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APPARATUS FOR HOLDING STONE FOR FACING

Filed March 15, 1961

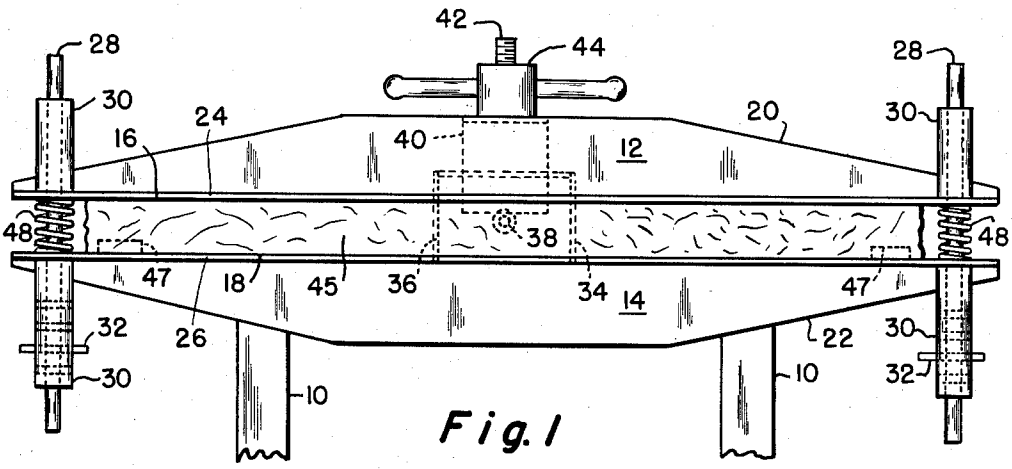


Fig. 1

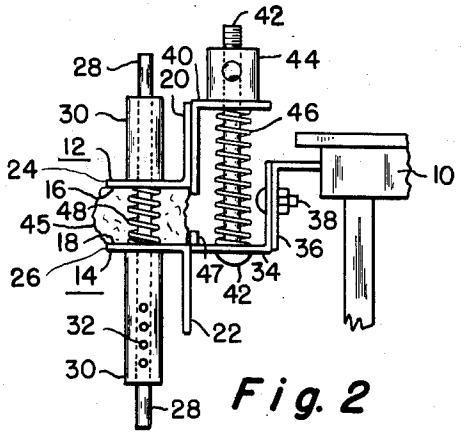


Fig. 2

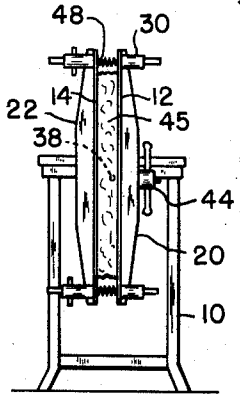


Fig. 3

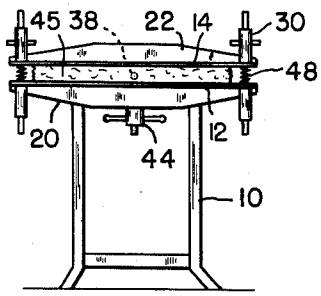


Fig. 4

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APPARATUS FOR HOLDING STONE FOR FACING

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This invention relates to a stone facing apparatus, more particularly to a novel means for holding semi-precious stone to facilitate facing the stone.

The facing of stone for interior or exterior decoration of buildings has been an art limited to skilled stone masons. The generally accepted method of facing stone today is a free-hand method wherein a skilled mason places the stone to be faced on a table and scribes a line on the stone using a straight edge. Using the line as a guide, the mason faces the stone with a regular mason's chisel and hammer. This method is not only time-consuming but is inaccurate even when practiced by a skilled stone mason. Frequently the faced stone does not have the front edges in the same vertical plane when faced by the free-hand method. Small deviations of this character are not noticeable to the eye when looking at each stone individually, but when a group of stones are laid, the finished wall may be noticeably out of line.

My invention provides a device which enables unskilled workers and even people deprived of sight to face stone more accurately than heretofore possible even by a skilled mason using the free-hand method. Essentially, it consists of a pair of vice members between which the stone to be faced is held. The outer edges of the vice members are positioned in the same vertical plane. The edges are straight, thereby providing a guide line for the mason. The vice members are rotatable to enable the mason to readily face both along the top and bottom edges.

In the drawings I have shown the presently preferred embodiment of my invention in which:

FIGURE 1 is a front elevation of my stone facing apparatus;

FIGURE 2 is a side elevation of my invention;

FIGURE 3 is a front elevation of my device on a reduced scale showing the device being rotated; and

FIGURE 4 is a view similar to FIGURE 3 showing the device after the rotation is completed and the stone is in position to complete the facing operations.

Referring to the drawings, I have shown my stone facing device attached to a table **10**. My device includes a pair of vice or holding members **12** and **14**. These members are preferably angle irons, each having a bearing side, **16** and **18** respectively, and a support side, **20** and **22**, which is at right angles to the bearing side. The two bearing sides are flat and are positioned in planes parallel to each other with the outer edges thereof, **24** and **26**, being straight and terminating in the same vertical plane.

The members are held in the proper position by pilot pins **28** which travel through bosses **30** located at each end of the bearing sides of the angle irons. A plurality of holes through the lower portion of the bosses and a matching hole through the pilot pins provide a means for adjusting the device to hold stones of various thicknesses. Keeper pins **32** pass through these holes and hold the pilot pins in position. For thick stones, the pins **32** pass through holes in the bosses which are close to the bearing side of the vice member. For facing thin stones, the pins pass through holes at a distance from the vice member.

The apparatus is fastened to the table by means of two additional angle irons. Clip angle **34** is fastened to

vice member **14** by any suitable means such as welding. The second angle iron **36** has one leg fastened to the clip angle **34** by pivot bolt **38** and the other leg fastened to table **10**.

A clip angle **40** is also fastened, generally welded, to vice member **12**. One leg of clip angle **40** and one leg of clip angle **34** are in planes substantially parallel to each other. A threaded bolt **42** extends through the openings in the parallel legs. A wing nut **44** is fastened to the bolt. By tightening wing nut **44** the distance between the bearing sides of members **12** and **14** may be reduced. In this manner a stone **45** positioned between the bearing sides may be held firmly in position. Stops **47** fastened to vice member **14** cooperate with a portion of clip angle **40** which extends below the support side **20** of member **12** to position the stone **45** between members **12** and **14** to the correct depth.

A coil spring **46** is placed around bolt **42** between clip irons **34** and **40**. Coil springs **48** fit around pilot pins **28** between the vice members **12** and **14**. These springs cooperate to completely release the vice members from the stone when the wing nut is loosened.

In operation, the stone to be faced is placed between the vice members **12** and **14** and wing nut **44** tightened to hold the stone. The outer edges of the vice members define the lines on which the mason will face the stone. The stone mason with a chisel faces the stone along the upper face using the edge of the upper vice member as a guide line. After this is completed, the bolt **38** is loosened and the device rotated 180° (as shown in FIGURES 3 and 4), thereby putting the unfaced edge at the top where it is readily accessible to the mason. The mason then faces the other side using the other edge of the vice member as a guide line. After the stone is completely faced, the device is returned to its original position (with the wing-nut up) and wing nut **44** loosened. Springs **46** and **48** will make sure that the stone is completely released from the vice action and the stone may be readily removed.

While I have described the presently preferred embodiment of my invention, it is to be understood that it may be otherwise embodied within the scope of the following claims.

I claim:

1. Apparatus for holding stone while facing the stone, said apparatus comprising: a pair of angle irons, each iron having a flat bearing side having a straight edge, means for holding said irons in operative relationship wherein the bearing sides are disposed opposite to and parallel with each other and the straight edges of the irons are in the same vertical plane, means for increasing and decreasing the distance between the bearing sides of the irons, and means for rotating the irons 180 degrees said last mentioned means being attached to the edge of one of said angle irons which is opposite the straight edge thereof so that said straight edge is unobstructed in order to provide ready access to the stone.

2. Apparatus for holding stone while facing the same, said apparatus comprising: a pair of angle irons, each angle iron having a flat bearing side terminating in a straight edge, a pair of pilot pins passing through opposed ends of the angle irons, said pins holding the straight edges of the angle irons in the same vertical plane, support members attached to each angle iron, said support members holding the bearing surfaces of said angle iron parallel to each other, means for increasing and decreasing the distance between the bearing surfaces of the angle irons; and means for rotating said angle irons at least 180 degrees.

3. Apparatus for holding and positioning stone while

facing the stone, said apparatus comprising: a pair of vice members, each member having a flat bearing side terminating in a straight edge, a pair of pilot pins passing through opposed ends of the angle irons, said pins holding the straight edges of the angle irons in the same vertical plane, support members attached to each angle iron, said support members holding the bearing surfaces of said angle iron parallel to each other, stops affixed to one of the vice members to position a stone between the vice members, means for increasing and decreasing the distance between the bearing surfaces of the angle irons; and means for rotating said angle irons at least 180 degrees.

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