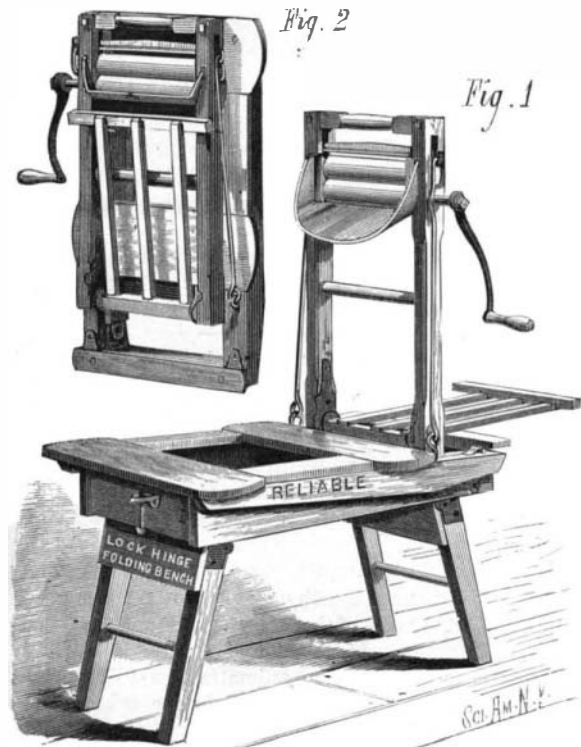


IMPROVEMENT IN WRINGERS.

The engraving represents a novel arrangement of clothes wringer and bench, recently patented by Mr. James K. Dugdale, of Richmond, Ind. In this device the weight of the tub and its contents are utilized for creating pressure between the two rollers of the wringer. The rollers are journaled in vertical posts hinged to the bench frame, and the cross bar which bears upon the movable journal boxes of the upper roll is connected by rods with levers hinged to opposite sides of the bench. Upon the top of these levers there is a platform adapted to receive a tub or other receptacle for clothes and water.



DUGDALE'S IMPROVED WRINGER.

The hinges by which the levers are connected with the frame are made adjustable, so that any desired degree of pressure may be brought to bear upon the clothes between the rolls. The forward end of the platform is guided by a pin working in a slotted plate projecting from the end of the bench. At the opposite end of the bench there is a folding rack for supporting a clothes-basket for receiving the goods as they are passed through the rolls. This rack is capable of being extended or contracted to suit circumstances. The rolls are provided with an inclined apron or water trough which returns all of the water to the tub and prevents slopping. The machine is well calculated for practical use, and is capable of being folded compactly, as shown in Fig. 2, for storage or shipment.

IMPROVED FIRE-EXTINGUISHING APPARATUS.

We give an engraving of a fire-extinguisher adapted to receive one or more streams from hydrants or steam fire engines, and to discharge the water in a single solid stream, which is found to be much more effective and capable of reaching through greater distances than the several streams used separately.

The nozzle, A, consists of three portions—the butt, *a*, barrel, *b*, and tip, *c*. The nozzle is screwed to the barrel, so that it can be removed or exchanged for a larger or smaller one. The butt is fitted at its end with a number of screw nipples or tubes, *e*, for connection of the hose pipes. Within the butt, valves, *e'*, are fitted to close over the apertures by internal pressure, so that water cannot escape by the nipples not in use. The butt is also formed with a socket that receives the end of a lever or handle, *g*, by which the nozzle is manipulated.

The nozzle is mounted on a truck, and a forward truck is provided for supporting the forward end of the nozzle. This truck is fitted with a short reach having a socket in its end for receiving a long reach attached to the main truck. In going to and from the place of use the forward truck will be used, and for that purpose a draught pole and a driver's seat are fitted on the truck. When the fire is reached the forward truck is to be removed, the manipulating lever is put in place, and two or more lines of hose are connected to the nipples, and the device is aimed by

manipulation of the handle, and a solid stream combining the smaller streams is discharged at one point.

To protect the operators the truck is provided with a shield or screen, D, consisting of a frame covered with canvas and strengthened by rope or wire braces. The side bars of the frame are hinged or jointed, so that the shield can be folded compactly when not in use. A hose pipe with a spray nozzle is connected with the nozzle to keep the shield wet. These arrangements allow the firemen to approach closely to the fire with the nozzle.

This invention was recently patented by Mr. Daniel B. Lynch, of Grass Valley, Cal.

MISCELLANEOUS INVENTIONS.

An improvement in electric lamps, patented by Mr. Ludwig K. Böhm, of New York city, relates to electric lamps of the arc type, in which the carbons are contained in vacuum chambers of glass. The object of this invention is to provide for convenient renewal of the carbon and insure uniform feed of the positive carbon to compensate for waste, to which ends the invention consists in a carbon holder of novel construction, combined with a separable vacuum chamber. The same inventor has also patented an improvement in electric lamps of the class in which an incandescing carbon is employed in a vacuum chamber, the object being to allow the use of straight carbons and to facilitate the introduction of the carbons and sealing of the wires.

An improved electric lamp has been patented by Mr. Edwin M. Fox, of New York city. This improvement relates to electric lamps of that kind which give light by the incandescence of a piece of carbon contained in the vacuum chamber.

Mr. Lambert F. Fouts, of Greenfield, Iowa, has patented an improved switch board for use in connection with annunciator or burglar alarms. The several doors and windows of a dwelling, hotel, or other structure, or any other desired points, are connected in a closed circuit with a battery, an alarm, and the switch board, the latter having a pivoted button and fixed post for each door or point in the circuit. When a "break" is made—as, for instance, when a door is opened—it may be located by moving one or more of said buttons until the restoration of the circuit through branch wires connected with the aforesaid posts and the consequent arrest of the alarm give the required indications.

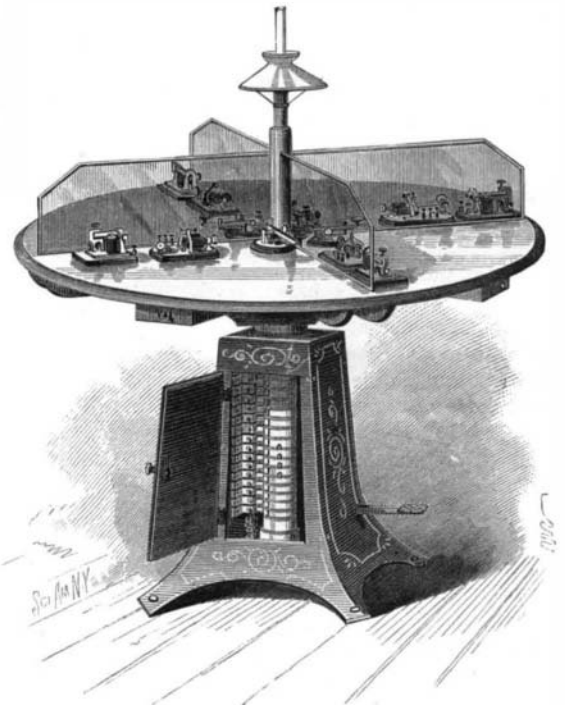
Messrs. Josiah Austin and Roscoe Chamberlain, of East Liberty, Ohio, have patented a gate which can be opened and closed by the vehicle which passes through it without compelling the driver to alight. It is an improvement upon that form of automatic gate in which a toothed bar acts upon a set of segmental teeth connected with the gate post to open or close the gate by the longitudinal movement of the sliding toothed bar, which is actuated by rods on opposite sides of the gate connected with double-cranked shafts that are struck and deflected by the vehicle wheels.

An improved axle-box cover has been patented by Mr. Daniel A. Bolt, of Stillwater, Minn. The object of this invention is to provide an efficient, easily-operated, and cheaply constructed lid or cover for the axle boxes of railroad and similar trucks, and one having such construction and arrangement that it will close from the jar or motion of the truck if accidentally left open. The invention consists of side pieces or facings, which are cast with or secured upon

lar projections formed in the grooves or ways to hold the lid tightly in place when closed and to prevent all rattling of the lid when the cars are in motion.

REVOLVING TELEGRAPH TABLE.

The engraving shows an improved revolving telegraph table patented by Mr. John L. Garber, of Greenville, Ohio. The table is divided by glass partitions into a series of subdivisions for the several sets of instruments. Each compartment of the table requires four strips or rings of metal around the central post, a separate insulated wire leading



GARBER'S REVOLVING TELEGRAPH TABLE.

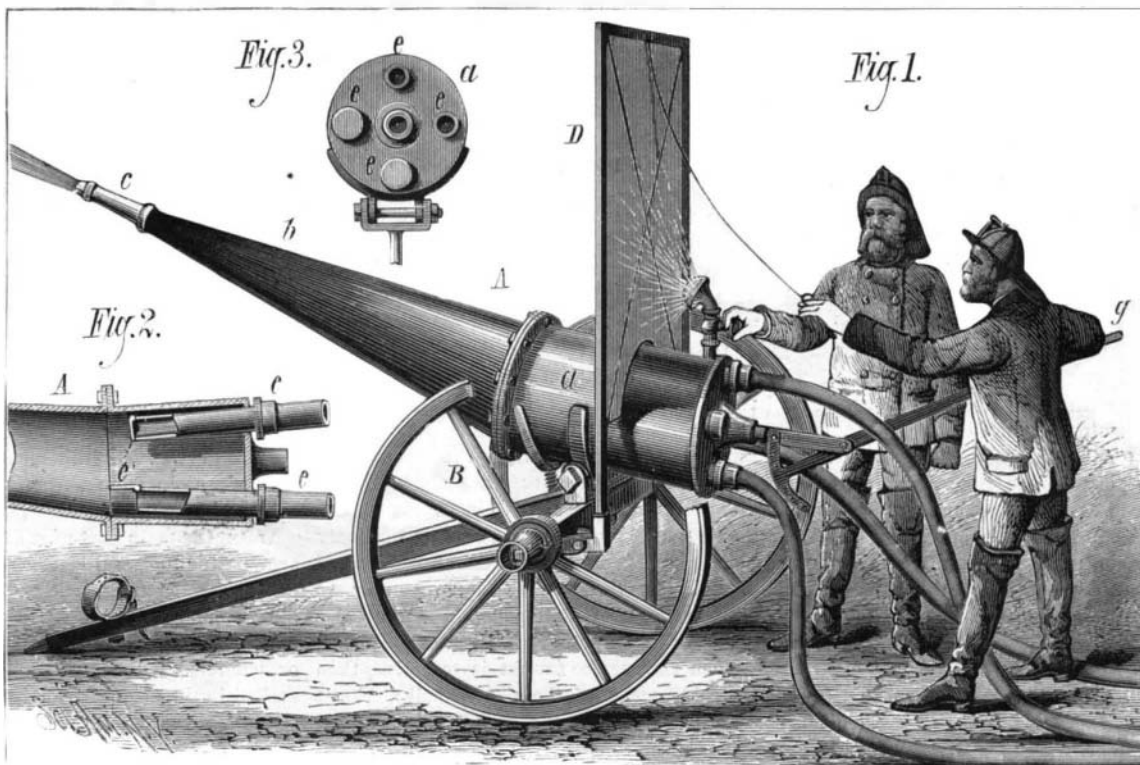
from each ring to their respective instruments on the table, the wires being placed in a shallow groove directly back of the rings and metal collar. The central post revolves in the central hollow leg of the table, and the hollow leg is provided with a series of contact springs, consisting of a segmental plate attached to a countersunk stem fitting into a socket and pressed against the plates or rings of the central post by a spiral spring, these contact springs or their sockets are connected with the local battery or main line. To the under side of the table is fastened a perforated ring, into the aperture of which a vertical locking bar fits, which is pressed upward by a suitable spring, and can be withdrawn by depressing a foot lever on the under side of the base frame of the table.

For conveniently illuminating the different sections of the table a lamp or gas burner is mounted at the intersection of the glass partition of the table. When the operator wishes to use any certain set of instruments he depresses the foot lever, which permits the table to be turned until the desired set of instruments is in front of the operator, who does not leave his seat. The foot lever being released the table is locked in position. This table may be arranged for two, three, or more sets of instruments, the number of rings and contact springs varying accordingly.

The advantages of this device will be apparent to telegraphic engineers and operators. The removal or insertion of switch plugs or the turning of switches is entirely avoided, the necessary changes being made automatically as the table is turned.

A Six-legged Cow.

A cow with two extra and useless legs was shown in Washington Market the other day. She came from Colorado, where she was found in a herd of cattle on the plains. The extra legs grew from the shoulders and were shaped like hind legs. The leg on the right side, terminating in an elongated hoof, measured 26 inches, and was at least 20 inches from the ground. The leg on the left side measured 16 inches, and was about 30 inches from the ground and evidently undeveloped. Looking from the tail of the animal toward the head the spine assumed a zigzag line, and the buttocks were widely separated, while the hips were unusually prominent.



LYNCH'S FIRE-EXTINGUISHING APPARATUS.

the face of the box, formed with the grooves or ways in which the cover or lid moves, and with projections at their upper ends for limiting the upward movement of the cover or lid, in combination with the lid formed with a bar or rod across its lower end, the sides of the lid being formed with cams or wedge-shaped projections to correspond with simi-