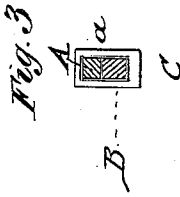
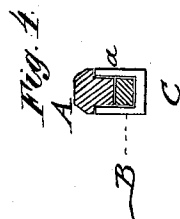
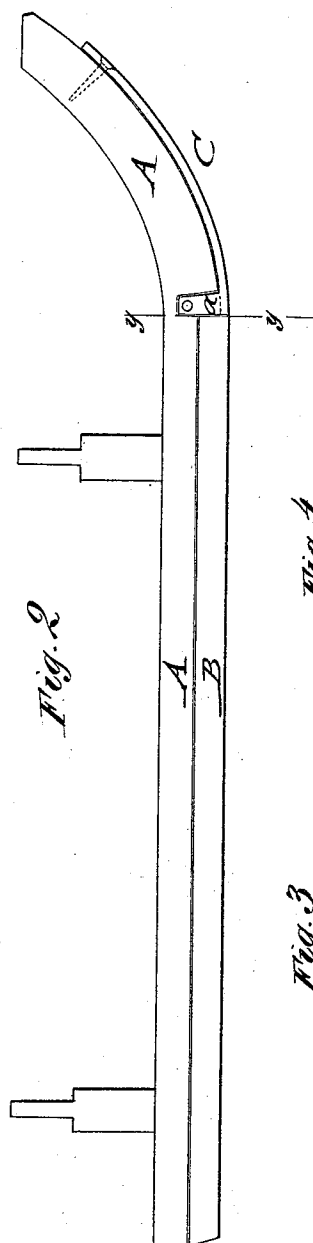
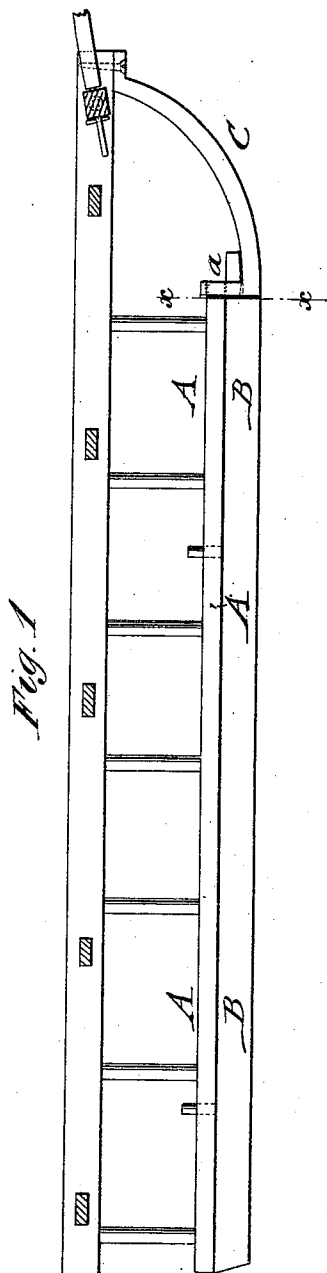


J. L. BRANNOCK & J. A. CLEVELAND.

SLED.

No. 181,403.

Patented Aug. 22, 1876.



WITNESSES:

A. W. Amqvist
John Goethals

INVENTOR:

J. L. Brannock
J. A. Cleveland

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JAMES L. BRANNOCK AND JAMES A. CLEVELAND, OF ANTIOCH MILLS,
KENTUCKY; SAID CLEVELAND ASSIGNOR TO SAID BRANNOCK.

IMPROVEMENT IN SLEDS.

Specification forming part of Letters Patent No. **181,403**, dated August 22, 1876; application filed
May 22, 1876.

To all whom it may concern:

Be it known that we, JAMES L. BRANNOCK and JAMES A. CLEVELAND, of Antioch Mills, Harrison county, Kentucky, have invented a new and Improved Runner for Sleds and Sleighs, of which the following is a specification:

Figures 1 and 2 represent, respectively, our improved runner as applied to a sled and sleigh; and Figs. 3 and 4 are vertical transverse sections of the same, respectively, on lines *x x*, Fig. 1, and *y y*, Fig. 2.

Similar letters of reference indicate corresponding parts.

The invention relates to an improved runner for sleds or sleighs, which saves a great deal of the time and trouble necessary to put in the ordinary sole or runner, and is a great deal cheaper than the present runner.

The invention consists of a separate curved front part of the runner, that is connected to the main body of the runner in rigid manner.

In the drawing, A represents the wooden part, and B the iron or steel part, of a sole or runner for sleds or sleighs. The iron part of the sole is made of sufficient thickness to be strong and durable. The curved front end C

of the runner is made of a separate piece, C, that is attached by an oblong socket or U-shaped band and fastening cross-bolt to the end of the straight horizontal part of the runner, while the front end of the curved piece C is bolted either to the frame of the sled or to the curved extension of the wooden-runner section, as shown in Figs. 1 and 2. The detachable curved section C is applied with great facility, as thereby no heating and bending of the iron runner to the shape of the wooden part are required, and a stronger, cheaper, and more durable runner obtained.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

A sled-runner, consisting of a curved wrought-iron bar, extending from the top of sled to the curve of runner, a metallic band welded thereto, and a straight piece of wood fitting into the band, substantially as shown and described.

JAMES L. BRANNOCK.

JAMES A. CLEVELAND.

Witnesses:

GEO. BRANNOCK,
ANNIE BRANNOCK.