

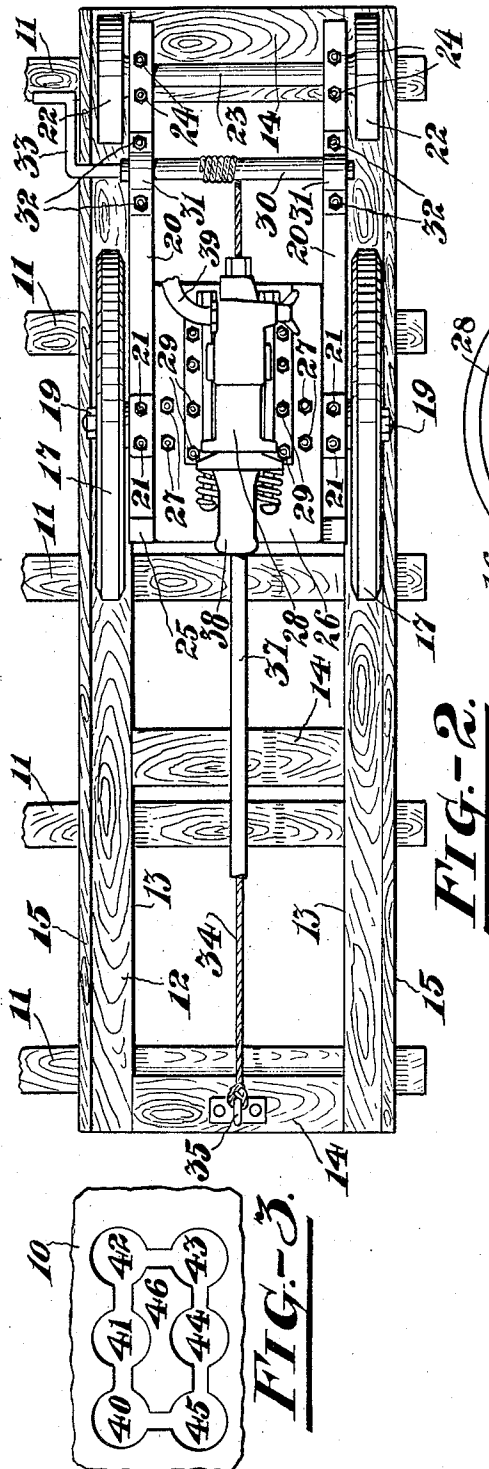
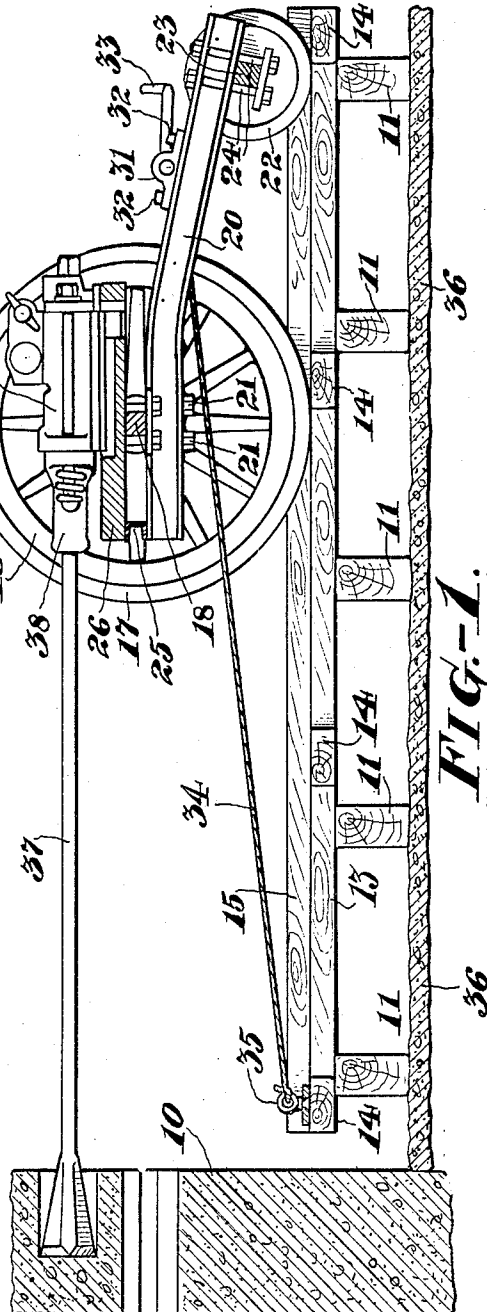
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MOUNTING FOR ROCK DRILLS

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MOUNTING FOR ROCK DRILLS

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This invention relates to rock drills, but more particularly to a mounting for a rock drill to be used in breaking a thick concrete or brick wall under circumstances that are such that rapidity in making the break is the most important consideration, as in fighting a fire.

One object of this invention is to provide a rugged compact and simple device to hold a rock drill steadily under conditions in which the ordinary quarry or mining mounting would be unsuitable.

Another object is to provide a rock drill mounting which may be quickly brought to the working position and set up in comparatively restricted quarters.

These objects among others are obtained by the device illustrated in the drawings, in which,

Figure 1 is a longitudinal view, partly in section, of a rock drill, rock drill mounting and tracks for the mounting.

Figure 2 is a top, plan view of the device shown in Figure 1, and

Figure 3 is a diagram showing the method of drilling a wall to form a break therein.

Referring more particularly to the drawings, 10 designates a wall which is to be pierced. Timbers 11 are laid parallel to the face of the wall 10. A frame 12 formed of two long parallel planks 13, held together by cross pieces 14 and having guard rails 15 secured to the outside edges of the planks 13 is placed transversely on the timbers 11.

A pair of artillery wheels 16, preferably having rubber tires 17 are mounted on an axle 18 and held in place by nuts 19. A pair of steel channel beams 20, are secured to the axle 18 by means of bolts 21 which extend through the axle. The channel beams 20 are, in this instance, bent slightly in a vertical plane. At the end of the beams remote from the axle 18, a second pair of wheels 22 are mounted on an axle 23, the axle 23 being secured to the frame or beams 20 by means of bolts 24. The channel beams 20 and the wheels 22 form a trail for the mounting and permit it to be moved from place to place without tilting.

A cross beam 25 is used to give additional

rigidity to the mounting. A saddle 26 is secured to the axle 18 by bolts 27 extending through apertures in the axle. The saddle 26 is so formed that a rock drill 28 of standard design may be fastened thereto by bolts 29. Rearwardly of the rock drill 28, a windlass 30, having bearings 31 is secured to the channel beams 20 by means of bolts 32. The windlass is provided with a crank 33. A cable 34 runs from the windlass to a ring bolt 35 which is fixed to the forwardmost cross-piece 14.

In the operation of the device, assuming that the wall 10 is to be pierced in order that a fire hose may be brought to play on a fire which is in progress on the left hand side of the wall as viewed in the drawings; the beams 11 are placed as shown on the floor 36. The planks 13 with the guard rails 15 and the crosspieces 14 are then laid on the beams 11 thus forming a pair of tracks for the wheels 16 and 22. The rock drill 28 together with the mounting is then run onto the track by means of a ramp or inclined plane (not shown).

When the rock drill and mounting are in place a drill steel 37, capable of drilling a hole of large diameter is inserted in the front head 38, of the rock drill 28. Pressure fluid is admitted to the rock drill from a source of supply (not shown) through the hose 39, of which only a part is shown. As the drill steel cuts into the wall, the windlass 30 is operated by turning the crank 33 thus drawing the mounting or carriage toward the wall 10 and advancing the drill steel into the wall.

One method of piercing the wall 10 by a hole of sufficient size to allow a hose to be played on the fire is shown in Figure 3. The holes 40, 41 and 42 are drilled in the order named, the tracks 12 being shifted by levers in order to place the drill for each hole. After the hole 40 is drilled a hose may be inserted therein and water delivered to the fire immediately. After the upper row of holes has been drilled the drill steel 37 is removed and a broaching steel (not shown) inserted in its place. The web of material remaining between the holes is cut away by

the broaching steel or a separate hand held drill may be used to remove this material. The timbers 11 are then removed and the tracks 12 dropped a corresponding amount.

5 The holes 43, 44 and 45 are then drilled and the material between them removed by broaching, thus permitting the removal of the block 46. The hole is now large enough to permit the passage of one or more hose lines
10 or if need be the firemen may pass through the hole.

I claim:

A mounting for rock drills comprising a pair of wheels, an axle operatively connect-
15 ing the wheels spaced one from the other, a pair of inclined members seated with one end upon the axle and extending therefrom in the form of a trail, bolts extending through the members and the axle to secure
20 the members to the axle, a saddle seated on the axle between said members, bolts extending through the saddle and the axle to secure the saddle fixedly to the axle, a rock drill mounted on the saddle and being fixedly se-
25 cured thereto, a second pair of wheels at the end of the trail distant from the first, a windlass on the trail intermediate the first and second pairs of wheels, a cable extending from the windlass, and securing means for
30 the cable positioned beyond the first wheels whereby the mounting and rock drill are moved when the windlass is operated.

In testimony whereof I have signed this specification.

35 CHARLES C. HANSEN.

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