

(No Model.)

A. A. PAGE.
METAL KNOB.

No. 465,286.

Patented Dec. 15, 1891.

Fig 1

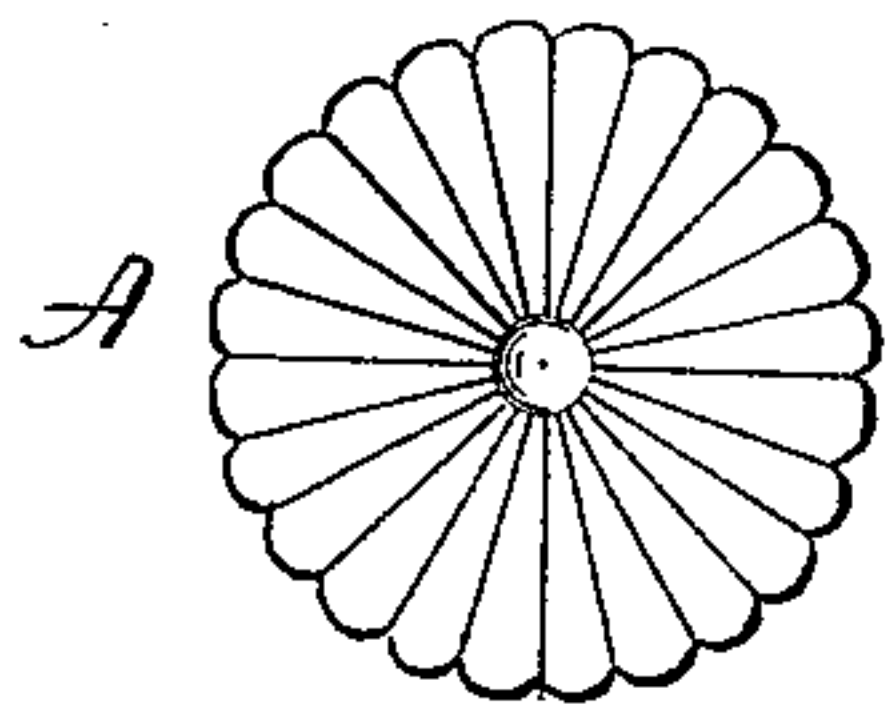


Fig. 2

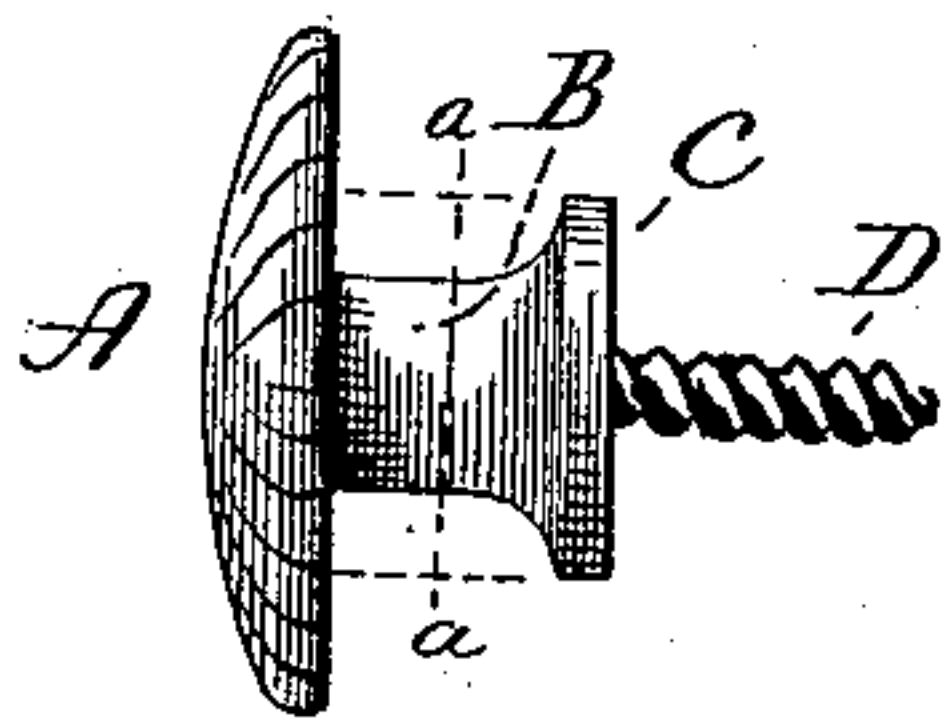


Fig. 3

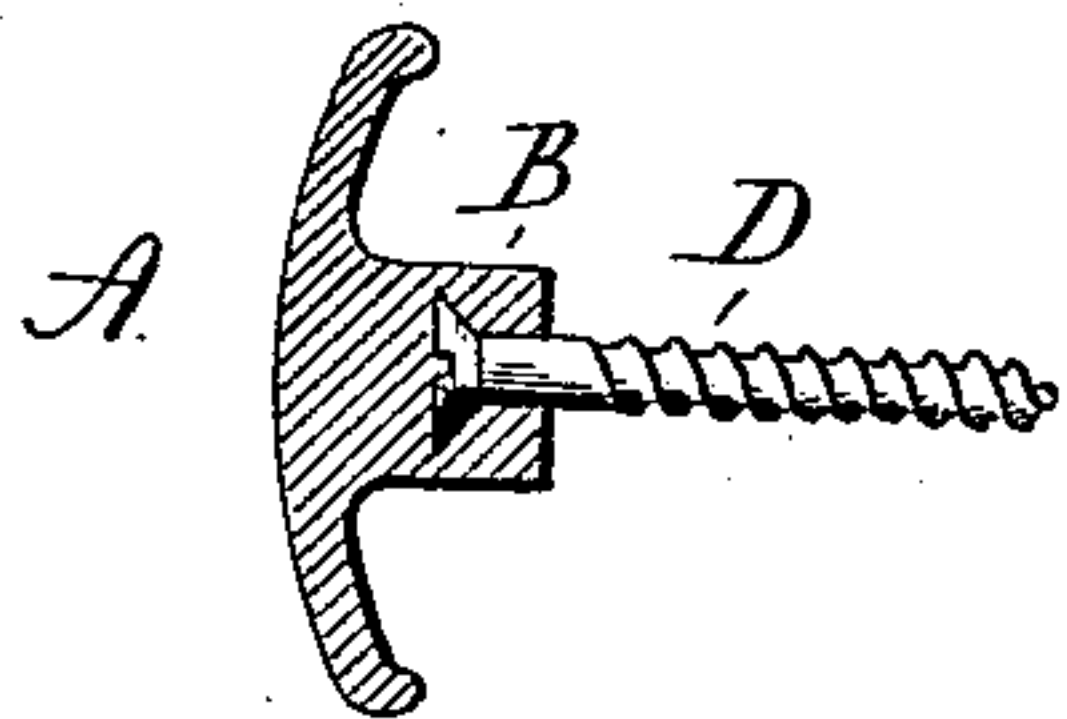


Fig 4

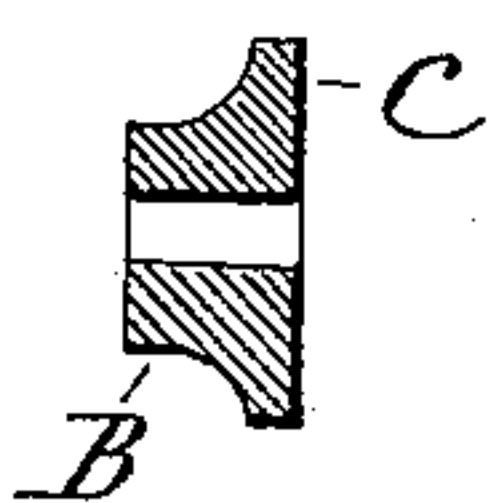


Fig. 5

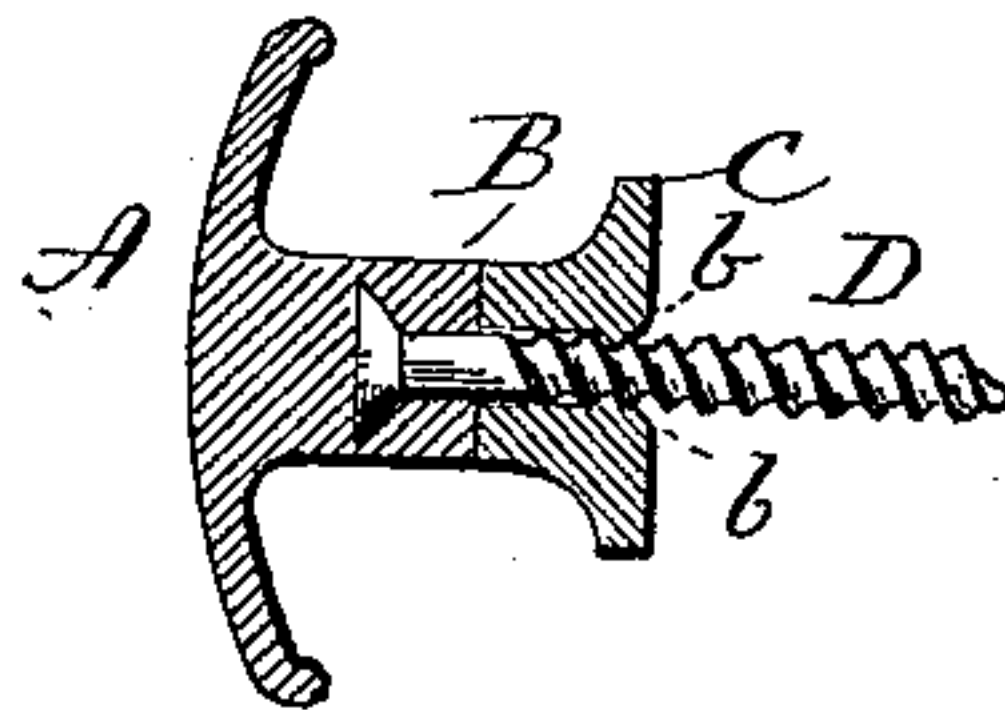
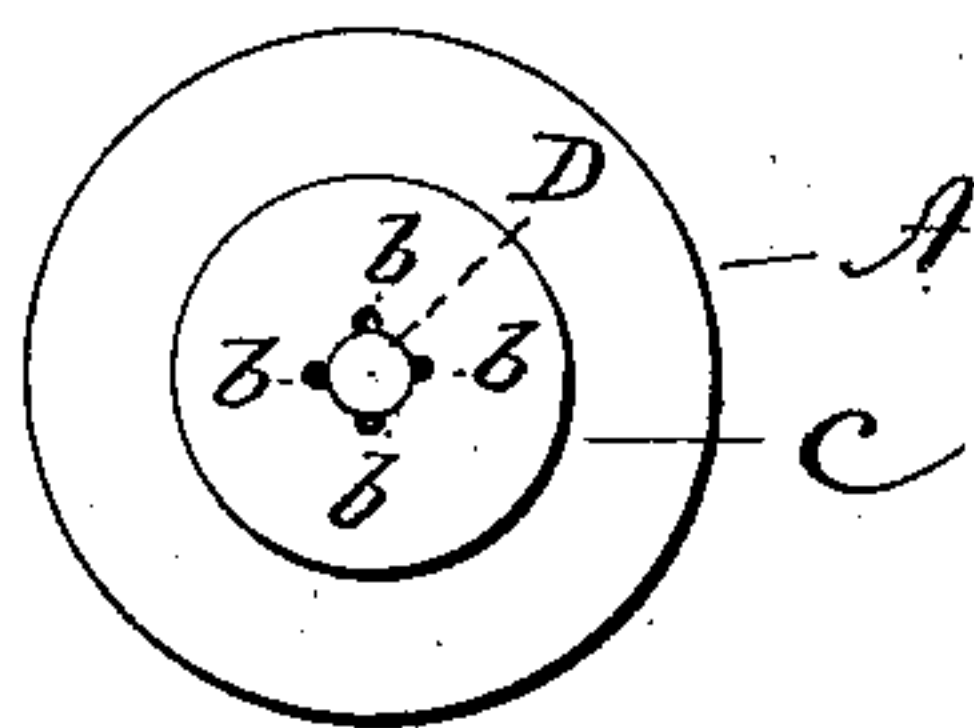


Fig. 6



Witnesses
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Inventor
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UNITED STATES PATENT OFFICE.

ALBERT A. PAGE, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO THE
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METAL KNOB.

SPECIFICATION forming part of Letters Patent No. 465,286, dated December 15, 1891.

Application filed September 7, 1891. Serial No. 404,934. (No model.)

To all whom it may concern:

Be it known that I, ALBERT A. PAGE, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Metal Knobs; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a face view of the knob; Fig. 2, a side view of the same; Fig. 3, a longitudinal central section of the head and its portion of the neck with the screw therein, but without the base portion; Fig. 4, a longitudinal central section of the base portion of the knob; Fig. 5, a longitudinal central section of the two parts of the knob united; Fig. 6, a base end view of the knob, illustrating the setting of the metal of the base into the screw.

This invention relates to an improvement in that class of knobs in which the head, neck, and base are made from cast metal and with a screw projecting from the base, by which the knob may be attached, and particularly to that class in which the face of the head is ornamented. In the manufacture of this class of knobs it is necessary, in order to produce the ornamentation of the head, that the plane of the head shall be parallel with the plane of the division in the flask. The neck of the knob is necessarily reduced from the diameter of the base, so as to give a neat appearance to the knob and yet give a sufficient size of base for the support of the knob. Because of the necessity of casting the knob with the plane of the head in the plane of the division of the flask, the neck of the knob has been required to be cast of the same diameter as the base, and, as indicated in broken lines, Fig. 2, then the knob placed in the lathe and the metal cut away to reduce the neck to its proper shape and size, as seen in Fig. 2. The labor thus required in the manufacture of this class of knobs and the loss of metal make them considerably more expensive than they would be could such labor and loss of metal be avoided. The object of my invention is to avoid this loss of metal and expensive labor; and the invention consists in

the construction of the knob, as hereinafter described, and particularly recited in the claims.

In the illustration, A represents the head portion of the knob; B, the neck, and C the base.

D represents the screw, which projects from the base, this screw being a common wood-screw set into the mold, so that the metal of the knob is cast around the screw to retain it in its place and firmly unite the two.

The ornamentation of the face of the knob may be as seen in Fig. 1 or any other desired design.

In casting the knobs they are molded and cast in two parts, the division being at the smaller diameter of the neck, as upon the line *a a*, Fig. 2, and in a plane at right angles to the axis of the knob. The part forming the head A and that portion of the neck B below the line are cast in one piece, as seen in Fig. 3. This enables the molding of the knob face downward, so that any desirable ornamentation may be applied thereto. The neck portion of the knob is of substantially the required shape and diameter. The screw D is placed in the mold and this portion of the knob cast thereon, as seen in Fig. 3, so that the screw becomes firmly united to the head portion of the knob. The base C, Fig. 4, is cast with the remainder of the neck B as a part of it and with a hole through it corresponding, substantially, to the diameter of the screw. The diameter of the base is substantially that which is required for the finished knob, and the neck contracts from the base to the required diameter for the smaller portion of the knob. This part of the knob is readily molded and cast, and, after casting the base portion of the knob, is set over the screw and so as to bring the two parts of the knob together, as seen in Fig. 5, and then the metal of the base around the screw is set upon the screw, as at *b*, Figs. 5 and 6, by a suitable instrument, which will force the metal of the base into firm engagement with the screw, so as to prevent the base from turning or slipping upon the screw, and thus the two parts are firmly united. Then the surface of the metal may be finished by any desirable known or usual process, the union of the two being

sufficient to permit the treatment of the knob as if the two parts were cast integral.

By thus casting the base in two parts and firmly uniting them so that they become inseparable I am enabled to cast the knob of substantially its finished shape, and thereby avoid the labor of turning down the neck and the loss of metal incident thereto.

I claim—

1. A cast-metal knob having a base, with the neck between the base and head of the knob reduced in diameter, the said head and base divided through the smaller diameter of the neck, combined with a screw in the axis of the knob, a portion of the neck being formed as a part of the knob, the remainder of the neck being a part of the base and secured to the screw, substantially as described.

2. The method herein described of making that class of cast-metal knobs which consist

of a head and a base, with a neck between of smaller diameter than the base, and which consists in casting the knob in two parts, the division being in the smaller diameter of the neck between the base and head and in a plane at right angles to the axis of the knob, the head portion having a screw secured therein in the process of casting, the screw projecting axially from the neck portion of the knob, the base portion of the knob placed over the screw, and the metal of the knob set upon the screw, so as to firmly unite the two parts of the knob, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

ALBERT A. PAGE.

Witnesses:

WM. S. COOKE,

CHAS. L. BALDWIN.