(Model.)

W. H. TAYLOR.

KNOB ATTACHMENT.

No. 261,968. Patented Aug. 1, 1882.

Fig. 1.

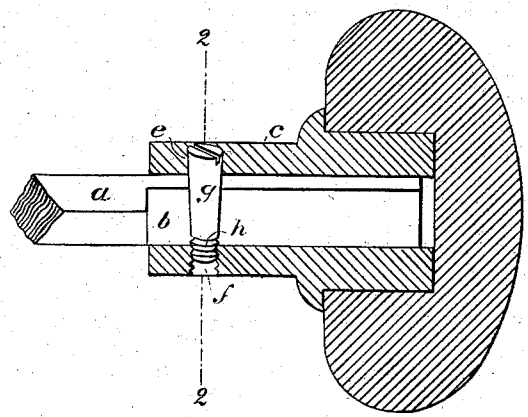
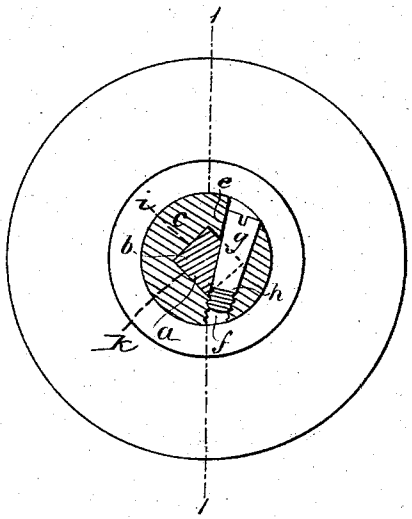


Fig. 2.



WITNESSES

Wm. A. Skinkle.

Ernest Abshagen.

INVENTOR

Warren H. Taylor,

By his Attorneys

Baldwin, Hopkins, & Peyton.

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

WARREN H. TAYLOR, OF STAMFORD, CONNECTICUT, ASSIGNOR TO THE YALE LOCK MANUFACTURING COMPANY, OF SAME PLACE.

KNOB ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 261,968, dated August 1, 1882.

Application filed October 10, 1881. (Model.)

To all whom it may concern:

Be it known that I, WARREN H. TAYLOR, of Stamford, Connecticut, have invented a new and useful Improvement in Knob-Spindles and in the Mode of Attaching Knob-Shanks to Spindles, of which the following is a specification.

The object of my invention is to provide simple, cheap, and reliable means of a particular kind for securing knob-shanks to spindles, having a capacity for ready and exact adjustment without the use of washers, to accomodate different thicknesses of doors.

In the accompanying drawings, illustrating my invention, Figure 1 is a longitudinal section of a knob, knob-shank, and spindle secured together, drawn on the line 1 1 of Fig. 2. Fig. 2 is a cross-section of the same, drawn on the line 2 2 of Fig. 1.

To carry out my invention I provide a rectangular spindle, *a*, with a cut-away part at one or both ends, as shown at *b*, and a knob-shank, *c*, with a correspondingly-shaped spindle-socket, *d*. The part cut away is cut on an inclined plane parallel with the axis of the spindle. I then form an inclined tapering bolt-hole, *e*, through the shank a little to one side of its center, the inside line of which nearest the center of the shank intersects that part of the spindle-socket corresponding with the cut-away part of the spindle. This bolt-hole need not necessarily extend entirely through the shank, but should be provided at its bottom with a female screw, *f*, as shown. To fit in this hole I provide a tapering bolt, *g*, with a male screw, *h*, at its smaller end. The construction and relation of these parts are such, as will be perceived by inspection of the drawings, that when the cut-away part of the spindle is inserted into its socket in the shank, and the bolt *g* is in place and screwed down tightly, the latter will bear on one side with a wedging action against the cut-away face of the spindle and press it with great force against the opposing faces *i* and *k* of the socket.

Before the bolt *g* is screwed home the spindle is of course to be properly adjusted in place by sliding it outward or inward in its socket, according to the thickness of the door to which the fastenings are being applied. Then when the force of the wedge is applied by means of the screw the spindle and shank will be held together with great firmness and security by this union of two mechanical powers. The spindle, instead of being cut away at its ends merely, may be cut away its entire length.

I am aware that it is not new to secure a spindle in a knob-shank by means of a tapering screw bearing near its lower end against one side of the spindle. Such a device is shown in English Patent No. 2,146 of 1870; but the construction of that device is different from mine, because the spindle of the English patentee is provided with a number of separate tapering grooves to suit the tapering extremity of his holding-screw, which is threaded near its upper end. I employ the same principle as the English patentee, but have improved its application successfully with the result of economy of construction and greater nicety of adjustment above stated, and with ample security of holding.

I am aware that it is not new to cut away a portion of a spindle, leaving an inclined-plane bearing-surface parallel with the spindle-axis; and I do not claim that.

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

The combination of a knob-shank constructed, substantially as described, with a spindle cut away as described, and the wedging-bolt, which enters the shank at one side of the spindle, passes the spindle, and enters the opposite wall of the shank, and when driven home bears against the spindle and secures it in any adjusted position, substantially as and for the purpose described.

In testimony whereof I have hereunto subscribed my name this 11th day of August, A. D. 1881.

WARREN H. TAYLOR.

Witnesses:
GEO. E. WHITE,
WM. T. PAYNE.