Dec. 22, 1925. 1,566,903

W. B. DURST

CORING IMPLEMENT FOR CONCRETE BLOCKS

Filed June 15, 1925

Fig. 1.

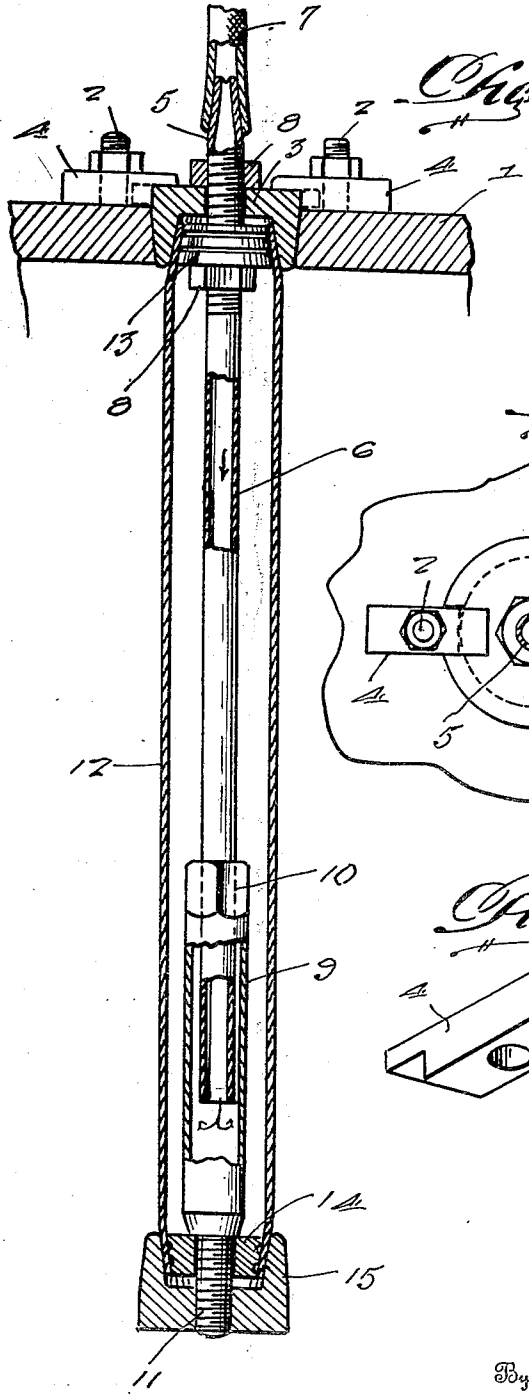


Fig. 2.

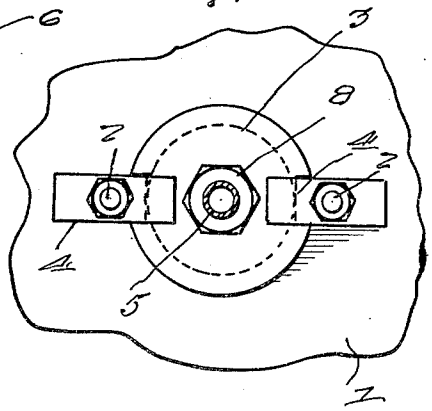
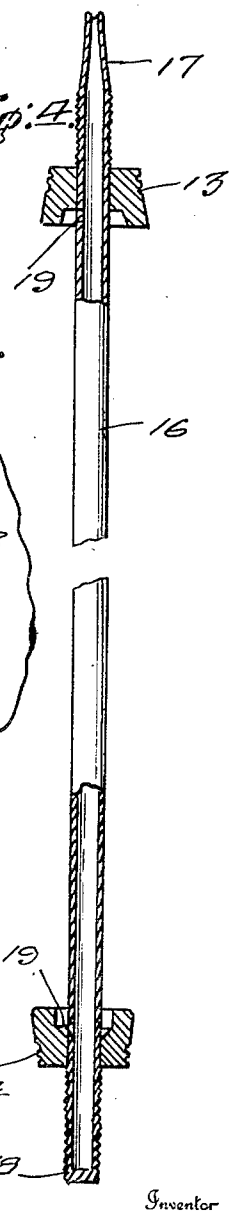


Fig. 3.

Fig. 4.



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UNITED STATES PATENT OFFICE.

WILLIAM B. DURST, OF GAINESVILLE, FLORIDA.

CORING IMPLEMENT FOR CONCRETE BLOCKS.

Application filed June 15, 1925. Serial No. 37,287.

To all whom it may concern:

Be it known that I, WILLIAM B. DURST, a citizen of the United States, residing at Gainesville, in the county of Alachua and State of Florida, have invented certain new and useful Improvements in a Coring Implement for Concrete Blocks, of which the following is a specification.

This invention relates broadly to the manufacture of hollow concrete blocks, and it has more particularly reference to a device or implement which is used for forming a bore in a concrete block during the molding operation.

Briefly, the invention has more particular reference to a rubber expansible tube which means extending into the interior thereof for introducing a supply of air for expansion of said tube.

The invention is characterized by the presence of novel details disposed in practical association with each other in a manner to permit the block to be cored out in an efficient manner.

The particular details and their relative arrangements will become readily apparent from the following description and drawing.

In the accompanying drawing forming a part of this application, and in which like numerals are employed to designate like parts throughout the same:

Figure 1 is a view in section and elevation showing the preferred embodiment of the invention.

Figure 2 is a substantial top plan view of the same with the rubber hose removed.

Figure 3 is a perspective view of one of the retaining lugs, and

Figure 4 is a detail sectional and elevational view of a different embodiment of air conducting conduits.

Observing Figures 1 to 3 inclusive, and more particularly Figure 1, it will be seen that the reference character 1 designates a portion of a conventional machine such as is now used in the process of forming hollow concrete blocks. This is provided with spaced upstanding screw threaded studs 2, disposed on diametrically opposite sides of a tapered opening. Fitted into this opening is a plug 3 provided with a flange resting upon the part 1 of the machine. At diametrically opposite points this flange is provided with notches and retaining lugs 4 are fitted onto the studs 2, and have portions extending into the notches with extensions overlying the body portion of the plug. It should be noted that the under side of this plug is formed with a recess and that it is also provided with a central opening. Extending upwardly through and beyond this opening is the screw threaded upper end 5 of a metal pipe 6 forming a part of an extensible conduit. A rubber air supply hose 7 is adapted to be connected to the tapered extremity of this pipe. Also, nuts 8 are threaded upon the threaded portions and located on opposite sides of the plug. As before intimated, this conduit is extensible, and it therefore comprises a relatively larger section 9 into which the lower end of the pipe 6 telescopes. This section is provided with a flat faced wrench engaging portion 10 at its top and with a reduced screw threaded extension 11 at its bottom. At this time I would point out that the air coming through the pipe 6 expands into the section 9, and then flows upwardly to fill a surrounding rubber tube 12. This rubber tube is of considerably greater diameter than the conduit, and it is connected to the conduit by novel means.

The novel means referred to comprises a tapered collar 13 screwed onto the threaded portion 5 at the top of the pipe 6, this collar serving to bind the upper end of the rubber 12 into the recess in the bottom of the aforesaid plug 3. To retain the collar in place the lower nut 8 is screwed upwardly. There is also a collar 14 placed loosely upon the threaded extension 11 at the bottom of the conduit, and this is disposed within the lower ends of the rubber 12 and serves to press the same against the surrounding wall in the cup 15 which is threaded onto the extension 11.

From the foregoing it is obvious that I have evolved and produced a novel coring device for hollow concrete blocks, the same comprising an extensible air conducting conduit surrounded by an elastic rubber tube which is firmly connected at its ends to said conduit and is adapted to be blown under the action of the air introduced through the conduit. In some instances, instead of using the extensible conduit, which enables a regulation of the air, I employ the type of conduit shown in Figure 4. In this figure it will be seen that the conduit simply comprises a single length of pipe 16 tapered at 17 at its top and closed at 18 at its bottom.

Both end portions are externally screw threaded, and adjacent the ends are escape ports 19. The rubber tube binding collars 13 and 14 are the same as before described with the exception that they are recessed upon their inner faces to make for an additional discharge of the air through the ports 19. It is of course understood that the rubber tube 12 surrounds this form of conduit in the same way as previously set forth.

No doubt persons skilled in the art to which the invention relates will be able to obtain a clear understanding of the same by considering the description in connection with the drawings. Also the method of the use of the device is the same as usual; a description thereof is deemed unnecessary.

While the preferred embodiments of the invention have been shown and described it is to be understood that changes coming within the field of invention claimed may be resorted to if desired.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent is:—

1. In a coring device for concrete blocks, an air supply conduit in the form of a pipe closed at one end and tapered at its opposite end, said pipe being provided with screw threads adjacent its end and inward of these threads with air escape ports, and a pair of tube retaining collars mounted on the threaded ends of said pipe, the peripheral edges of said collars being tapered and formed with anti-slipping grooves, and the opposed inner faces of the collars being formed with recesses, said collars being adapted to be associated with and disposed adjacent to said air ports.

2. In a coring device for concrete blocks, an extensible air supply conduit composed of telescopically connected sections, one of which is of a greater diameter than the other to form an air receiving and retorting receptacle, said last named section being provided with a screw threaded stem at its outer end, the first named section being screw threaded at its outer end, collars associated with the threaded ends of said sections, recessed heads surrounding said threaded ends, and a rubber tube surrounding said conduit and having its ends secured in the recesses of said head by said collars.

3. In a coring device for concrete blocks, an air supply conduit adapted to be contained within an open ended rubber tube, said conduit being composed of a relatively long pipe section and relatively short pipe section, said last named section being of a diameter to loosely receive the inner end of the long section for providing an air receiving and retarding receptacle, said long section being externally screw threaded and tapered at its outer end, the short section being flat faced on its exterior at its inner end and provided with a reduced threaded stem.

In testimony whereof I affix my signature.

WILLIAM B. DURST.