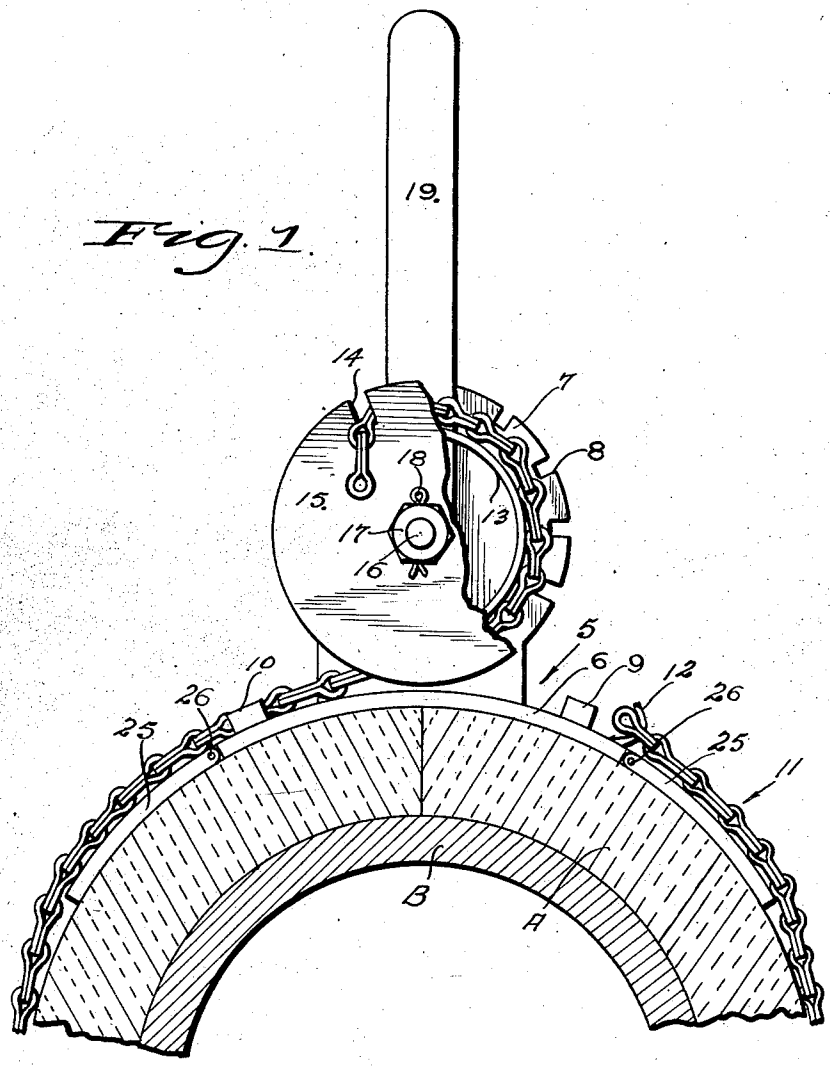
July 31, 1945. A. OSBORNE 2,380,781

SHEET METAL LAGGING TOOL

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Fig. 1.



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Fig. 2

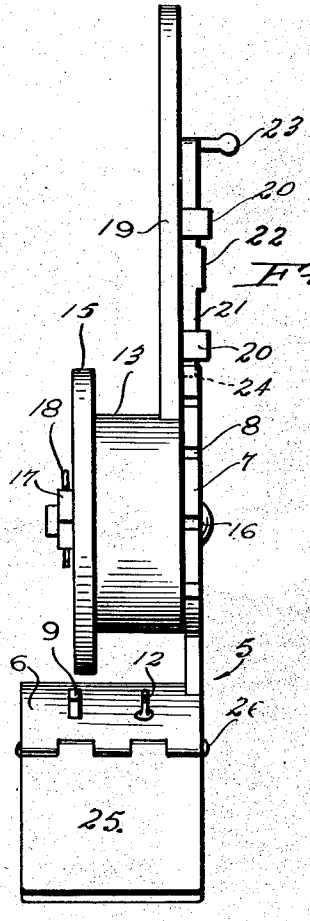


Fig. 3.

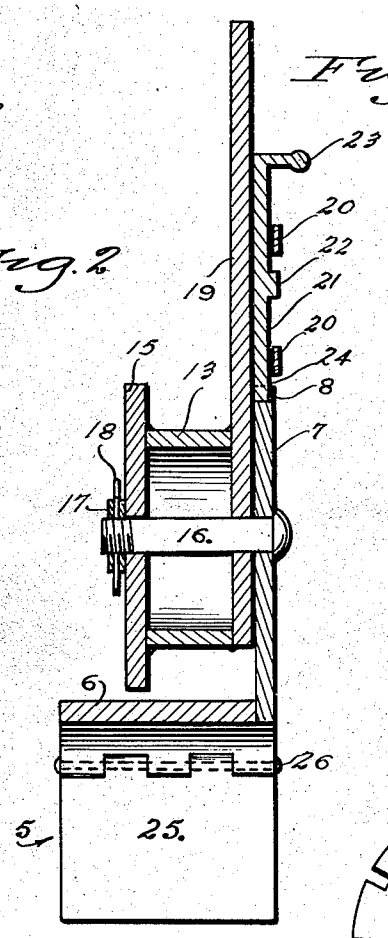
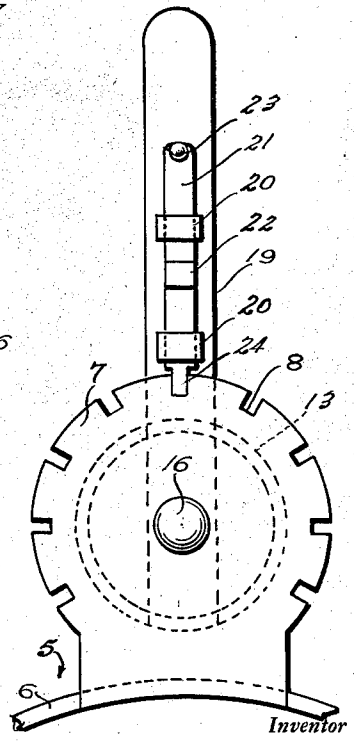


Fig. 4.



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SHEET METAL LAGGING TOOL

Alfred Osborne, Pittsburgh, Pa.

Application January 17, 1944, Serial No. 518,627

3 Claims. (Cl. 254—78)

This invention relates to an especially constructed and novel tool particularly useful in handling an embracing flexible chain such as is adapted to be wrapped around pipe insulation to hold the insulation or equivalent covering material in place while screwing or bolting sheet metal jackets or lagging material in place.

As implied by way of the preceding introductory statement of the invention the task of securing sheet metal lagging over insulated piping is not easily performed. In such circumstances I have found it expedient and practicable to design and utilize a special tool, there being a wrap-around chain cooperable with the tool so that the chain and tool together serve to adequately keep the insulated pipe covering in place during the subsequent or additional step of screwing and bolting lagging, preferably the sheet metal variety, in place.

In adopting a tool and chain assemblage answering the requirements of the trade and the user, I have, after careful study and thought, provided special adapter means such as serves to accommodate the binding chain and also functions as a supporting base for the lever-equipped chain-winding drum and keeper means for the lever.

A structure devised in accordance with the principles of this invention seems both appropriate and aptly fitted for the purposes intended and otherwise suitable in that it is comparatively simple in construction, reliable and easy to use, sturdy and well balanced.

Other features and advantages will become more readily apparent from the following description and the accompanying illustrative drawings.

In the drawings, wherein like numerals are employed to designate like parts throughout the same:

Figure 1 is a view partly in section and partly in elevation, the elevational portion being broken away to disclose certain otherwise hidden details, said view disclosing a fragmentary portion of the pipe, pipe covering and the chain and chain winding and binding tool.

Figure 2 is an edge elevation of the tool per se with the chain omitted.

Figure 3 is a central vertical sectional view through said tool.

Figure 4 is a rear elevational view, that is, a view observing the assemblage seen in Figure 2 in a direction from right to left.

The adapter device, this being the main support for the tool, is denoted by the numeral 5. This is characterized by an arcuate central or main base plate 6 having an upright terminating in a disk-like head 7. The marginal portion of this head is provided with circumferentially spaced notches 8 constituting keeper seats. The plate 6 is provided with alternate lugs 9 and 10 to accommodate the length of the flexible binding chain 11. One end of the chain is detachably connected with an anchoring hook 12 and the opposite end of the chain is wound about a reeling drum 13 and fastened in an anchoring notch 14 in the marginal portion of the disk-like head 15 forming an internal part of the drum. As brought out to advantage in Figure 3, the drum is mounted for idling rotation on a bolt 16 mounted in the upright 7. This bolt serves as an axle and there is an assembling and retaining nut 17 on the threaded end held in place against accidental displacement by a cotter-key 18. In addition to the chain anchoring and retaining head 15 the drum is also provided with an operating lever 19. This lever is formed integral with the drum and rides in contact with the upright 7 and, like the drum, is rotatable on the axle 16. The lever is of any appropriate length and design. On its rear side it is provided with strap retainers 20 for a sliding detent or latch 21. The latch is provided with a stop shoulder 22 and is also provided with a handle 23. The reduced keeper finger 24 (see Figures 3 and 4) on the lower end of the latch is adapted to be selectively engaged with the keeper notches or seats 8.

In practice, I have found it desirable to provide extra arcuate plates or flaps 25, these being hingedly connected as at 26 to opposite ends of the main adapter plate 6.

In operation one end of the chain 11 is connected with the anchoring hook 12 on the plate 6. The chain is then wrapped around the insulation covering A embracing the pipe B. Then with the device in place as shown in Figure 1, the free end of the chain is wound partly over the drum 13 and anchored in the retention notch 14. By partly rotating the drum and winding the chain thereon, the chain is made taut and binds the covering A on the pipe B. The latch 21 is engaged with the desired keeper notch to hold the lever in the position to which it has been moved, thus rendering the device self-sufficient to hold the covering A in place. It now becomes possible to bolt, screw or otherwise fasten the sheet metal lagging (not shown) in place.

It is thought that persons skilled in the art to which the invention relates will be able to obtain a clear understanding of the invention after considering the description in connection with the

drawings. Therefore, a more lengthy description is regarded as unnecessary.

Minor changes in the shape, size and arrangement of details coming within the field of invention claimed may be resorted to in actual practice, if desired.

Having described the invention, what is claimed as new is:

1. In a metal lagging tool of the class described, a longitudinally bowed adapter plate provided with a right angularly disposed support, said support including a disk-like head having marginal notches constituting keeper seats, an axle carried centrally by said head, a chain drum mounted on said axle, said drum including a notched head and lever, and a latch on said lever engageable with said keeper seats.

2. In a metal lagging tool of the class described, a longitudinally bowed adapter plate provided with a right angularly disposed support, said support including a disk-like head and said head having marginal notches constituting keeper seats, arcuate leaves hingedly connected to the opposite ends of said adapter plate, a chain hook on one end of said adapter plate, a chain guide lock on the opposite end of the plate, an axle carried centrally by said head, a chain drum mounted on said axle, said drum including a notched head and a lever, and a latch on said lever engageable selectively with keeper seats.

3. A metal lagging tool of the class described comprising a longitudinally bowed adapter plate provided with a right angularly disposed part including a disk-like head having marginal notches, said head being provided centrally with an outstanding axle, a chain accommodating and winding drum mounted for rotation on said axle, said drum having a lever in sweeping movable contact with the adjacent inner surface of the said head, the upper end of the lever extending beyond the marginal notched portion of the head, and a latch on said extending end portion of the lever mounted in a range for selective engagement with the notches.

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