(No Model.)

J. E. GAITLEY.

HANDLE.

No. 373,181. Patented Nov. 15, 1887.

Fig. 1.

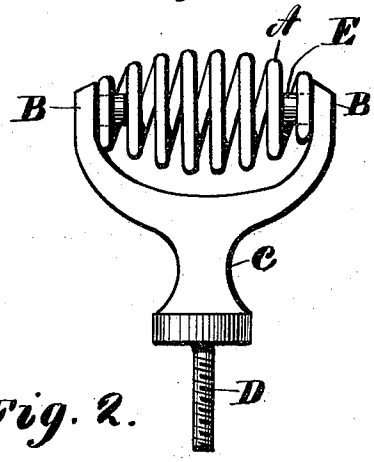


Fig. 2.

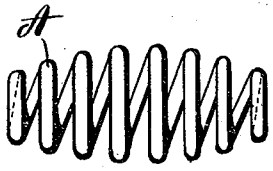


Fig. 3.

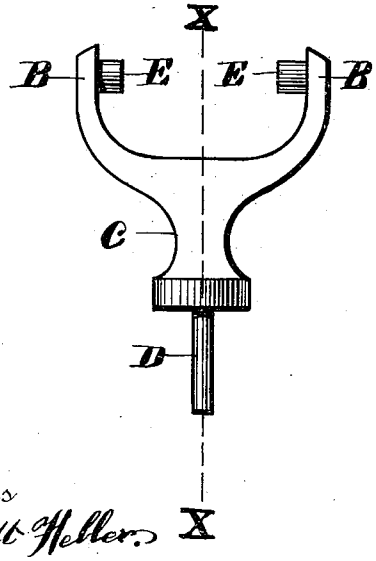


Fig. 5.

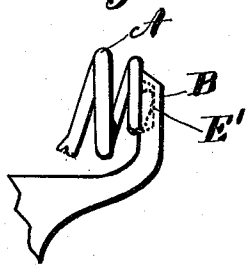
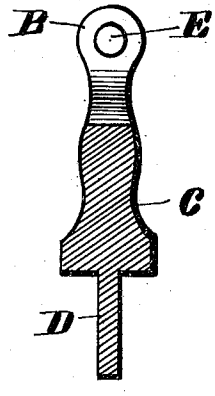


Fig. 4.



Witnesses
Reinhardt Heller.
John T. Booth

Inventor
John E. Gaitley
By his Attorney
Geo. A. Moore

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

UNITED STATES PATENT OFFICE.

JOHN E. GAITLEY, OF TROY, NEW YORK.

HANDLE.

SPECIFICATION forming part of Letters Patent No. 373,181, dated November 15, 1887.

Application filed May 27, 1887. Serial No. 239,570. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. GAITLEY, a resident of the city of Troy, in the county of Rensselaer and State of New York, have invented certain new and useful Improvements in Handles; and I do hereby declare that the following is a full, clear, and exact description of the invention, that 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 the letters of reference marked thereon, which form a part of this specification.

Similar letters refer to similar parts in the several figures therein.

My invention relates to improvements in handles; and it consists of the novel construction and combination of parts hereinafter described, and pointed out in the claims.

The objects of the invention are fully set forth in connection with the following description.

Figure 1 of the drawings is a side elevation of my improved handle. Fig. 2 is a similar view of a helispherical coil of wire forming the elongated knob detached from the casting forming the other portion of the handle. Fig. 3 is a similar view of the casting with the wire coil detached. Fig. 4 is a vertical central section of the casting, taken on the broken line X X in Fig. 3. Fig. 5 shows modified form of coil-seat.

The knob portion of the handle is formed from a single piece of wire coiled in any desired shape to present a series of connected spirals, though I prefer to coil the wire in the form of a helispherical coil, A, with contracted open ends adapted to receive the lugs E, projecting inwardly from the arms B of the bifurcated casting C. The coil, which has the elasticity of a coil-spring, is formed to be a little longer than the space which separates the inner surfaces of the arms of the casting when its resilient force is unconstrained. The two parts—coil and casting—are put together in the position shown in Fig. 1 by constraining the coil, thereby contracting the spaces between the several spirals until the coil is sufficiently shortened to permit of its insertion between the arms upon the lugs E. As soon as released from the constraining force the resiliency of the coil causes its ends to be pressed firmly against the inner faces of the arms B, each end inclosing one of the lugs E, by which the coil is firmly held in place between the arms.

The adaptability of wire coils for stove-handles and in other places where subjected to considerable heat is well known, and various means have been employed for connecting such coils with stove-doors and other articles. The means which I have herein described are very simple as well as durable and easily constructed. There are no washers, nuts, and bolts connecting the coils with the handle-shank to work loose when in use. Only two parts are required—viz., the coil and the bifurcated casting. The latter may be made malleable and provided with a stem, D, threaded when desired, as shown in Fig. 1, for securing the handle to any desired object. It will also be observed that the longitudinal axial line of the coil is right angular to that of the attaching-shank, which affords a better grasp for turning the handle than a knob, the periphery of which is concentric with the axial line of the shank. There is no bolt or stem passing through the interior of the coil to heat the coil or intercept radiation of heat from the coil.

The ends of the coils may be ground or filed off on the outer edge of the wire, as indicated by dotted lines in Fig. 2, to cause the ends to fit more closely upon the inner faces of arms B.

When desired, the coil-seats on the inner faces of the arms B may be provided with or located at the bottom of receiving-depressions E′, (shown by dotted lines in Fig. 5,) in which case the lugs E may be dispensed with.

What I claim as new, and desire to secure by Letters Patent, is—

1. As an improved article of manufacture, a handle consisting of a bifurcated casting and a detachable coiled-wire spring supported by the arms of the casting in a position such that its longitudinal axial line is right angular to the axial line of the handle-shank, sub-

stantially as described, and for the purposes set forth.

2. In a handle, the combination, with a detachable spring-coil, of a bifurcated coil-supporting shank provided on the inner faces of its arms with coil end seats and with an attaching-stem, substantially as described, and for the purposes set forth.

In testimony whereof I have hereunto set my hand this 19th day of May, 1887.

JOHN E. GAITLEY.

Witnesses:
GEO. A. MOSHER,
CHAS. L. ALDEN.