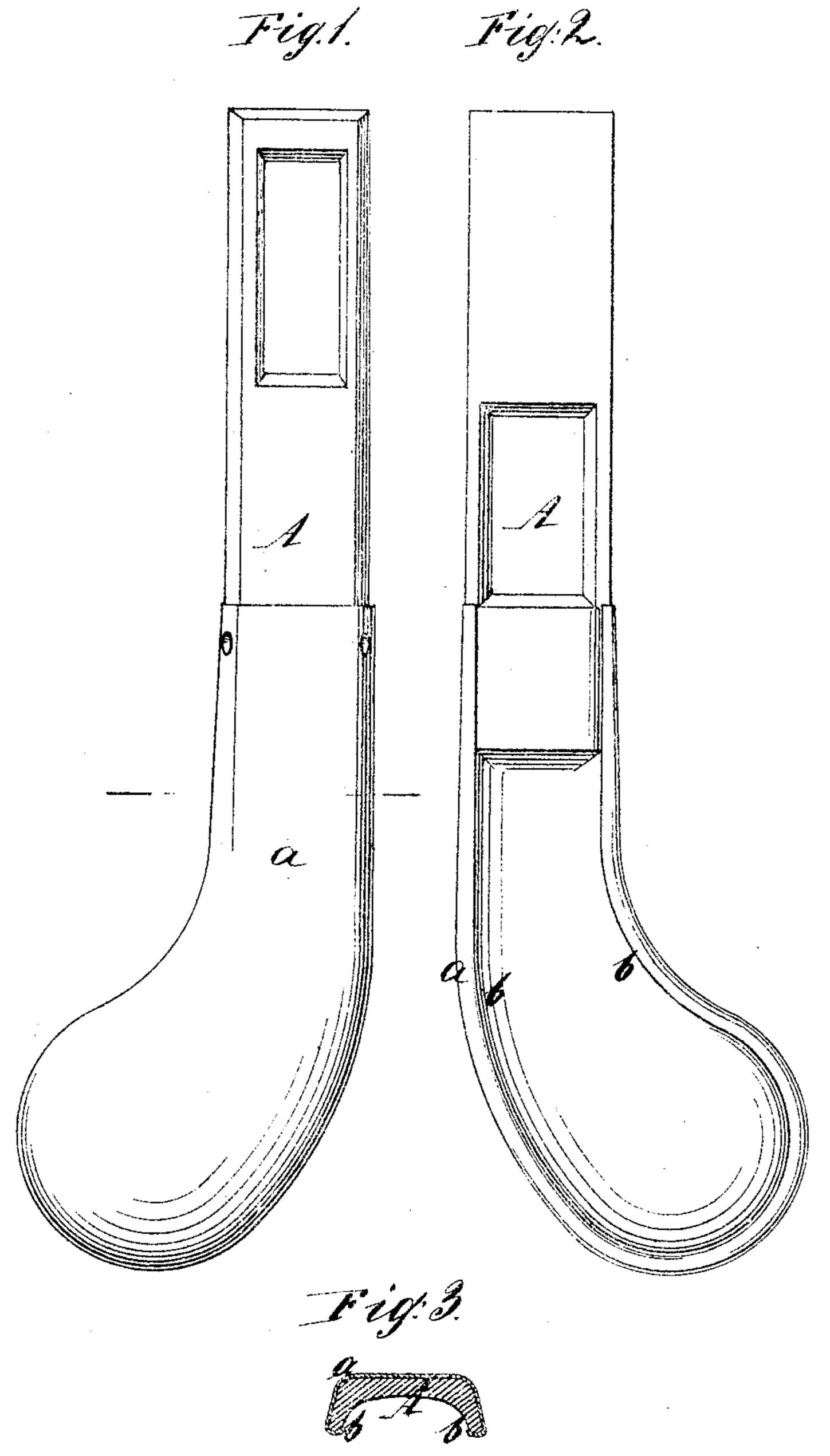
H. HAAS.

Pedals for Musical Instruments.

No. 143,509.

Patented Oct. 7, 1873.



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UNITED STATES PATENT OFFICE.

HENRY HAAS, OF NEW YORK, N. Y.

IMPROVEMENT IN PEDALS FOR MUSICAL INSTRUMENTS.

Specification forming part of Letters Patent No. 143,509, dated October 7, 1873; application filed July 23, 1873.

To all whom it may concern:

Be it known that I, Henry Haas, of the city, county, and State of New York, have invented a new and useful Improvement in Pedals for Musical Instruments; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 represents a plan or top view of my invention. Fig. 2 is an inverted plan of the same. Fig. 3 is a transverse section of the

same.

Similar letters indicate corresponding parts. This invention consists in a pedal which is east of iron, and the treadle of which is protected by a piece of sheet metal bent round the cast-iron body, and afterward nickel-plated in such a manner that the treadle is not liable to show signs of corrosion for a long time, and, furthermore, the cost of manufacturing a plated pedal is decreased.

In the drawing, the letter A designates my pedal for a piano-forte or other musical instrument. This pedal is cast of iron, and, in order to protect the same against corrosion, I apply to it a piece, a, of sheet metal, tinned iron being used by preference; and, in order to fasten this piece of sheet metal in a simple and effective manner, I provide the cast-iron body with a cavity in its under surface, leaving a rim, b, round the edge, over which the sheet metal is turned. By this arrangement I am enabled to fasten the piece a of sheet metal to the body of my pedal by a simple pressure with a suitable

die, and all cracking or wrinkling of the sheet metal is avoided. After the piece of sheet metal has been properly secured to the castiron body I plate the same with nickel or other non-corrosive metal, and a beautiful article is produced at a comparatively small expense.

I am aware that pedals for musical instruments have been made of cast-iron and plated with nickel; but the nickel-plating is applied directly to the cast-iron; and in order to effect this purpose it is necessary to grind off and polish the surface of the iron—an operation which requires considerable time and labor, and consequently increases materially the expense of the pedal; and, furthermore, if the nickel-plating is applied directly to the iron, it is not very durable, and liable to exhibit signs of corrosion after a short time.

The application of a piece of sheet metal, particularly tinned sheet-iron, to the pedal can be effected at much less expense than the operation of grinding off and polishing the castiron body; and when the nickel-plating is applied to the surface of tinned sheet-iron or German silver it lasts a long time without showing signs of corrosion.

What I claim as new, and desire to secure

by Letters Patent, is—

A pedal for musical instruments made of cast-iron, provided with a bottom rim, b, and protected by a piece, a, of sheet metal, which may be nickel-plated, substantially as shown and described.

HENRY HAAS.

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.