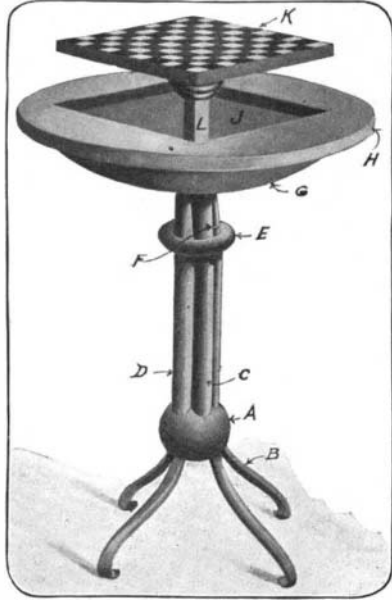


A CONVENIENT GAME TABLE.

We illustrate herewith a convenient game table invented by Mr. Marten Manfred, 314 State Street, Santa Barbara, Cal. The table is arranged with a movable

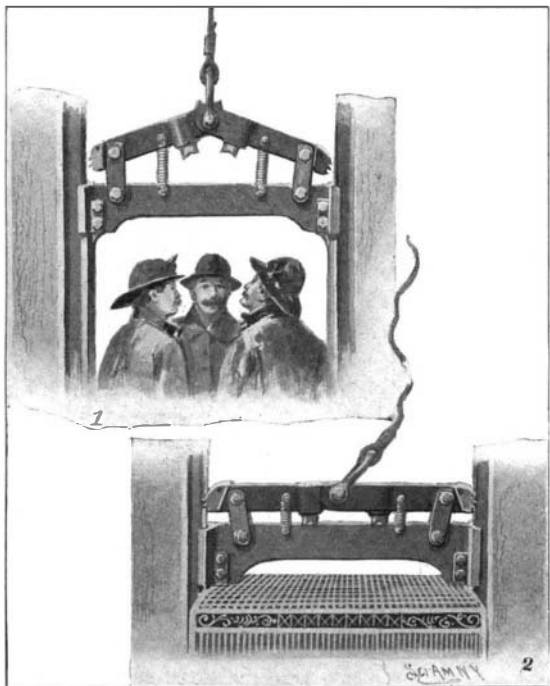


CONVENIENT GAME TABLE.

top section, which when released exposes a compartment under the top surface of the table in which game apparatus may be stowed. The base of the table comprises a member *A*, from which the legs *B* project. A stem is mounted on this member, and is formed of four parallel rods *C* and *D*, all of which are rigidly attached thereto. Three of the rods are rigidly secured at their upper ends to the body *G* of the table, while the fourth rod *C* has slight play therein. The rods, it will be noticed, are tapered to receive a clamping ring *E*. Centrally spaced in the table-top *H* is a compartment *J* which forms a receptacle for the game apparatus above referred to. The movable section or game board *K* is provided with a shank *L*, which passes down through the table body and is arranged to slide between the rods *C* and *D* of the stem. A spiral spring at the bottom of the shank serves to raise the game board to the open position illustrated. A pin *F* is carried on the shank *L*, and projects between the rod *C* and one of the fixed rods. When desired to close the compartment, the game board is pressed down flush with the top of the table, and then the clamping ring *E* is pressed downward on the stem. This serves to press inward the rod *C*, which tightly pinches the pin *F*, thus holding the game board in place against the tension of the spring. The table may then be used in the usual manner; nor does it even appear externally that the table is of any more than ordinary construction. To reach the interior compartment, it is merely necessary to raise the ring *E*, whereupon the spring throws up the game board and exposes the cavity *J*.

A SAFETY CATCH FOR ELEVATORS.

A very simple device for preventing elevator accidents is provided in an invention recently patented by



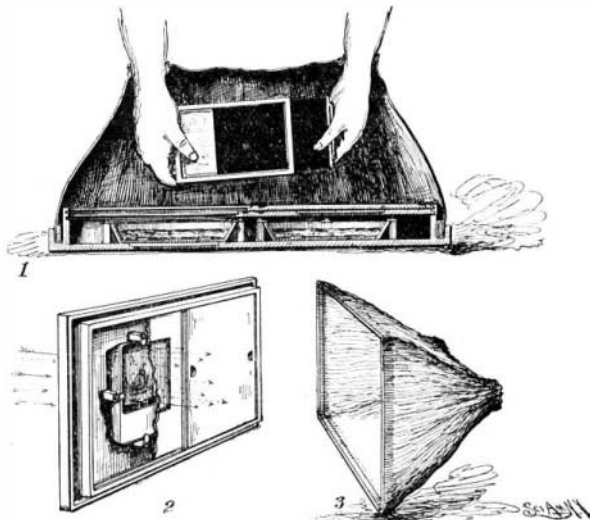
SAFETY CATCH FOR ELEVATORS.

Mr. Robinson Hainsworth, of 11 Victoria Street, Hull, England. The invention is particularly applicable to mine and lift cages, skips, and the like, though obviously it may be employed on any class of elevator, the arrangement being such that should the hoisting rope break, the safety catch will immediately operate to bring the car to a standstill. We illustrate herewith the simple device employed. It consists of a pair of toggle-levers fulcrumed to the cross beam of the car, and at their common joint connected to the hoisting rope by a pin and shackle link. The outer ends of the toggle-levers terminate in dogs or shoes which are serrated, so that when brought into operative position they will be embedded in the guides in the shaft. Normally, however, they are kept out of engagement with the guides by the tension on the hoisting rope. When in this position, as shown in Fig. 1, the toggle-levers are drawn upward and inward until limited by shoulders at their outer extremities which engage the fulcrum links. Now, should the hoisting rope break, the toggle-levers will be immediately straightened by the tension of a pair of springs, so that their serrated ends would be thrust into the guides. The weight of the car tends only to further straighten out the toggle-levers and embed the dogs into the guides, thus arresting the downward motion of the car, as illustrated in Fig. 2.

A successful trial of this safety catch was recently made in a mine in Cornwall, England. The test which aroused greatest interest was one in which the skip was filled with iron to a weight of about four tons. The hoisting rope was cut when the device was midway between the dividers. At this point there was some give to the guides, but the skip was brought to rest after sliding a distance of 3 feet 9 inches, or about 9 inches from the point of full embedment, thus demonstrating that, as claimed by the inventor, there is no shock, but a gradual arrest of the cage or skip. The inventor is at present on his way to the Transvaal to install his gear in a number of mines in that region.

DAYLIGHT DEVELOPING BOX.

A most troublesome feature of photography, particularly for amateurs, is the necessity of performing



DAYLIGHT DEVELOPING BOX.

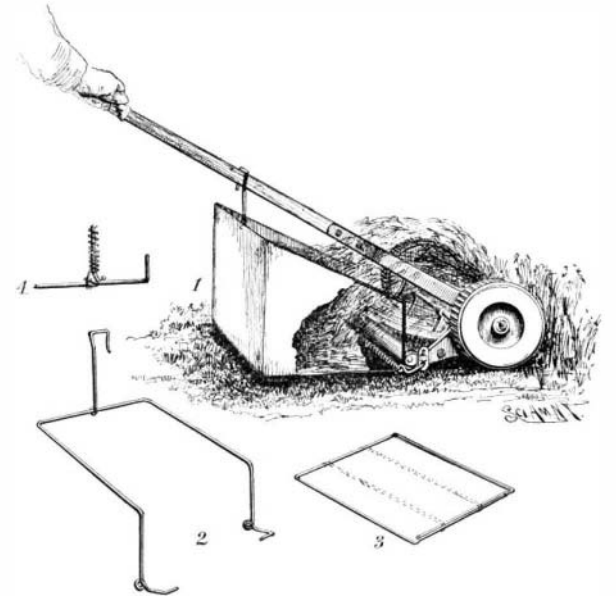
the developing operations in a dark room under a red light; for, aside from the difficulty of arranging the room so that no ray of white light may fall upon the plate, one must move with utmost caution under the dim red light to avoid upsetting and spilling the developing and fixing solutions.

We present herewith the illustration of a daylight developing box invented by Mr. Samuel J. Sloane, of 256 Ninth Street, Jersey City, N. J. This box contains two trays, one for the developing solution and the other for the fixing bath. The cover of the box comprises two lids, which are mounted to slide in grooves in the side walls of the box, so that access may be had to either tray. In the bottom of the box beneath the developing tray is a plate of ruby glass; a similar plate of glass is provided in one of the lids. When removing the plates from the plate holder and placing them in the box, a hood is used, as shown, which covers the entire box, fitting tightly into the grooves at the sides. Armholes in the hood permit access to the interior without admitting the light. After a plate has been placed in the tray containing the developing solution and covered with the lid having the glass plate, the hood may be temporarily removed. The developing operation may be watched by holding the box up to a window or lamp from time to time, permitting the light to pass through and reveal the condition of the plate. The hood is applied again when it is time to change the plate over into the fixing solution, and the lid containing the red glass is moved to cover this plate before the hood is removed. The fixing operation may then be easily observed through the glass. In order to prevent the solutions in the trays from pouring out when the device is held up to the light, a strip of glass is cemented over the lower

end of each tray, forming a pocket to catch the solutions.

ODDITIES IN INVENTIONS.

USEFUL DEVICES FOR THE CARE OF THE LAWN.—We picture in the accompanying illustration a very useful attachment for lawn mowers. It consists of a receptacle which may be readily secured to any lawn mower to catch the grass as it is cut, thus preventing the lawn from becoming littered, and collecting the cut grass for feeding horses or other animals. The receptacle consists of a canvas bag stretched over a wire frame. Fig. 2 shows the upper frame, which is



ADJUSTABLE GRASS RECEPTACLE FOR LAWN MOWERS.

hooked over the handle of the lawn mower, while its lower end is secured to the mower frame. The lower frame is shown in Fig. 3, and consists of a rectangle of wire, with its ends overlapping at the lower side, where it is attached to the upper frame. A spring coiled over these ends, and secured as shown in Fig. 4, serves to draw them inward, thus holding the ends of the upper frame tightly hooked on to the mower frame. This arrangement obviously permits attachment to any width of lawn mower. Braces shown in dotted lines, Fig. 3, serve to hold up the slack of the bag when it is attached to a small or narrow machine.

Another device which will be found useful for trimming lawns consists of a pair of shears arranged to lie parallel with the ground, but having operating levers or handles extending vertically therefrom. The blades are pivoted on a shoe, which holds them a suitable distance above the ground, and on a vertical extension of this shoe the levers are pivoted, with their lower ends projecting in slots in the blades. A cross piece on the shoe extension is provided with members for limiting movement of the levers. The device will be found particularly useful for trimming around bushes or along a fence, as illustrated. It also offers



SHEARS FOR TRIMMING LAWNS.

the advantages of being operated by a person standing in upright position, and further insures cutting the grass at a proper height above the ground.

SELF-DUMPING GARBAGE-CAN.—An up-to-date way of disposing of one's garbage is shown in the accompanying illustration. The arrangement will be found particularly useful for flats or adjacent apartments, enabling the cans to be directed from a series of points to a common receptacle, into which they will automatically deposit their contents. An overhead trolley wire is strung from the kitchen window to a post situated at any suitable point. The garbage can is suspended from a pair of trolley wheels adapted to travel