

AN IMPROVED OIL CAN HOLDER.

A device to facilitate the lubricating of machinery, where the parts are not ordinarily within reach or easily accessible, is shown in the accompanying illustration, and has been patented by Mr. Edgar G. Bruner, of West Point, Neb. The device consists of a cup

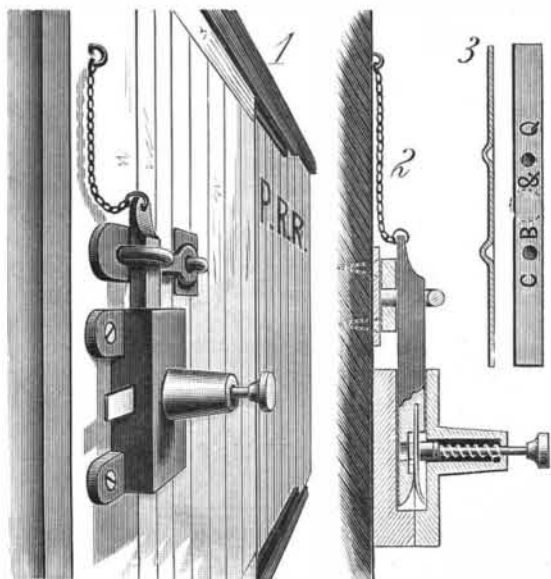


BRUNER'S OIL CAN HOLDER.

of suitable size and shape to hold an oil can, and provided with an elongated handle, and rods for holding and adjusting the cup in the desired position, the cup having retaining springs in its interior for holding the oil can in place when the cup is canted or even completely reversed. The handle is attached to the cup by a yoke, and a rod secured to the bottom of the cup affords bearings for another yoke secured to a slide bar which passes through staples in the handle. Another slide rod, passing through staples in the handle, is connected to the cup by an eye at the rear of its rim, and by the aid of these rods, which have free lateral play along the handle, the cup can readily be tilted and held in any position desired.

AN IMPROVED SEAL LOCK.

A seal lock which may be operated without the use of pinchers or pliers, adapted to receive a sealing strip, and especially designed for use on freight car doors, is shown in the accompanying illustrations, and has been patented by Frank W. Richey and Sumner M. Robbins, of Armstrong, Wyandotte County, Kansas. The end of the locking bolt which enters the lock case is provided with a spring tongue, the extreme end of which is bent outward, while the extreme end of the bolt proper, opposite the end of this spring tongue, is cut away, as shown in the sectional view, Fig. 2. Just back of this cut-away end of the bolt is a shoulder, so that there is a space behind this shoulder between the tongue and the bolt, in which the sealing strip rests, there being also an aperture in the spring tongue to register with another aperture in the recess in the bolt. A plunger



RICHEY AND ROBBINS' SEAL LOCK.

with a punch point is mounted in a housing that extends outwardly from the lock case, and is held in normal position by a spring coiled about the plunger stem. The seals consist of strips of metal in which are formed projections, as shown in Fig. 3, in side and front views. Before the insertion of the bolt, one of these sealing strips is passed through the lock case, and so adjusted that its projections will be upon either side of the bolt cavity. Then, as the bolt is

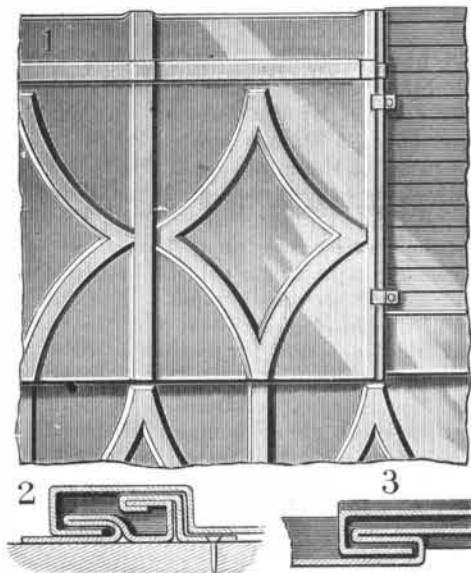
forced inward, the plunger being held back, the sealing strip will be borne upon by either the out-turned edge of the spring tongue or by the cut-away end of the bolt, and will enter the space back of the shoulder in the bolt, when the plunger is permitted to enter and rest in the slot in the spring tongue, and the lock is sealed. The sealing strip cannot be drawn out of the lock case, owing to the formation of its projections on either side of the bolt, nor can the bolt be withdrawn, as its shoulder would strike against the sealing strip. To open the car door, a slight tap is made upon the outer end of the plunger, when its punch point is forced inward and severs the sealing strip, as indicated in dotted lines in Fig. 3, after which the ends of the severed strip may be removed from the lock case and the bolt withdrawn.

Wood Fibers Capable of Being Spun.

Boards as free from knots as possible, of any desired width, and about 3/8 of an inch thick, are cut in a direction parallel with the fiber, preferably from pine or fir wood or from the softer part of larch, and are boiled in a solution of sulphurous acid or a bisulphite, whereby the disintegration of the wood is effected. No chopping is required, and before boiling the wood is steamed at 212° Fah. for a long time. After boiling the mass is partly dried on a wooden frame and then passed through rollers having "deep ribs" in the direction of their length, the projections on one roller fitting in the corrugations of the other, whereby the fibers will be separated from each other, and may be combed in an apparatus similar to that for combing flax, etc.—By Alex. Mitscherlich, Freiburg.

AN IMPROVED METALLIC SHINGLE.

A metallic shingle which is easily applied to the roofs or sides of buildings, which is storm proof and cannot be easily stripped off by winds, while being inexpensive and durable, is shown in the accompanying illustration, and has been patented by Mr. Henry Smeeton,



SMEETON'S METALLIC SHINGLE.

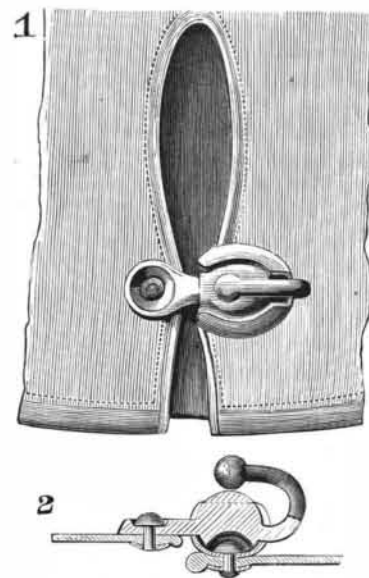
of Ottawa, Ill. It is made of a single piece of metal so bent and doubled at its edges as to form locking joints on all four of its sides, Figs. 2 and 3 showing sections of the vertical and horizontal joints. The faces of the shingles may be made flat or plain, although shown with a raised diamond-shaped design, and they may be tramped upon without injury or starting joints or seams, as they are not nailed through at the side edges, but held by clips, and will yield somewhat to expansion and contraction. In laying the first course on a roof, the center of the overlapped top portion of each shingle is secured to the roofing boards by a nail, and its right hand side by one or more clips, this side then affording a lip for hooking the left-hand side of the next shingle to it, and so on for the course, the first shingle at the left-hand side having been fastened at the edge in any proper way. Dependence may be placed entirely on the clips to hold the shingles to the roofing boards, but the use of clips at the sides and a nail on the top is preferred.

Keep the Traps Filled.

A medical correspondent, writing to the daily press, calls attention to the risks to householders resulting from the evaporation of water from traps, occurring during a period when the house is unoccupied, and states that it has fallen to his lot to see more than one outbreak of sore throat, which he believes is caused by this circumstance. It may be hoped that the usual house cleaning, which necessitates the occupation of the house immediately before the return of its owners, is for them a safeguard; but the subject is well worth the attention of householders, in the interest of caretakers as well as of themselves, and the careful charging of traps and the thorough ventilation of houses are necessary wherever they have been left uninhabited during any period of time.

AN IMPROVED GLOVE FASTENER.

A simple and efficient fastener for gloves, by which they may be easily and quickly fastened and unfastened, and which can be readily applied to the glove, is shown in the accompanying illustration, and has been patented by Mr. George Geary, of Johnstown, N. Y. A spring socket is attached to one side of the slit of the glove, and an arm attached to the glove at the opposite side of the slit is provided with a ball adapted to fit in the spring socket. The latter is a concave metal plate, with ears which are also concave and incline toward



GEARY'S GLOVE FASTENER.

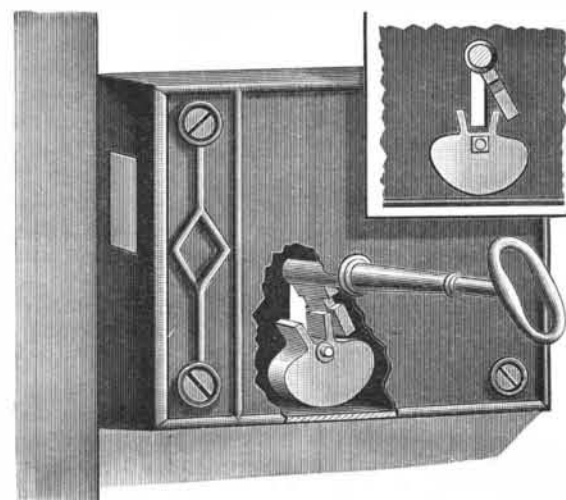
each other, there being a notch in the side adjoining the slit and another notch in the opposite side, together with a central hole by which the socket is secured to the glove by a rivet. The arm carrying the ball adapted to fit into the spring socket is turned over the top and made into a knob, for convenience in springing the ball into the socket and removing it in fastening and unfastening gloves.

Products from Essence of Birch Bark.

E. Mourlot, Paris, obtains from essence of birch bark, by rectification, an essential oil, which possesses among other properties that of being fatal to "insect life," and an electrically insulating tarry substance. These two products are so treated and combined with other substances as to produce an anti-oxidizing material and an insulating substance capable of the same applications as ebonite. Among the other ingredients employed, in addition to the products from the essence of birch bark, are caoutchouc, sulphur, chalk, talc, litharge, antimony sulphide, kaolin, zinc white, and red ochre.

A DEVICE TO RETAIN KEYS IN LOCKS.

A simple attachment within a lock case, which prevents the key, when left in the lock, from working or being thrown out, is shown in the accompanying illustration, and has been patented by Mr. Stephen H. Paulmier, of Madison, N. J. It consists of a movable guard, in the form of a pendent weight, pivoted within the lock case directly below the key hole, the guard having two upwardly extending arms or wings, between which the bit of the key passes when entering the lock. This guard, when the key is not in the lock, naturally adjusts itself, according to its center of gravity, so that the arms or wings will stand at either side of the keyhole, and the key is freely ad-



PAULMIER'S KEY FASTENER.

mitted; but when the key has been turned sufficiently to pass these wings, as in throwing the bolt, and is allowed to come to rest, the guards prevent it from turning down, so that its bit will lie in the line of the key hole, as frequently occurs in the shutting or slamming of doors, although it can be so turned by hand with perfect facility when desired. This guard can be readily attached to almost any lock, and does not necessitate any special construction of the key.