

G. MACKAY.
BINDER.

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1,005,444.

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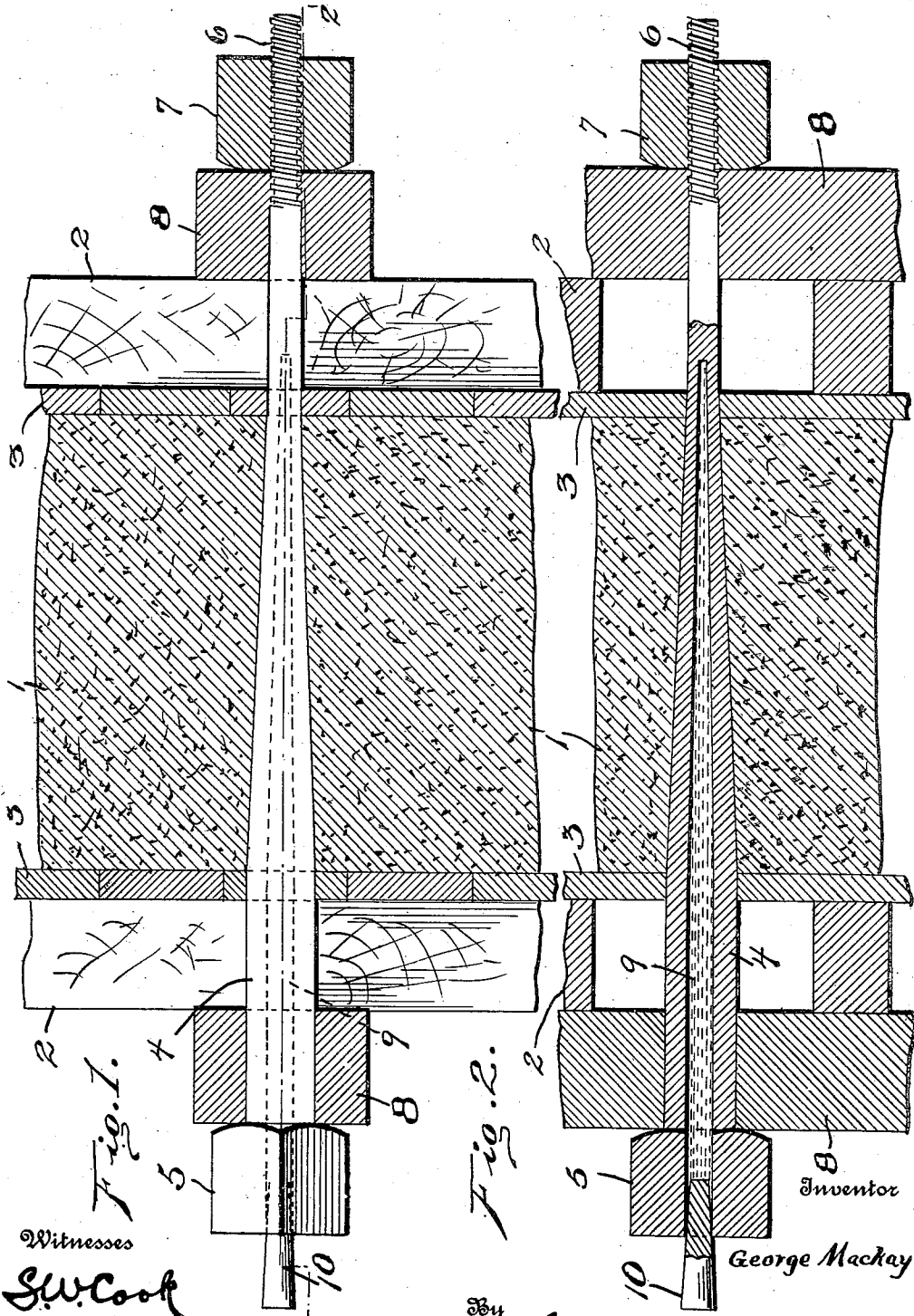


Fig. 1.

Fig. 2.

Witnesses

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UNITED STATES PATENT OFFICE.

GEORGE MACKAY, OF JERSEY CITY, NEW JERSEY.

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1,005,444.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, GEORGE MACKAY, a citizen of the United States, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Binders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to new and useful improvements in binders for cement forms or molds.

The common method now employed for retaining the sides of the cement forms in proper relation to each other is to use an iron bolt, which extends through the said molds, or to connect the same by wires. When it is desired to remove the iron bolts the cement obviously adheres thereto, and often it is impossible to remove the same without injuring the walls.

The object of my improved method is to provide a bolt formed of wood or the like which will contract as the cement dries, and therefore be very readily removed.

A further object of my invention is to improve and simplify devices of this character, rendering them comparatively simple and inexpensive to manufacture, reliable and efficient in use, and readily operated.

With the above and other objects in view this invention resides in the novel features of construction, formations, combinations and arrangements of parts to be hereinafter more particularly described, claimed and illustrated in the accompanying drawing, in which—

Figure 1 is a sectional view taken through a cement wall form having my improved binder applied thereto, and Fig. 2 is an enlarged detail sectional view taken through the binder removed from the wall.

Referring to the drawings by characters of reference, the numeral 1 designates a portion of a cement wall, the same being supported in a mold form 2, provided with the usual lining 3.

My improved binder 4 is illustrated as supporting the opposite sides of the mold 2, the same being in the form of a tapered bolt, provided at its enlarged end with a head 5

and at its opposite end with a threaded extension 6, adapted for the reception of a nut 7, whereby the same may be used to clamp the opposite sides of the mold securely together between the customary longitudinally extending beams 8 interposed between the said mold, and the head and the nut respectively. This bolt or binder 4 is provided with a centrally located longitudinally extending channel 9, adapted, when the device is applied, to be filled with water, said water being retained therein by means of a suitable plug 10 adapted to be fitted in the opening formed in the head 5. After the cement, which is placed in the mold, hardens, the block is removed, allowing the water to flow from the said opening 9, obviously permitting the binder, which is preferably formed of hard wood, to contract and be easily withdrawn from the mold without injuring the cement contained therein.

From the foregoing disclosure it will be manifest that a binder is provided for which will fulfil all the necessary requirements of such a device.

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

1. A device such as described, provided with a centrally located passage for the reception of fluid, means for retaining said fluid therein and for the purpose of providing for the expansion of the said device, and means for removing the said fluid and providing for the contraction of the said device, substantially as and for the purposes described.

2. A device such as described, comprising a tapered member, a head formed on one end thereof, a threaded extremity provided upon the other end thereof, the said body being centrally channeled for the reception of a fluid, a plug for the purpose of retaining the said fluid therein, for the purpose of providing for the expansion and contraction of the body portion, substantially as and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE MACKAY.

Witnesses:

JAMES MACKAY,

WILLIAM GORDON.