(No Model.)

A. K. HOFFMEIER.

METALLIC DOWEL PIN.

No. 375,449. Patented Dec. 27, 1887.

Fig. 1.

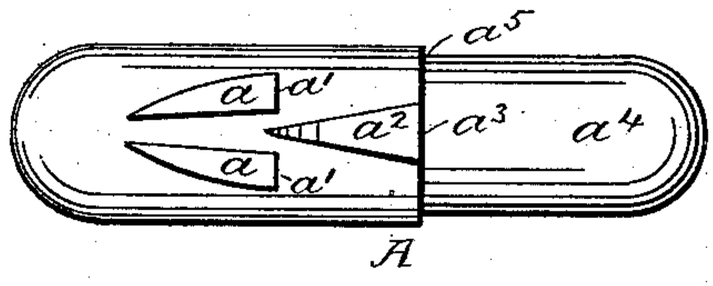


Fig. 2.

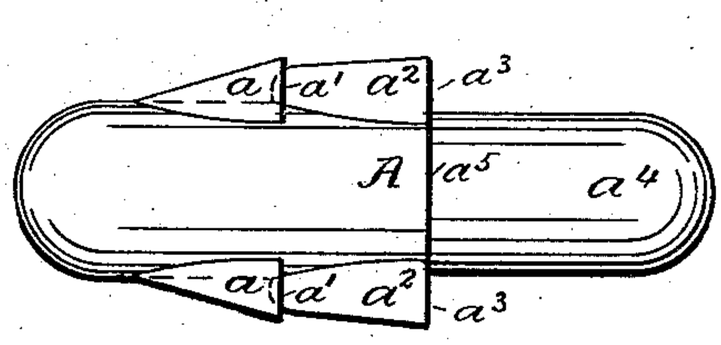
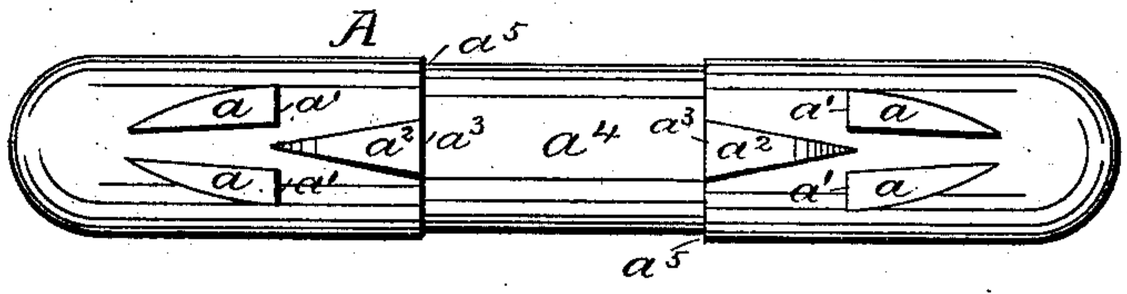


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

AMOS K. HOFFMEIER, OF LANCASTER, PENNSYLVANIA.

METALLIC DOWEL-PIN.

SPECIFICATION forming part of Letters Patent No. 375,449, dated December 27, 1887.

Application filed March 29, 1887. Serial No. 232,890. (No model.)

To all whom it may concern:

Be it known that I, AMOS K. HOFFMEIER, a citizen of the United States, residing at Lancaster, in the county of Lancaster and State of Pennsylvania, have invented certain new and useful Improvements in Metallic Dowel-Pins; and I hereby declare the following to be a full, clear, and exact description of the invention, such as 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 and figures of reference marked thereon, which form a part of this specification.

This invention relates to metallic dowel-pins; and it consists in the novel construction of the same, as hereinafter fully described and claimed.

In the drawings, Figure 1 is a side view of a dowel-pin constructed according to this invention. Fig. 2 is also a side view of the dowel-pin, but turned one-quarter round from the position shown in Fig. 1. Fig. 3 is a side view of a dowel-pin for permanently securing the parts to which it is applied.

All the figures show the dowel-pins greatly enlarged in size.

A is the dowel-pin, which is ordinarily formed of common cast-iron, but may also be made of other metals, either rolled or cast. Two projections, *a*, are formed upon each side of one end of the pin. These projections converge slightly toward the large end of the pin and taper outward from it, forming the shoulders *a'*. A third projection, a^2, is formed between each pair of projections *a*. This projection a^2 is V-shaped, and its small end commences about in line with the shoulders *a'*. Its larger end terminates in the shoulder a^3 and its small end is slightly rounded.

The portion a^4 of the dowel-pin is made rather smaller in diameter than the rest of the pin, and joins onto it with the shoulder a^5 in line with the shoulders a^3 of the projections a^2. Each end of the pin may advantageously be rounded. In use, holes of equal size are bored in the parts to be connected and the larger end of the pin is driven into one of these holes. The projections *a* cut their way into the wood at the sides of the hole, and the projections a^2 which follow them crowd the wood behind the shoulders *a'* and secure the larger end of the pin in the hole. The pin is driven in until the shoulder a^5 comes flush with the edge of the hole, and the projecting smaller portion of the pin is then inserted in the other hole.

This form of dowel-pin is very convenient for the loose parts of iron-molders' patterns and for the leaves of extension-tables.

The larger part of the pin is made about one-quarter of an inch in diameter for general use.

When the parts are to be permanently connected, the dowel-pin is made double-ended, as shown in Fig. 3. The projections are exactly the same as those before described, and the pin is used in the same manner, with the exception that the shoulders a^5 are driven below the edges of the holes in the wood.

What I claim is—

1. A metallic dowel-pin provided with the projections *a*, and with a projection, a^2, between and behind the said projections *a*, and with the portion a^4 of smaller diameter than the rest of the pin, substantially as and for the purpose set forth.

2. A metallic dowel-pin provided with the projections *a* and with a projection, a^2, between and behind the said projections *a*, upon each end of it, and with the portion a^4 of smaller diameter than the rest of the pin, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

AMOS K. HOFFMEIER.

Witnesses:
JEREMIAH RIFE,
GEO. K. HOFFMEIER.