

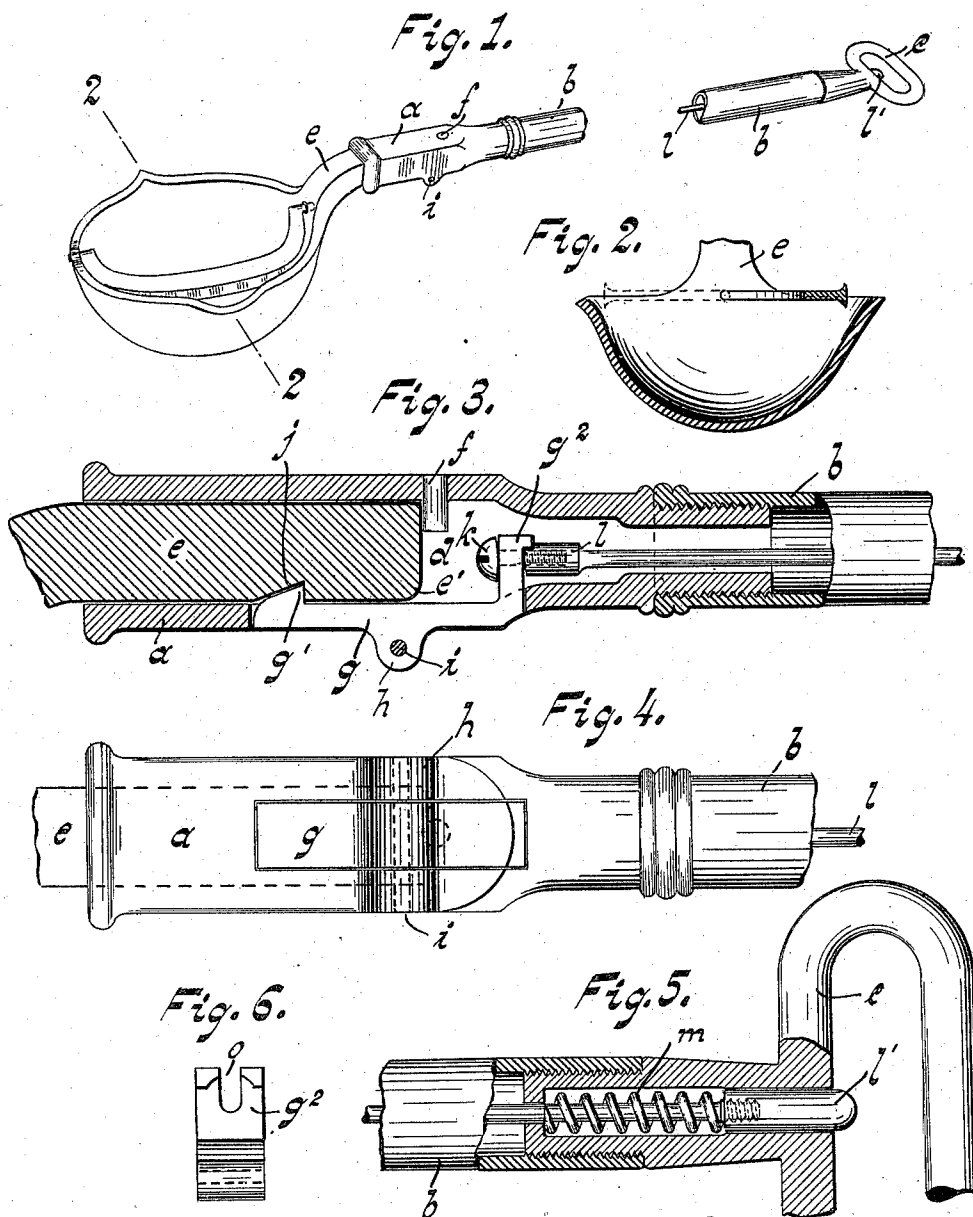
(No Model.)

J. IDES.

DETACHABLE HANDLE FOR SMELTING LADLES.

No. 576,367.

Patented Feb. 2, 1897.



Witnesses

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UNITED STATES PATENT OFFICE.

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DETACHABLE HANDLE FOR SMELTING-LADLES.

SPECIFICATION forming part of Letters Patent No. 576,367, dated February 2, 1897.

Application filed November 2, 1896. Serial No. 610,833. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH IDES, a subject of the Emperor of Austria-Hungary, and a resident of Elizabeth, county of Union, and State of New Jersey, have invented certain new and useful Improvements in Detachable Handles for Smelting-Ladles, of which the following is a full, clear, and exact specification, reference being had to the accompanying drawings, wherein—

Figure 1 is an elevation of my improved detachable handle, showing the same attached to a smelting-ladle. Fig. 2 is a section on lines 2 2 in Fig. 1. Fig. 3 is a longitudinal section through lower end of the handle. Fig. 4 is a bottom view thereof. Fig. 5 is a sectional view, partly in elevation, of the upper end of the handle; and Fig. 6 is an end view of the latch-hook securing the stem of the ladle in the handle.

Similar letters of reference indicate corresponding parts in all views of the drawings.

My improved detachable handle consists of the squared socket *a*, trunk *b*, and handle *c*, screwed together, as shown in Figs. 3 and 5. Socket *a* is square and hollow, the cavity *d* thereof being slightly larger, but conforming in shape with the stem *e* of the ladle to admit this stem when expanded by heat. Pin *f*, set in top of the socket *a*, is provided to prevent the stem *e* of the ladle from entering farther into the socket than is necessary.

In the lower part of the socket *a* is provided a longitudinal slot, and therein is hinged the latch-hook *g*, oscillating on pin *i*, pillowed in boss *h*. The forward end of this latch-hook *g* is shaped into a nose *g'*, adapted to enter into a corresponding notch *j*, provided in the stem of the ladle, and the rear end *g*² is bent inward at a right angle and provided with a slot *o*. Screw *k* passes through this slot and connects the latch-hook to the head of rod *l*, which passes through the trunk *b* and the end of the handle *c* and is screwed into push-knob *l'*, projecting into the ring. Spiral spring *m*, slid on the end of rod *l*, is compressed between the end of the handle-piece *c* and the push-knob *l'*, and thus holds the latch-hook *g* in the position shown in Fig. 3, the nose *g'* projecting in the cavity of the

socket. Thus when the handle is pushed onto the stem of a ladle the somewhat-rounded edge *e'* of the stem *e* will engage the upper face of the nose *g'*, pushing it downward, and when the stem reaches its proper position in the socket the nose *g'* will spring into the notch *j*, and, locking the stem of the ladle in the socket, will secure the ladle to the handle.

To release the ladle from the handle, it will only be necessary to push knob *l'* inward, whereby the motion of the knob being imparted through the rod *l* to the upward-bent rear end *g*² of the latch *g* the nose *g'* will be forced out of the notch *j*, and then the handle can be withdrawn.

I claim as my invention and desire to secure by Letters Patent—

1. A detachable handle for ladles comprising a hollow socket, adapted to receive the stem of a ladle, a hollow trunk and a handle, a stop-pin set in the socket and projecting into its cavity, a latch-hook hinged in a slot of the socket and having on its forward end a nose adapted to engage a corresponding notch provided in the stem of the ladle and its rear end bent upwardly, a push-knob, set in the opposite end of the handle, a connecting-rod, connecting the upwardly-bent rear end of the latch-hook to a push-knob, and the spiral spring slid on the connecting-rod and pressing the push-knob outward in the ring of the handle-piece.

2. The combination with a detachable handle for smelting-ladles, having a hollow socket adapted to receive the stem of the ladle, of a stop-pin projecting into this cavity, and of a spring-actuated latch-hook, pivoted in a slot of the socket, and having its rear end bent upwardly, a push-knob set in the opposite end of the handle and a connecting-rod, connecting the latch-hook with the push-knob.

In witness that I claim the improvements described in the foregoing specification I have signed my name in the presence of two subscribing witnesses.

JOSEPH IDES.

Witnesses:

A. W. CARY,
E. C. NIELSON.