of a collodion mixture consisting, essentially, of distilled water, nitrate of silver, absolute alcohol, chloride of calcium, citric acid, and ordinary collodion.

An improved strap for baby chairs has been patented by Mrs. Mary W. Blacker, of Brentwood, N. Y. The invention consists in a waist belt having a forked strap attached to the front, which strap is connected with the belt by two side straps, which form loops for passing the baby's legs through, the belt being passed around the baby's waist and one of the rear rounds of the chair back, and then buckled, whereas the forked ends are fastened to the front legs of the chair. Further information may be obtained by addressing Mr. Frank E. Blacker, Brentwood, Suffolk Co., N. Y.

Mr. Frederic A. Weise, of Brooklyn, N. Y., has patented a glass mould designed more especially for making "fountain bottles" and the like, in which the glass may be more evenly or suitably distributed than in the present style of mould, and from which the bottle may be more easily and quickly removed.

An improvement in the class of planters having reciprocating seed slides, with which auxiliary devices are combined to assist in regulating the discharge of seed, has been patented by Mr. Leonhard Grieser, of Minonk, Ill. The invention consists, mainly, in the employment of a curved reciprocating block or bar, which is located in the hopper and attached to the seed slide, with which it reciprocates simultaneously, so as to alternately open and close one of its two adjacent openings, and thereby alternately permit and prevent the escape of seed through the openings.

Mr. W. I. Wooster, of Harvard, Ill., has patented an improved blind fastener and slat operator, which consists of a slotted strip of wood or metal fixed vertically on a side of the blind and connected with each blind slat, said strip of wood or metal being moved vertically to open or close the slats and to bolt the blind by means of a rod that passes through the window frame.

**CONCRETE FENCE POST AND SILL.**

The engraving represents a novel fence post, also a sill for plank walks and plank roads, recently patented by Mr. Andrew Climie, of Ann Arbor, Mich. These articles are made of concrete strengthened by iron rods. The process of manufacture is exceedingly simple, and may be successfully conducted by any ordinary laborer. The moulds in which the posts and sills are formed are made of wood and arranged to hold the iron parts in position until the concrete sets. In the post the iron rod extends lengthwise through the center, and is provided with branches which project laterally through the concrete and beyond the surface of the post to receive nuts for holding the fence boards or rails, the ends of the branches being screw-threaded for receiving nuts for this purpose. The posts are planted in the ground like ordinary fence posts. If desired, a top rail or cap may be secured to the top of the post by a nut on the end of the central rod.

The sills or ties for plank walks and roads are moulded in the same way, and are provided with screws or spikes for securing the planks in place. These posts and sills are practically indestructible, and afford a means of building good and durable fences and walks where timber is scarce. This combination of iron and concrete insures great strength and rigidity, and when the question of durability is considered this will undoubtedly be found much cheaper than other kinds of posts.

**A Well that Needed Cleaning.**

The following articles were taken from a well recently at Pollock, Missouri: Four wash pans, eleven half pint cups, two hats, four tin dippers, one brass tablespoon, one boot and one shoe, and one basket, one teacup and one saucer, two half gallon buckets, one piece of lightning rod. Evidently the family which had used that well was not lacking in small boys as well as general unthrift. Such a rubbish pit, however, might be a much less dangerous source of water

supply than many seemingly clean wells with cess pool connections.

**NOVEL FOLDING STAND.**

The folding stand shown in the annexed engraving was recently patented by Messrs. Freeborn & Chase, and is being largely manufactured by Mr. T. W. Freeborn, of Newport,



**FREEBORN' FOLDING STAND.**

R. I. It has been well introduced, and has received the indorsement of prominent hotel men and others who have adopted it. It is very simple and practical, consisting of cross legs pivoted to each other, the jointed arms hinged to the upper part of these legs, and a two-part top attached to the jointed arm so as to elevate the stand in the center when folded, and is provided with handles formed by openings on opposite sides of the line between the two parts of the top, so that one motion of the arm of the person using it can be closed or opened instantaneously. It is made into various articles of which the butler's stand is one of the most important. Perhaps the leading feature of the patent is the cutting board, which is appreciated not only by dressmakers and milliners, but by every woman who has her family sewing to do. It has a great advantage over the ordinary lap

**NEW INVENTIONS.**

Mr. Claude I. Wallis, of Memphis, Ala., has patented a simple and convenient pocket pen and brush for marking boxes, packages, etc. It consists of a tube or hollow handle containing an ink reservoir, a brush at one end of the handle inclosed in an elastic thimble, and in communication with the ink reservoir, and of a double-nibbed pen fixed in the opposite end of the handle from the brush.

A frog for timber chutes has been patented by Mr. Henry L. Day, of Truckee, Cal. The invention consists in attaching to the chute, at any convenient point, a frog, which consists of a long timber mortised obliquely into a timber of the chute, and of two or more shorter timbers, whose pointed ends may be entered into the ground, and whose larger ends rest on a cross piece that is set close against the chute in the angle made by the timber and the chute. It is stated that when other conditions are equal, this frog enables one to deliver in a given time one-third more logs than can be delivered by the old method of rolling them into the chute. Timber chutes are sometimes three or four miles long.

Simon J. Freeman, of New York City, has patented a fastener for meeting rails of sashes, so constructed as to fasten the sashes automatically as the sash is closed, which cannot be unfastened from the outer side of the window.

An apparatus for the manufacture of ice has been patented by Mr. Andrew J. Zilker, of Austin, Texas. The object of this invention is to provide means by which artificial ice may be detached from the moulds in unbroken blocks.

Mr. John R. Pafford, of Cuero, Texas, has patented a light, cheap, portable, and durable bed bottom, which can be fitted to any bedstead.

Mr. Horatio N. Bill, of Willimantic, Conn., has patented an improvement in fire kindlings and machine for manufacturing the same. The object of the invention is to make a cheap and readily-ignited kindling block.

Mr. Patrick W. Groom, of St. Louis, Mo., has patented an improved handle socket strap for shovels, spades, and scoops. The invention consists in combining a flanged socket with a recessed blade.

An improved gate has been patented by Mr. William H. Tobey, of Livonia, Mo. The invention consists in a gate having one or more of its lower rails made in two parts, correspondingly beveled where they meet between the braces, and one of them secured at its unbeveled end by a detachable pin.

An improvement in hame tugs has been patented by Mr. Jacob E. Moeller, of Centralia, Ill. This invention relates to that portion of carriage harness which is used for adjustably connecting the forward end of the trace with the hook or cockeye of the hames.

An improved seat lock has been patented by Mr. John L. Dolson, of Charlotte, Mich. The object of this invention is to furnish fasteners for the seats of spring wagons and other vehicles, so constructed as to hold the seats securely and allow them to be readily removed and adjusted.

Mr. Richard Ray, of Lake City, Fla., has patented an improved umbrella or sunshade, so constructed in the top or cover as to more effectually protect the person from the rays of the sun or from rain.

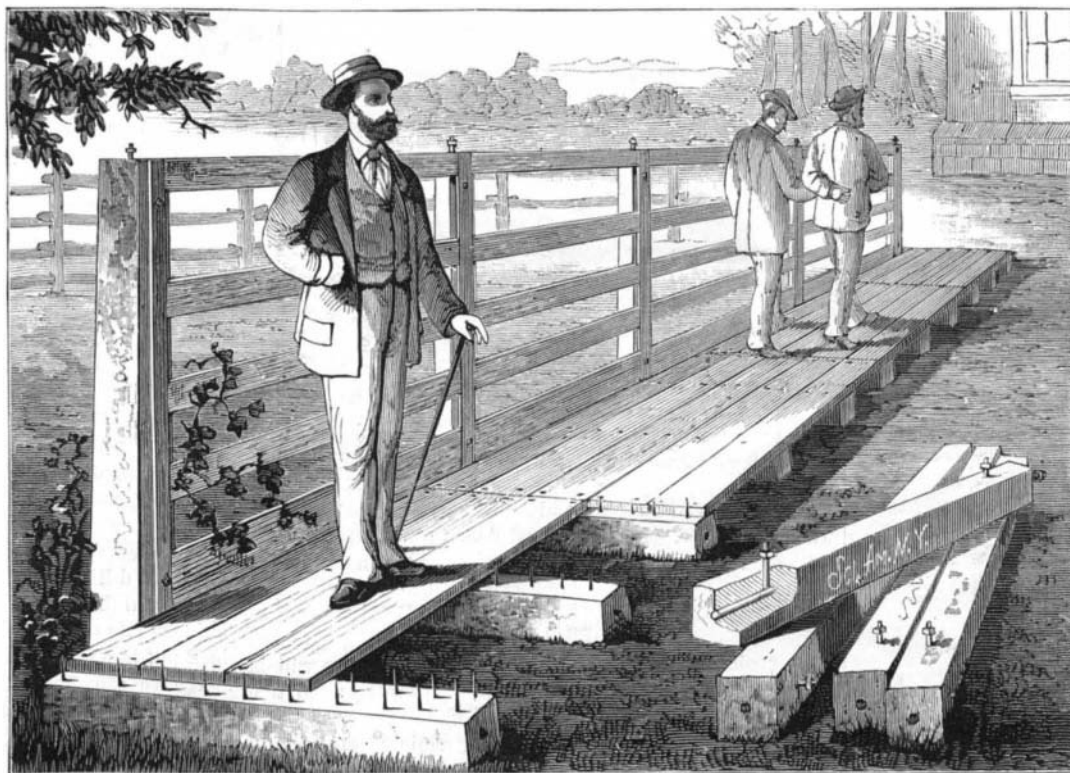
An improvement in umbrellas of that form in which some of the ribs are longer than the others, or in which the staff is connected eccentrically to the cover, to allow the person to occupy the center of shelter and be better protected from rain or the sun's rays, has been patented by Mr. Alexander H. Ege, of Mechanicsburg, Pa.

A compound rotary and reciprocating churn in which is employed a rotary dasher to whip the milk, in combination with a reciprocating dash to displace the liquid, so that the entire liquid contents of the churn may be quickly and continuously presented to the action of the rotary paddle or dash by the movement of the reciprocating dash, has been patented by Mr. Andrew Mearns, of Tolesborough, Ky.

Mr. Rhodes Arnold, of Waltham, Mass., has patented a novel arrangement of the bridle rein, whereby the rider is enabled to exercise control over the animal without exerting great power and without extraordinary strain upon the rein itself.

An improvement in horse collar fastenings has been patented by Messrs. Ebenezer Fisher and John Watson, of Kincardine, Ontario, Canada. This invention relates to an improved fastening for metallic horse collars, more particularly for that for which the same inventors have received letters patent of the United States No. 224,671.

An improved form of mail bag for horseback routes, designed to facilitate the packing of mail matter therein and its removal therefrom, has been patented by Mr. Thomas J. Mayo, of Paintsville, Ky.



**CLIMIE'S CONCRETE FENCE POST AND SILL.**

board, as it can be left with the work on it without disarranging it. It also relieves the operator of all weight, and consequently entails no injury. It can be folded quickly when not desired for use. These stands are made up as chessboards and writing desks; they are also made in the form of a saddle rack, which is appreciated by those who have occasion to clean and dry harnesses.

The dotted lines in the engraving show the movement of the parts in folding. It is not often that a simple invention like this can be applied conveniently to so many useful purposes.

Further information may be obtained by addressing Mr. T. W. Freeborn, P. O. box 108, Newport, R. I.