(No Model.)

T. R. BIRD.

KNOB ATTACHMENT.

No. 516,909. Patented Mar. 20, 1894.

FIG. 1

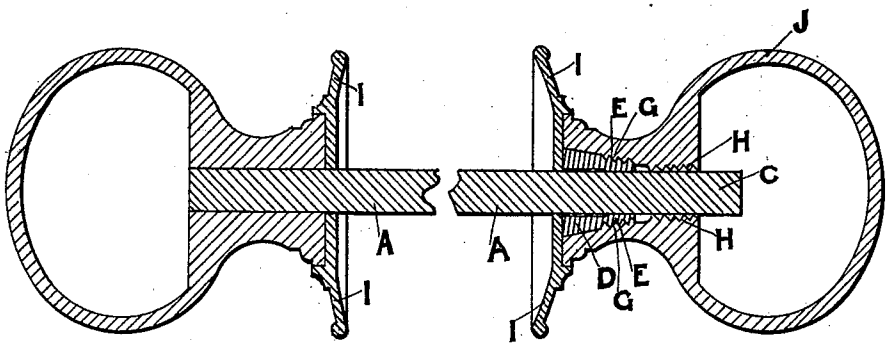


FIG. 2

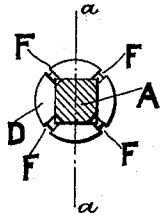
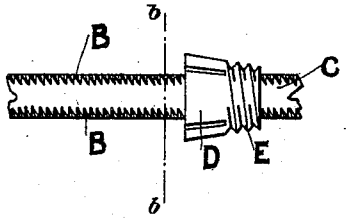


FIG. 3



Witnesses:

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UNITED STATES PATENT OFFICE.

THOMAS RICHARD BIRD, OF DERBY, ENGLAND.

KNOB ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 516,909, dated March 20, 1894.

Application filed May 31, 1893. Serial No. 476,104. (No model.) Patented in England July 26, 1892, No. 13,596.

To all whom it may concern:

Be it known that I, THOMAS RICHARD BIRD, a subject of the Queen of Great Britain and Ireland, and a resident of 49 and 50 Pear Tree Road, Derby, in the county of Derby, England, have invented a certain new and useful Improved Means for Attaching Door-Knobs, Handles, and the Like to their Spindles, (for which I have obtained Letters Patent in Great Britain, No. 13,596, bearing date July 26, 1892,) of which the following is a specification.

The object of my invention is to provide a cheap and more effective means of attaching door knobs, handles and the like to their spindles.

Referring to the drawings which form a part of this specification: Figure 1 is a vertical section through a pair of door knobs and spindles on line *a*, *a* of Fig. 2 showing the application of my invention. Fig. 2 is a section through the spindle on line *b*, *b*. Fig. 3 is a plan looking down showing the spindle and plug to be hereinafter referred to, the knob in Figs. 2 and 3 being omitted.

I form the spindle A of any suitable section but preferably square the sides or edges B being roughened, serrated, corrugated or threaded so as to present a suitable gripping surface for the plug (to be hereinafter described), and the end C which passes into the knob may be threaded either on the edges or round the whole periphery of the spindle if desired. Over the spindle A I pass a plug D of a truncated cone section threaded externally at its narrow end E and having slits such as F at its larger end, it may also be roughened in any suitable manner internally if desired for the purpose of obtaining a better grip of the spindle. The neck of the knob J is threaded internally at G to engage with the threaded end E of the plug D and may also be threaded at H to engage with the threaded end C of the spindle A.

To fix the knob on the spindle the plug D is pushed along the spindle to its proper position and the neck of the knob placed over same and upon being screwed up, the plug D by the elasticity imparted to it by means of the slits F firmly grips the spindle assisted by the serrated, corrugated or roughened edges or faces of the said spindle A, and the knob J is held securely in position, it being further assisted by means of the threaded portion H engaging with the threaded end C of the spindle; I may however if desired dispense with the threads at H and C and simply trust to the tightening of the plug D upon the spindle A.

I do not wish to make any claim for serrating, corrugating, roughening or threading the said edges or faces of the spindle such operation being already well known, except as to the application of my invention.

The rose I forms no part of my invention but is in general use when fixing such knobs.

It will be understood that either or both door knobs may be fixed to the spindle by these means although I have only shown one of them to be so fixed on the drawings.

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

In combination with the spindle A, the split plug D adapted to be slid thereon to its proper position, a knob neck having an opening substantially in the shape of a truncated cone in its front face terminating in screw threads, said plug fitting said opening and threaded at its rear end to engage the threaded part thereof, a rose I covering the end of the knob, and a threaded connection between the knob and spindle, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

THOMAS RICHARD BIRD.

Witnesses:

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