R. McMANUS & R. R. COLBURN.

METAL COVERED KNOBS.

No. 190,349. Patented May 1, 1877.

Fig. 1

Fig 2

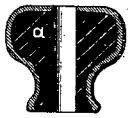
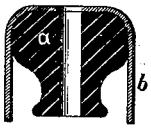


Fig 3



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UNITED STATES PATENT OFFICE.

ROBERT McMANUS AND RICHARD R. COLBURN, OF ANSONIA, CONNECTICUT.

IMPROVEMENT IN METAL-COVERED KNOBS.

Specification forming part of Letters Patent No. **190,349**, dated May 1, 1877; application filed March 30, 1877.

To all whom it may concern:

Be it known that we, ROBERT McMANUS and RICHARD R. COLBURN, both of Ansonia, in the county of New Haven and State of Connecticut, have invented a new Improvement in Metal-Covered Knobs; and we do hereby declare the following, when taken in connection with the 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 perspective view of the knob; Fig. 2, a vertical central section; and in Fig. 3, a section of the cup and knob to illustrate the method of uniting.

This invention relates to an improvement in that class of knobs which are used for stoves and heated articles, the object being to make a non-heat-conducting knob with a metal surface.

Heretofore solid metal knobs have been employed for this purpose, also mineral knobs and sheet-metal knobs formed from two or pieces, sometimes filled and sometimes not. The mineral knobs are practically useless, because they are easily broken, yet they are good non-conductors, and the said sheet-metal construction is too expensive for general use.

The object of this invention is to overcome the difficulties experienced with these classes of knobs; and it consists in a body of mineral, vitreous, or other non-conducting material covered by sheet metal closed thereon, the entire covering being in a single piece.

The body *a* of the knob may be of any of the usual knob-forms, and made of any suitable non-conducting material with a perforation through it, or other device for the purpose of attachment.

From sheet or ductile metal a cup-shaped part, *b*, is formed, so as to pass on over the largest diameter of the knob, as seen in Fig. 3; then in a suitable lathe or metal-spinning machine, the metal is spun down onto and so as to fit closely this surface of the knob, as seen in Fig. 2, or it may be closed thereon by other closing apparatus.

This presents a metal surface over the entire knob, and all in one piece, whereby the usual forming and closing together of several pieces, as in sheet-metal knobs of previous construction, is avoided, and all the advantages of a metal knob combined with a non-conducting body is attained, and at no more cost than an equally well-finished cast-metal knob.

We are aware that knobs have before been made of a non-conducting material, and in some cases inclosed by a metal covering formed in two or more pieces. We therefore do not broadly claim a metal-covered knob; nor a knob having a body of non-conducting material.

We claim—

As an article of manufacture, the herein-described knob consisting of the non-conducting body incased within a metallic shell formed in a single piece of sheet metal, and closed upon the said body, substantially as described.

ROBERT McMANUS.
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Witnesses:
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