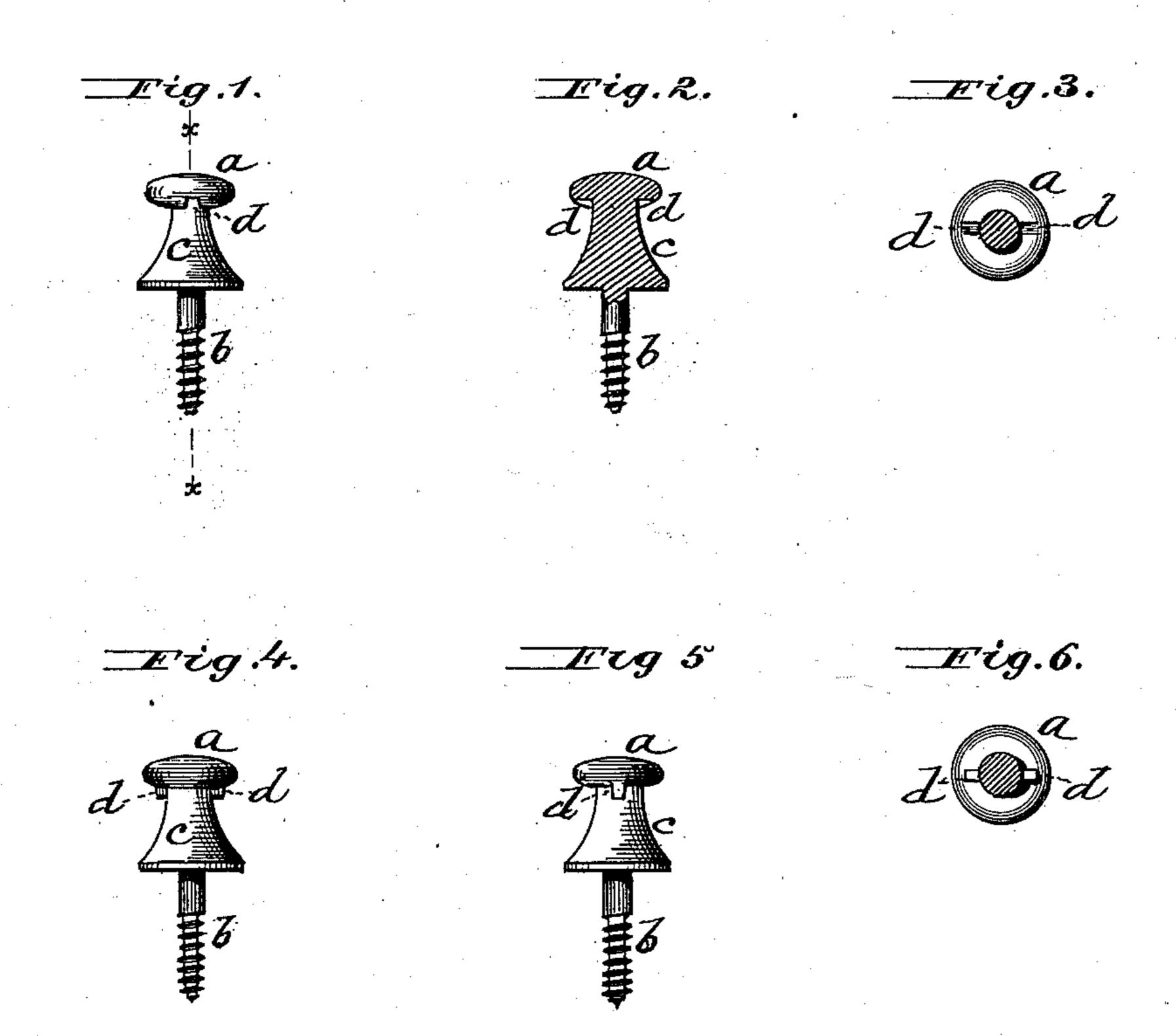
## G. L. CRANDAL. Carriage-Knobs.

No. 198,840.

Patented Jan. 1, 1878.



Attest: 26 Deerine Floyd Sarris. Seorge La Craudal

Invertor.

By Johnson Wohnson

Atty's

## UNITED STATES PATENT OFFICE.

GEORGE L. CRANDAL, OF BINGHAMTON, NEW YORK.

## IMPROVEMENT IN CARRIAGE-KNOBS.

Specification forming part of Letters Patent No. 198,840, dated January 1,1878; application filed November 26, 1877.

To all whom it may concern:

Be it known that I, GEORGE L. CRANDAL, of Binghamton, in the county of Broome and State of New York, have invented certain new and useful Improvements in Carriage-Knobs; and I do hereby declare that the following is a full, clear, and exact description thereof, which 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 letters of reference marked thereon, which form a part of this specification.

My invention consists of a screw-shanked carriage-knob, provided with indentations, nicks, or projections on the inner or under side of the head, and adapted to receive the action of a griping wrench or jaws, whereby it may be forced in or withdrawn without liability to scratch or injure the surface of finely-finished carriage-bodies, or other parts into which the knob is screwed.

By my invention the knob is screwed in by grasping the head, and not the base, as hitherto.

Such knobs have hitherto been made with a many-sided base, and the wrench has been applied thereto in such manner that its end would be liable to bear against and mar the surface of the carriage-body; besides, the knob thus formed must necessarily be heavy, and of a clumsy, unfinished appearance.

By my invention the knob has a light and neat base, and the under part of the knob proper has the provision for receiving the griping-jaws away from the base, and avoiding all danger of defacing the surface into which the knob is screwed.

The knob nicks or projections are invisible from the front or show end, and are on opposite sides of the neck, or arranged in such manner as to receive the applying device, which must be adapted for the purpose of driving or withdrawing the knob.

Referring to the drawings, Figure 1 represents an elevation of a screw-shanked knob embracing my invention; Fig. 2, a section; and Fig. 3, a cross-section, looking at the notched or nicked inner or under side of the knob-head. Figs. 4, 5, and 6 are similar views of the knob with head projections for the ap-

plying device.

The carriage-knob, or similar button, has the usual knob a, screw-shank b, and base or body c, and these may be of any suitable form and construction. The inner or under side of the head or knob a has formed, in any suitable manner, nicks, indentations, or their equivalent projections d, adapted to receive the jaws of the wrench. These notches, indentations, or projections I prefer to make radial, and on opposite sides of the knob proper, at its junction with the neck of the body, so that the jaws of the applying device will embrace the head a, and, taking into the notches (without touching the edges of the knob) or over the projections, drive the knob by turning it, thus screwing by the head instead of by the base. The applying tool is constructed so as not to mar the japanned surface of the knob.

By making the wrench-holds on the under side of the head they do not show, and the knob is screwed in from the head, so that all liability to mar the carriage-body surface is

avoided.

I claim—

A screw-shanked knob for carriages and other purposes, having the under or inner side of its knob proper formed with holds for the applying device.

In testimony that I claim the foregoing I have affixed my signature in the presence of

two witnesses.

GEO. L. CRANDAL.

Witnesses:

H. S. CRANDAL, JOHN LAGRANGE.