

(No Model.)

J. J. COBB.

SLEIGH KNEE.

No. 384,128.

Patented June 5, 1888.

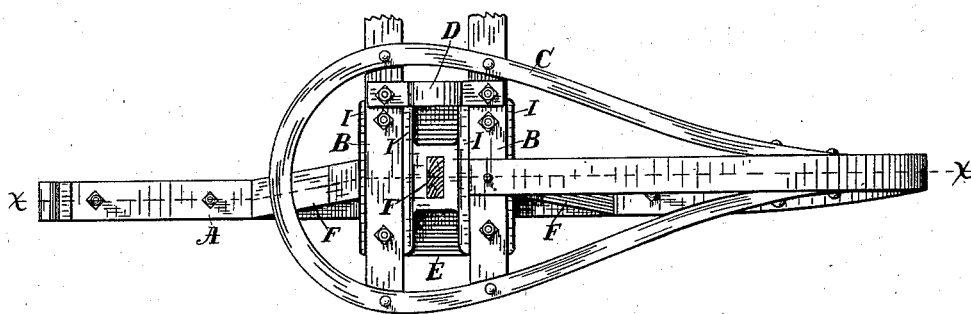


FIG. 1.

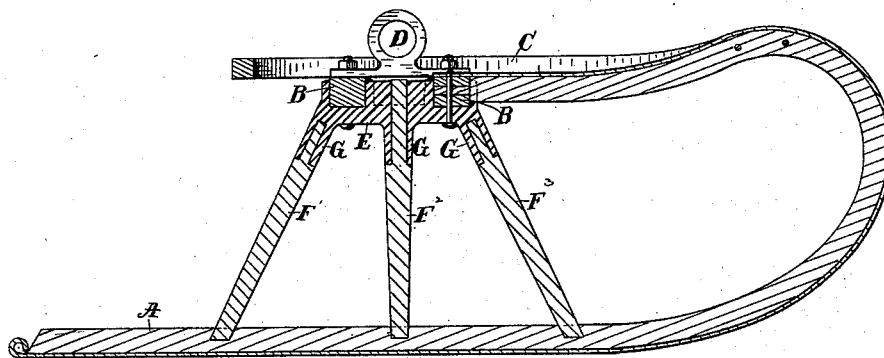


FIG. 2.

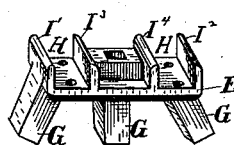


FIG. 3.

Witnesses,

Chas McQuwan.
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By his Attorney.

Dennis L. Rogers.

UNITED STATES PATENT OFFICE.

JOHN J. COBB, OF GRAND RAPIDS, MICHIGAN.

SLEIGH-KNEE.

SPECIFICATION forming part of Letters Patent No. 384,128, dated June 5, 1888.

Application filed February 23, 1888. Serial No. 265,047. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. COBB, of the city of Grand Rapids, in the county of Kent and State of Michigan, have invented a certain
5 new and useful Improvement in a Combined Sleigh-Knee and Beam-Holder, which I desire to secure by Letters Patent of the United States, and of which the following is a specification, reference being had to the accompanying
10 drawings.

My invention relates to the construction of a combined sleigh-knee and beam-holder which can be made of malleable iron cast in a single
15 piece and having grooves or shoulders for receiving and holding the beams, and mortises or sockets for holding the sleigh-knees, and arranged between the beam and runner.

Referring to the drawings, Figure 3 is a detached view, partly in perspective, of my improved sleigh-knee and beam-holder. Fig. 1
20 is a plan or vertical view showing the device as applied in the construction of a bob sleigh intended to be used interchangeably with wheels on hacks or other similar vehicles, and
25 Fig. 2 is a vertical sectional view on the line *x* of Fig. 1.

Similar letters of reference refer to corresponding parts throughout the several figures.

A is the sleigh-runner; B B, beams; C, guard.

30 D is an adjustable box resting upon the beams for supporting the axle of the hack or other vehicle when it is desired to use the bobs interchangeably with wheels for such vehicles.

E represents my invention having the sockets G G G and ribs I' I' I' I' and grooves H H;
35 F' F' F', sleigh-knees. The two outer ribs, I' and I', and the middle knee, F', may be omitted in this construction, except where the greatest degree of strength and rigidity is required.

40 The knees F' are firmly and rigidly secured in

the sockets G by pressure, the same as spokes are secured into hubs of wheels, and the beams laid into the grooves H being neatly fitted, and are secured by bolts, as shown.

I am the inventor of the improvement in 45 "sleigh-knee and beam sockets" described in the specification forming part of Letters Patent No. 181,248, issued to me August 22, 1876, also of the device shown in Letters Patent No. 204,884, June 18, 1878; hence I make no broad
50 claims.

What I do claim, and desire to secure by Letters Patent, is—

1. The combined sleigh-knee socket and beam-rest E, consisting of a metallic piece 55 which may be made of malleable iron cast in a single piece having ribs I' I' I' I', forming grooves H H, for supporting and securing beams B B, and having also sockets G G G, for receiving ends of knees F' F' F', arranged
60 between the beams and runner, substantially as described.

2. In a combined sleigh-knee socket and beam-rest, consisting of metallic piece E, constructed as described, having ribs I' I' I' I', 65 forming grooves H H, and having sockets G G G, the combination and arrangement of ribs I' I' I' I' and grooves H H with the sockets G G G, arranged substantially as described, and for the purposes herein set forth. 70

3. A gear for sleigh bobs, composed of the metallic piece E, having ribs I' I' I' I' and grooves H H and sockets G G G, in combination with beams B B, knees F' F' F', and runner A, arranged substantially as described, 75 and for the purposes herein set forth.

JOHN J. COBB.

Witnesses:

DENNIS L. ROGERS,
GEO. B. COBB.