

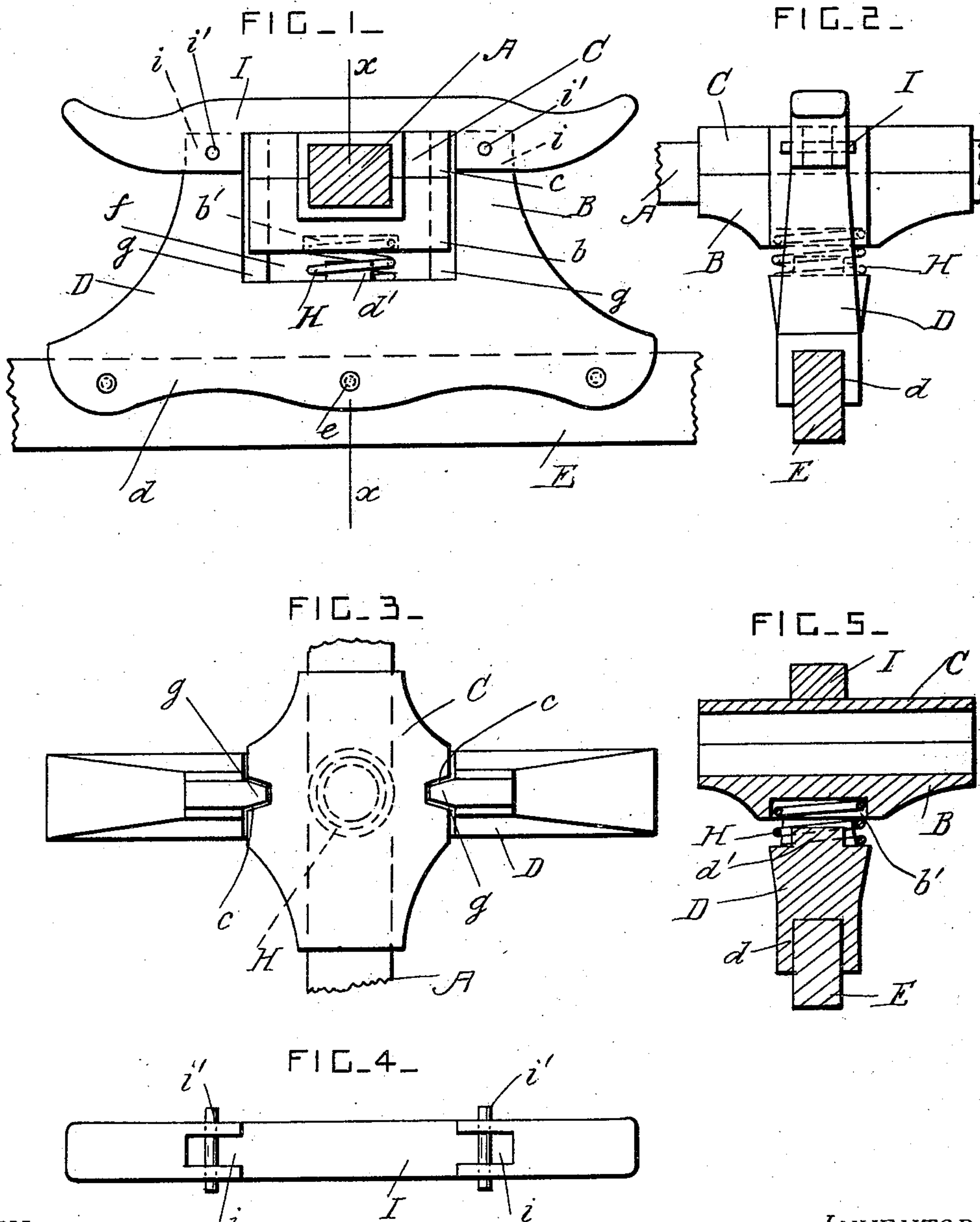
No. 877,285.

PATENTED JAN. 21, 1908.

J. A. BERGREN.

SLEIGH KNEE.

APPLICATION FILED MAY 18, 1907.



WITNESSES:

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JOHN A. BERGREN, OF LAKE PARK, MINNESOTA, ASSIGNOR OF ONE-HALF TO HAROLD E. BERGERSON, OF LAKE PARK, MINNESOTA.

SLEIGH-KNEE.

No. 877,285.

Specification of Letters Patent.

Patented Jan. 21, 1908.

Application filed May 18, 1907. Serial No. 374,385.

To all whom it may concern:

Be it known that I, JOHN A. BERGREN a citizen of the United States, residing at Lake Park, in the county of Becker and State of Minnesota, have invented certain new and useful Improvements in Sleigh-Knees; and I do hereby declare the following to 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.

This invention relates to sleigh knees; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In the drawings, Figure 1 is a side view of the sleigh knee. Fig. 2 is an end view of the same. Fig. 3 is a plan view of the sleigh knee with the keep-bar removed. Fig. 4 is a detail plan view of the keep-bar, from below. Fig. 5 is a cross-section through the sleigh knee taken on the line $x-x$ in Fig. 1.

A is one end portion of a sleigh beam of any approved construction.

B is a channel-shaped support in which the end portion of the beam rests.

C is a channel-shaped cover which fits over the upper part of the sleigh beam, and corresponds in form with the support B.

The two parts B and C are provided with vertical grooves b and c in their sides respectively, and the sleigh beam is prevented from sliding longitudinally in these said parts by any approved means.

D is a knee bracket the lower portion of which is provided with a groove or channel d in which the sleigh runner E is secured by rivets or bolts e . The upper part of the bracket D is provided with a gap f for receiving the parts C and D, and g are wedge-shaped guides arranged in the said gap, at its sides, and engaging with the said grooves c and d , which also are wedge-shaped.

H is a spiral spring which is interposed between the bottom of the gap f and the underside of the support B. The support B has a recess b' which incloses the upper end portion of the spring, and the bracket D has a projection d' which enters the lowest coil of

the said spring. In this manner the spring is free to contract and expand and cannot slip sidewise out of place. Instead of employing a spiral or helical spring, any other approved form of spring may be used, or a spring block of india rubber or any other approved spring material may be used.

I is a keep-bar which is provided with sockets i at its end portions. These sockets fit over the upper end portions of the knee bracket, and i' are bolts or pins which pass laterally through the said sockets and secure the keep-bar in position.

The spring and the slidable support relieve the sleigh beam of all jolts and jars, and the device is very simple and not liable to be broken or to get out of order.

What I claim is:

1. In a sleigh knee, the combination, with a knee bracket provided with a gap having vertical guides at its sides, of a channel-shaped support and a channel-shaped cover for engaging with the sleigh beam, said support and cover having grooves in their sides which slide over the said guides, a spring interposed between the bottom of the said gap and the said support, and a keep-bar secured to the top of the said knee bracket and closing its said gap.

2. In a sleigh knee, the combination, with a knee bracket provided with a gap having vertical guides at its sides, of a support and a cover for engaging with the sleigh beam each provided with grooves which slide over the said guides, a spring interposed between the bottom of the said gap and the said support, a keep-bar provided with sockets at its ends which fit over the upper projecting ends of the said knee bracket and brace them together, and pins which pass laterally through the said sockets and secure the said keep-bar to the said knee bracket.

In testimony whereof I have affixed my signature in the presence of two witnesses.

JOHN A. BERGREN.

Witnesses:

J. E. BAKKE,
JOHN H. MOORE.