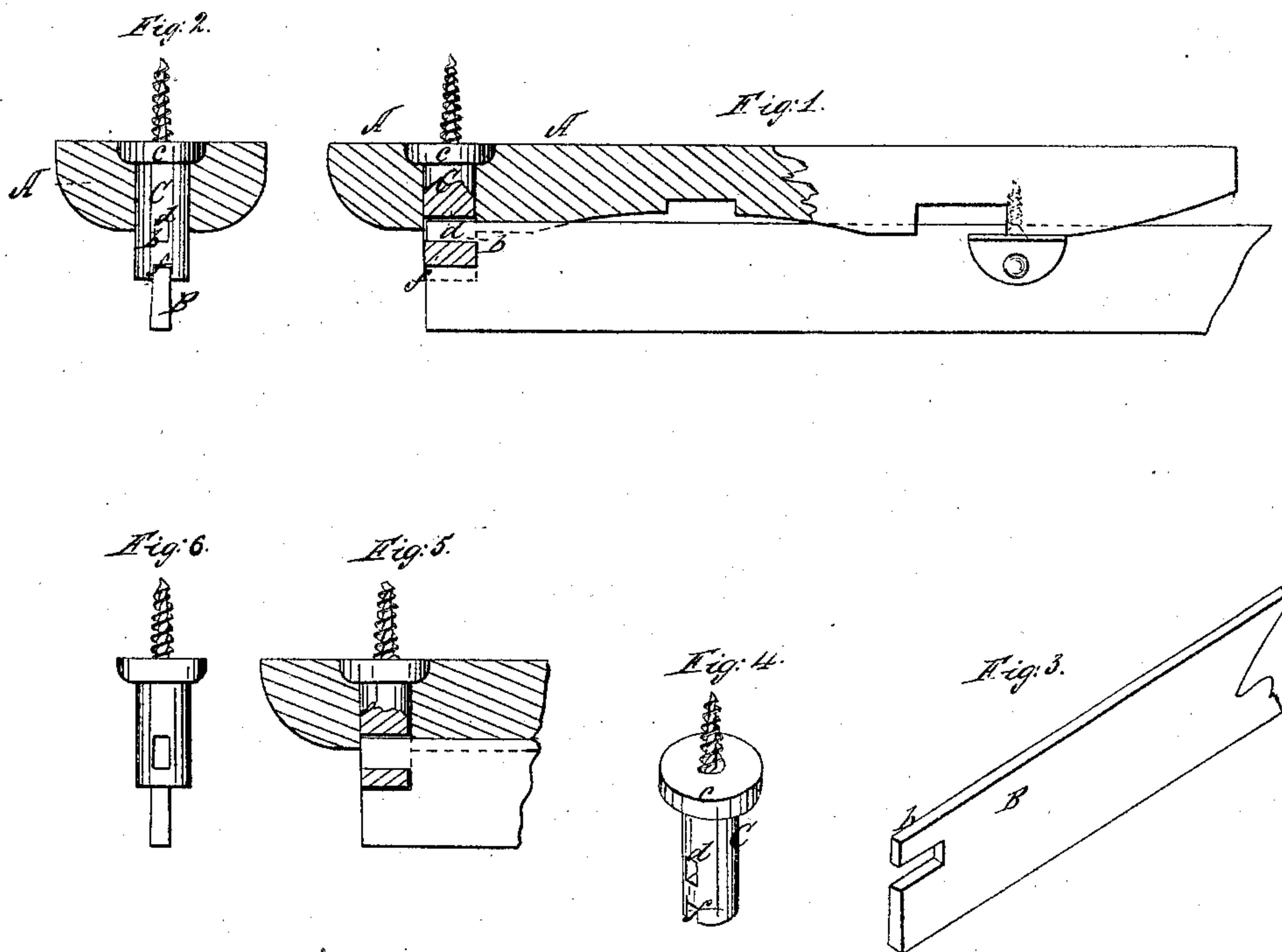


E. Vorster,

Skate.

N^o 41,455.

Patented Feb. 2, 1864.



Witnesses:

*J. Kaufmann
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Inventor:

Edw. Vorster

UNITED STATES PATENT OFFICE.

EDWARD VORSTER, OF BROOKLYN, E. D., NEW YORK.

IMPROVEMENT IN SKATES.

Specification forming part of Letters Patent No. 41,455, dated February 2, 1864.

To all whom it may concern:

Be it known that I, EDWARD VORSTER, of Brooklyn, E. D., in the county of Kings and State of New York, have invented a new and useful Improvement in Skates; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a sectional side elevation of my invention. Fig. 2 is a vertical cross-section of the same, the line of section being taken through the center of the heel of the skate. Fig. 3 is a perspective view of the rear portion of the runner. Fig. 4 is a perspective view of the heel-bolt. Figs. 5 and 6 are similar views as in Figs. 1 and 2, exhibiting a modification of my invention.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in providing the heel-bolt with a fixed shoulder at the upper end, the lower end of the same being made to lock with the rear end of the runner, so that by securing the fore end of the runner in the usual manner the said runner and heel-bolt are both attached at once without operating a nut on the heel-bolt.

To enable those skilled in the art to make and use my invention, I will proceed to describe it.

A represents the stock of a skate made in the ordinary way. B is the runner, and C the heel-bolt. The latter is formed with a shoulder, *c*,

at the upper portion, and with a mortise, *d*, at its lower part. The runner B is formed with a tongue, *b*, corresponding to fit the aforesaid mortise *d*. *f* represents a groove in the lower extremity of the heel-bolt C, to overlap the rear end of the runner B, for the purpose of guiding the same more firmly; but this groove may be omitted, as in the modification shown in Figs. 5 and 6.

When the heel-bolt C is inserted from the top of the stock and the fore end of the runner B is pressed in the groove and secured at the fore end in the usual manner by wood-screws, the back end of the runner B and the heel bolt C are at once fixed to the stock A. Thus the securing of the heel-bolt and the back end of the runner are very greatly simplified, and the cost of manufacturing the skates is lessened.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

Providing the upper end of the heel-bolt C with a fixed shoulder, *c*, and forming a lock with the runner B at its lower end, so that by attaching the fore end of the runner in the usual way the heel-bolt and back end of the said runner are at once firmly secured to the stock of the skate.

EDWD. VORSTER.

Witnesses:

S. KAUFMANN,
JOSEF KAUFFMANN.