(No Model.) 2 Sheets—Sheet 1.

W. H. BAKER.

ATTACHMENT FOR POTTERY TURNING MACHINES.

No. 417,967. Patented Dec. 24, 1889.

Fig. 1.

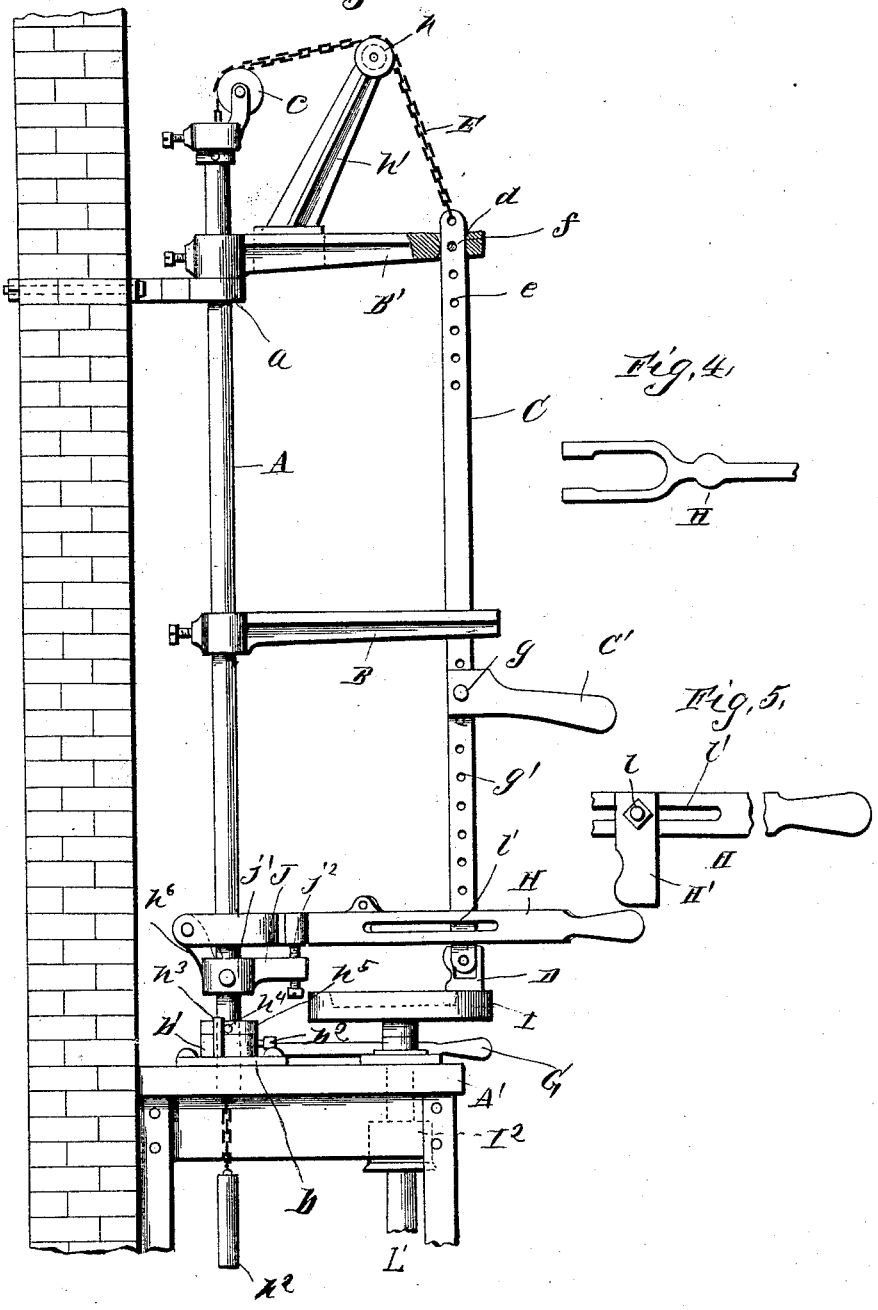


Fig. 4.

Fig. 5.

WITNESSES

C. L. Taylor

Villette Anderson.

INVENTOR

William H. Baker

by E. W. Anderson

his Attorney.

(No Model.) 2 Sheets—Sheet 2.

W. H. BAKER.

ATTACHMENT FOR POTTERY TURNING MACHINES.

No. 417,967. Patented Dec. 24, 1889.

Fig. 2.

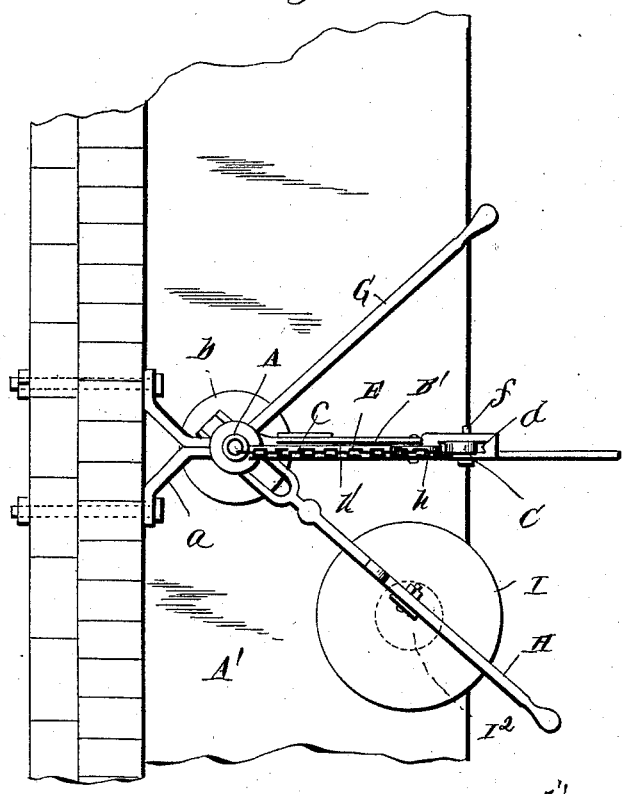
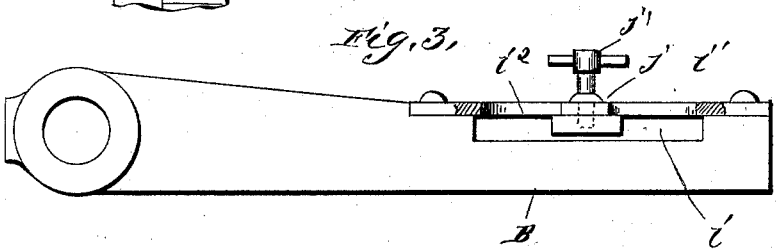


Fig. 3.



WITNESSES

C. L. Taylor

Villette Anderson

INVENTOR

William H. Baker

by E. W. Anderson

his Attorney.

UNITED STATES PATENT OFFICE.

WILLIAM H. BAKER, OF TRENTON, NEW JERSEY.

ATTACHMENT FOR POTTERY-TURNING MACHINES.

SPECIFICATION forming part of Letters Patent No. 417,967, dated December 24, 1889.

Application filed June 29, 1889. Serial No. 316,072. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. BAKER, a citizen of the United States, residing at Trenton, in the county of Mercer and State of New Jersey, have invented certain new and useful Improvements in Pull-Down Attachments for Pottery-Turning; and I do 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a side elevation of the invention. Fig. 2 is a top view, and Figs. 3, 4, and 5 are detail views.

This invention relates to certain improvements in jiggers for pottery-ware; and it consists in the novel construction and combination of parts, as will fully appear from the following description and accompanying illustration.

In carrying out my invention I employ an upright, and preferably hollow, shaft A, which is suitably supported in position, passing near its upper end through the eye of a bracket *a*, fastened to or in the wall, and stepped at its lower end in a bearing *b*, bolted to a frame or support A′. This shaft carries a swiveled pulley or sheave *c* at its upper end, and two arms B B′, one applied by a collar and holding-screw near its upper end above and resting upon the bracket *a*, and the other by similar means a short distance above its lower end.

C is a vertical carrying beam or bar, which is held in an opening *d* in the outer free end of the upper arm, and in the arm B, as explained farther on, said beam or bar having a series of adjusting-apertures *e* in its upper end portion, through any one of which, and through coincident apertures in the upper arm B′, is inserted a holding and adjusting screw or bolt *f*. The opening *d* in the arm B′ has convex or rounded front and rear walls to permit the beam or bar C to be freely moved to a limited extent in and out at its lower end in adjusting the profile or former on said beam to its work.

The beam or bar C has a manipulating-handle C′, which is vertically adjustable by a suitable bolt *g* and adjusting-apertures *g′* in the beam C, according to requirement.

The beam C carries at its lower end a "profile" D, which is suitably secured thereto to operate upon and give the required contour to the inside of the vessel. Said beam is suspended from and has connected to its upper end a chain E, which passes over a pulley *h* in the upper end of a crane *h′*, secured upon the upper arm B′, said chain also passing over the swiveled pulley or sheave *e*, and thence down through the shaft A. To the lower end of this chain is a weight h^2, counterbalancing the weight of the beam.

The step or bearing *b* has resting upon it the inner end or collar *b′* of a handle or lever G, which collar is held to the shaft A by a holding-screw b^2, whereby the shaft may be given an axial movement in order to center the beam with relation to the jigger and when it is desired to carry or move the beam away from the jigger. This movement of the said parts is limited by a pin h^3 on the shaft-step *b* engaging a pin or stop h^4 on a collar h^5, held on the shaft A.

The arm B has applied to one side, over a slot *i* therein near the outer end, a bar *i′*, held thereto by bolts and having a recess i^2, which receives and in which moves or is adjusted the slide *j* of a gage G′, also comprising a clamp-shouldered lever-screw *j*. The slot *i′* also receives the beam or bar C, the movement of which is limited by the gage G′, which is adjusted to give the thickness of wall required. The outward movement or swing of the beam is designed to facilitate the work and to enable the profile on the lower end of the latter to clear the edges of the vessel operated on in removing or withdrawing the profile from the vessel.

H is the pivoted "pull-down" arm, which is bifurcated to permit its application to the shaft A, and which has a bolt passed through the projecting ends of the arms of its bifurcated portion and through a lug h^6 on the gage J, hereinafter referred to, to hold it in position and yet allow the arm to be swung upward, as required, when it is not in use. The arm H is upheld by detaching the chain E from the beam C and connecting it to said

arm, the swiveled pulley *c* swinging or accommodating itself to the change in the direction of the passage of the chain from the beam to the said arm, which is arranged at an angular distance from the plane of said beam. Previous to detaching the chain E from the beam the latter is elevated out of the way, and thus held by the insertion of the screw or bolt *f* in the required opening in the beam and the coincident aperture in the arm B′. The arm H carries a profile or former H′ and has a handle for its convenient manipulation. The arm H, with its profile or former H′, is for use in shaping the inner surface of shallow vessels, the beam C, with its former or profile, being used in treating deep vessels. The arm H being connected to the chain E, as above stated, the handle or lever G is so manipulated as to align the profile H′ of the arm H with the center of the jigger or its head, the lever G then being secured by the screw b^2. The profile H′ is gaged by the movement of its holding screw-bolt *l*, engaging a longitudinal slot *l′* in the arm H. The arm H is arranged to stand at such an angle to a vertical plane passing through the beam C and shaft A that when the beam C is moved or carried a certain distance away from over the jigger said arm will be brought into alignment with the jigger, ready for use. The angular distance is usually about forty-five degrees.

I is the jigger, suitably mounted upon a shaft L′, journaled in the frame or support A′ and driven by a pulley I^2 and a belt.

J is a gage to regulate the height of the arm H according to the depth of vessel its profile or former is designed to enter, in order to secure uniform thickness of bottom of the vessel. The gage consists of a bracket *j′*, held upon the shaft A by a holding-screw, and of an adjusting-screw j^2, carried by said bracket and engaging the arm H.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with the arms carried by an upright shaft, of the suspended vertical profile-beam carried by said arms, one of said arms having a gage consisting of a slide *j* and a clamp-shouldered lever-screw *j′*, working in a recess i^2 in a bar *i′*, applied to said arm to control the movement of said beam to and from the vessel operated upon, substantially as set forth.

2. The combination, with the upright shaft and the arm carrying a profile, of the gage consisting of a bracket applied to said shaft and an adjusting-screw carried by said bracket and engaging said arm, substantially as set forth.

3. The combination, with the upright shaft and the pivoted arm carrying a profile, of the gage consisting of a bracket applied to said shaft and an adjusting-screw carried by said bracket and engaging said arm, and the chain or its equivalent connected to said arm and passed over a swiveled pulley upon the upper end of said shaft, and having a weight suspended from the lower end of said chain, substantially as described.

4. The combination of the upright shaft, the shaft step or bearing, the pivoted pull-down arm, and the shifting lever or handle held upon said shaft and having a stop engaging a pin on the shaft-step, substantially as set forth.

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

WM. H. BAKER.

Witnesses:
THOMAS STUBBS,
GEORGE RICH.