

LAWN MOWING MADE A PLEASURE.

As one recalls the comparatively few closely-cut and well-kept lawns to be seen a few years ago, and now looks about and beholds them on all sides, it becomes evident that the people are better provided with means to gratify the desire to beautify their homes and public grounds, and that at a much less expense than in former days.

The lawn mowers of ten and even five years ago were not only high priced, so that but few could afford to purchase them, but even the smaller sizes were made so heavy and cumbersome to handle, that it required a strong man to put them in practical operation. The cutting apparatus was imperfectly made, and the journals and gearing were unprotected, so that dirt and grass soon clogged up the machine, giving rise to complaints which have led inventors to devise new machines to obviate so far as possible the difficulties of the past; the result is that he who has a lawn can afford to purchase good mowers and cut his own grass.

Among the number of new mowers made with a view of overcoming the difficulties referred to, the one herewith illustrated is at present attracting public attention; and lawn owners in general will find it worthy of careful consideration on account of its marvelous ease of handling while in practical operation, and the numerous improvements which have been applied to it in a very desirable manner.

It is well known that a side-wheel mower always runs with one wheel in the standing grass, breaking it down, so that the next time the grass is passed over it is not all cut; and the day after mowing it is frequently the case that rows of standing grass may be noticed on various parts of the lawn.

In the mower herewith shown Mr. H. G. Fiske, the inventor and patentee, avoids using either side or rear wheels, or even a solid roller, the latter being objectionable by making the mower run hard and heavy, and being of but slight service as a means of rolling down the unevenness of the ground. To obtain a means of traction and to make the mower extremely light, he employs an open roller, which is made largely of steel wire, secured at intervals around the circumference of two end disks, and intermediate supports are placed in the longer rollers to make the whole rigid. By this method of construction the roller can be made extremely light; and since the openings are sufficiently large to allow the grass to protrude, the best possible traction is obtained, and that without bringing any of the usually necessary pressure to bear upon it. By this arrangement alone it is said about one half the power required to operate other mowers is saved, and by strictly adhering to true scientific principles in forming the gearing, knives and the journals throughout much more labor is also saved. All the exposed journals are covered with protecting bands and the oil holes are drilled on an incline; by which devices in addition to the tight gear case all particles of dirt and grass are prevented from finding entrance to wear out the movable parts of the mower.

By an ingenious arrangement of the parts at each end of the mower the knives cut within the unusually small space of one inch of the extreme outside, making this mower very convenient in cutting close up to walls, fences, etc. The several adjustments are easily and quickly made, the journals to the cutter shaft are packed with felt to retain the oil, and a large proportion of the material from which the mower is made is steel, wrought or malleable iron, thus procuring great strength with light weight.

The adjustment of the handle is quite convenient and novel in its way, as by means of sliding bolts it may be removed in an instant for the purpose of putting the mower in a small space. The handle may be as quickly applied at any desired elevation, or it may be secured at a forward angle, so that the cutting apparatus may be tilted up from the ground, and by swinging the handle backward to the ground, the entire mechanism is so elevated that by applying a crank to the end of the cutter shaft it may be turned backward, and oil and emery applied for grinding the knives, without specially preparing the mower therefor. The spiral knives are hardened

and are made of a hooking shape, that they may be dressed on the front edge with a sharp file for the purpose of keeping a keen edge on them.

The mower, when in operation, is quite silent and would be scarcely noticed by a passer by, and what is not less important, its construction enables a young man to operate a forty inch machine, in quite high grass, for hours at a time with relatively little fatigue. A slight-built boy of ten years of age has been known to cut quite heavy grass for an hour at a time with a twenty-four inch machine. In general appearance the machine is compact, tasteful, and

handsomely ornamented. The Blair & Fiske Manufacturing Company, of Springfield, Mass., are the manufacturers of this mower, which they have very appropriately named the "Easy" lawn mower. They are making them in seven sizes, beginning at ten inch cut and ending with a twenty-four inch. They also have a thirty and a forty inch machine, but these are made only to order. The latter is shown in

**WITHERS'S IMPROVEMENT IN TEA KETTLES.**

our engraving. Naturally with the many advantages claimed for the "Easy" lawn mower there is little difficulty in attracting the attention of the public and the trade in general. Jobbers throughout the country are rapidly making arrangements for local agencies in their vicinity for next season and very large sales are anticipated.

IMPROVED TEA KETTLE.

The engraving shows an improvement in tea kettles patented by Mr. W. S. Withers, and now being introduced by Messrs. Withers & Wolfe, 84 Whitehall St., Atlanta, Ga.

This improvement is designed to prevent the possibility of the handle of the kettle becoming heated, a common oc-

prevented from moving either vertically or laterally. When the lid of the kettle is closed the handle is held erect, and when the handle or bail is grasped and the kettle raised, the hinged lid will be held firmly against the body of the kettle over the orifice in its top, and thus prevent the escape of steam or water, as the lid cannot possibly raise or slip to the side, even though the kettle be turned half over in the direction of the spout.

The lid may be raised wholly or partially from off the kettle by depressing the handle, as represented by the view in the background, which dispenses with the trouble and inconvenience of taking hold of the lid for that purpose, as is the case with the ordinary class of vessels of like character. The great advantage of this improvement is that the handle, not being permitted at any time to be in contact with the side of the kettle, cannot become heated.

MISCELLANEOUS INVENTIONS.

Mr. Albert M. Da Costa, of Brooklyn, N. Y., has patented an improved finger guide for type writers, by means of which the keys may be quickly located without the aid of sight.

An improved match box has been patented by Mr. Georg Wenström, of Stockholm, Sweden. It is provided with a sliding cap or inner box, which is divided into two compartments—one for holding matches and the other for receiving the end of the cigar for lighting—and formed with a slit at one side for the insertion of a match within the lighting chamber; also, in a tongue formed on the inner box, which, in connection with an opening in the outer box, forms a cutting device, combined with a chamber formed at the inside of the match box to receive the cuttings.

An improvement in mechanism for mixing and feeding material to the stones of a grinding mill, whereby the action of the mixing and feeding devices is rendered uniform, one being started or arrested at the same time with the other and operated at the like rate of speed, has been patented by Mr. James P. Lowell, of Purcellville, Va.

A machine for sawing shingles from blocks, which is so constructed that the shingles may be sawed with their butts up and down alternately, so that the blocks will be kept square and the length of the shingles will always be in line with the grain of the wood, has been patented by Mr. Elias C. Schermerhorn, of Alder Creek, N. Y.

Mr. William T. Wainwright, of Dry Sawmill, Pa., has patented an improved bench plane, which may be used for square jointing, for beveling, and for rabbeting.

An improvement in stove boards has been patented by

Mr. A. Irving Griggs, of New York city. The invention consists in constructing a stove board made with a bead and a hem, and having the lower ply of the hem corrugated and its edge turned up against the plate within the cavity of the bead, and the veneer cemented to the lower side of the middle part of the plate.

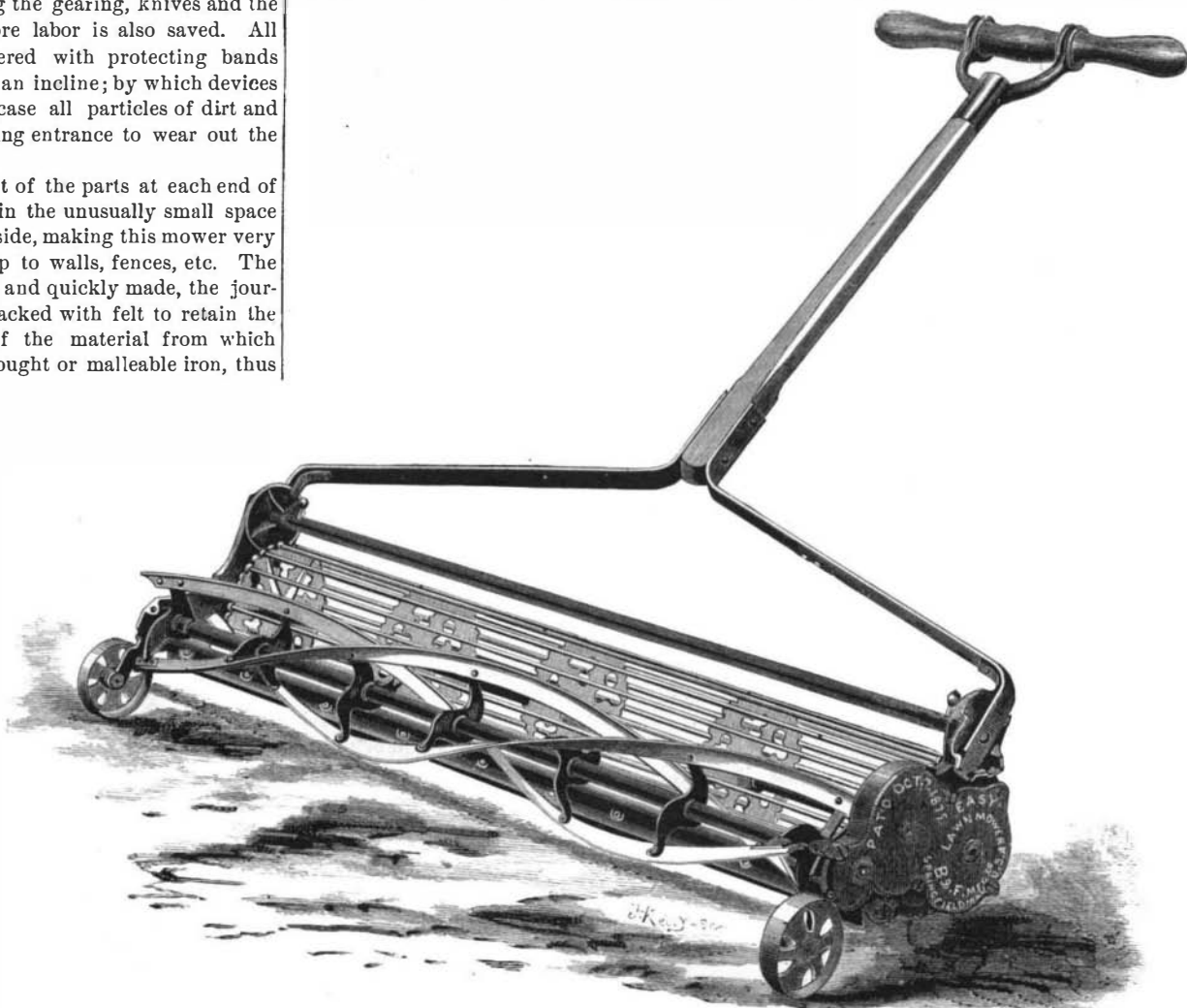
An improved coffin handle has been patented by Mr. George S. Eaton, of Brooklyn, E. D., N. Y. The object of this invention is to furnish coffin handles simple in construction, easily and quickly put together, and not liable to break.

Mr. Paul Crippen, of Bronson, Mich., has patented a waterproof paint compound, consisting of alum, coal tar, and sulphur boiled together.

Messrs. Marshall J. Allen, of New York city, and William E. Bradley, of Frankfort, Ky., have patented an improved process of saving the sugar and starch contained in a waste product in the manufacture of whisky and utilizing it. The process consists in freeing the slop from the bran, chaff, and coarse particles of grain, and introducing the liquid

thus obtained in place of water in the succeeding operations with fresh grain.

An improved ironing machine has been patented by Mr. John Socias y Rubio, of New York city. This invention is an improvement in the class of machines in which the sad iron is suspended and adjusted vertically by a screw, and is designed to provide means for suspending a sad iron which will allow it to be moved in any direction over the ironing table; also, to suspend the sad iron by yielding or elastic devices, to enable it to be operated easily and efficiently.

**THE 'EASY' LAWN MOWER.**

currence with utensils of this class when placed over the fire, and also by the same arrangement to prevent the lid from raising or moving from off the kettle, holding it firmly pressed down when it is tipped or inclined, thus avoiding the escape of hot water and steam.

The invention consists in connecting the bail or handle with the lid or cover of the kettle by a rod, so that when the lid is closed upon the kettle the handle will be held erect, or, if the bail is turned over to the side, the lid, which is hinged to the kettle at that side, will be raised accordingly, and when the handle is grasped to raise the kettle, the lid is

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.

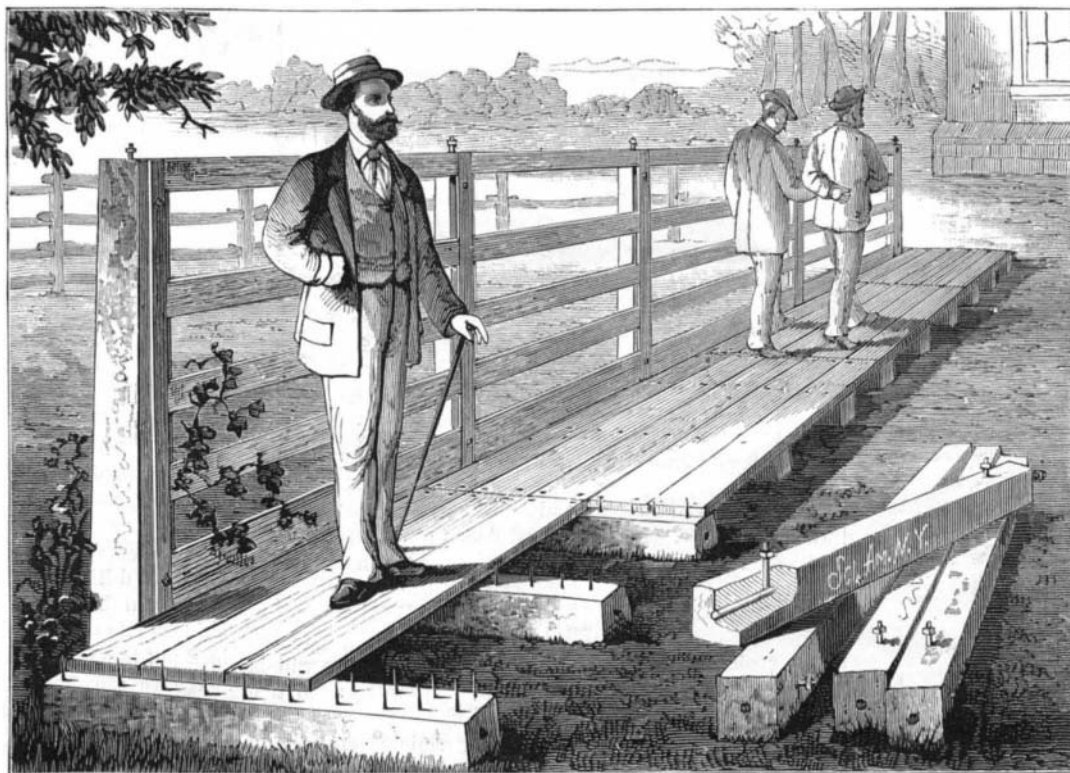
An improvement in umbrellas of that form in which some of the ribs are longer than the others, or in which the staff is connected eccentrically to the cover, to allow the person to occupy the center of shelter and be better protected from rain or the sun's rays, has been patented by Mr. Alexander H.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