No. 829,847. PATENTED AUG. 28, 1906.

W. H. COYLE.

SLEIGH.

APPLICATION FILED JAN. 10, 1906.

Fig. 1.

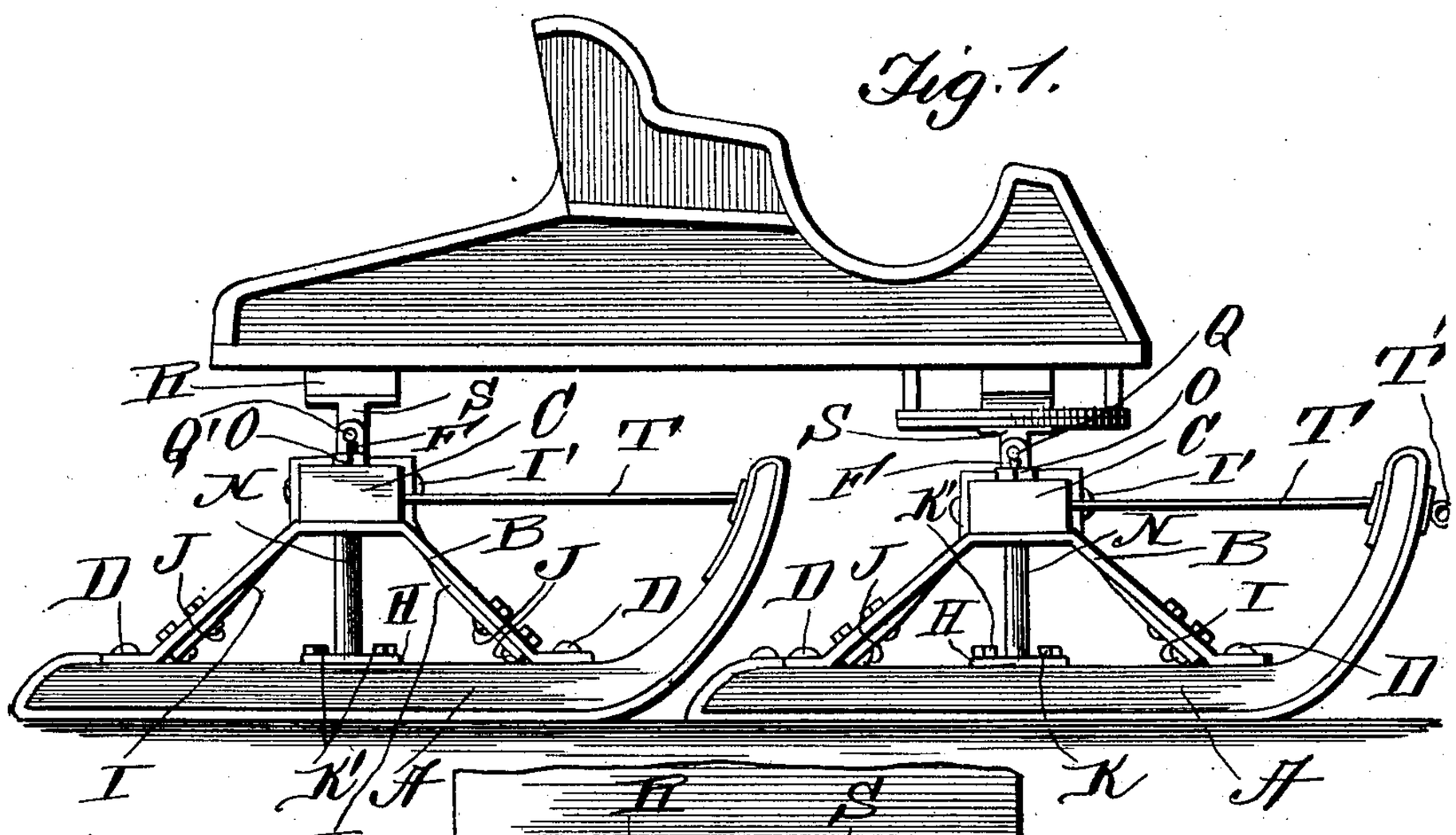


Fig. 2.

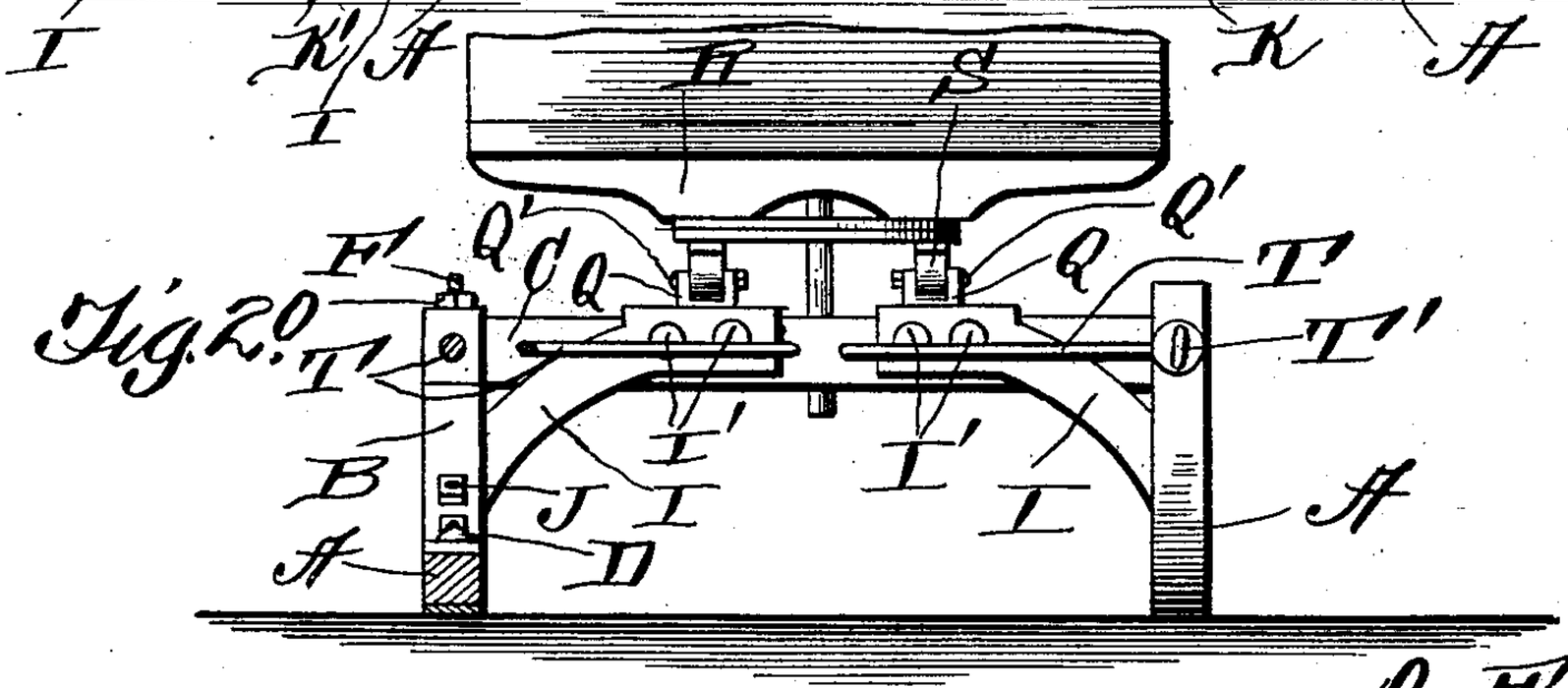


Fig. 3.

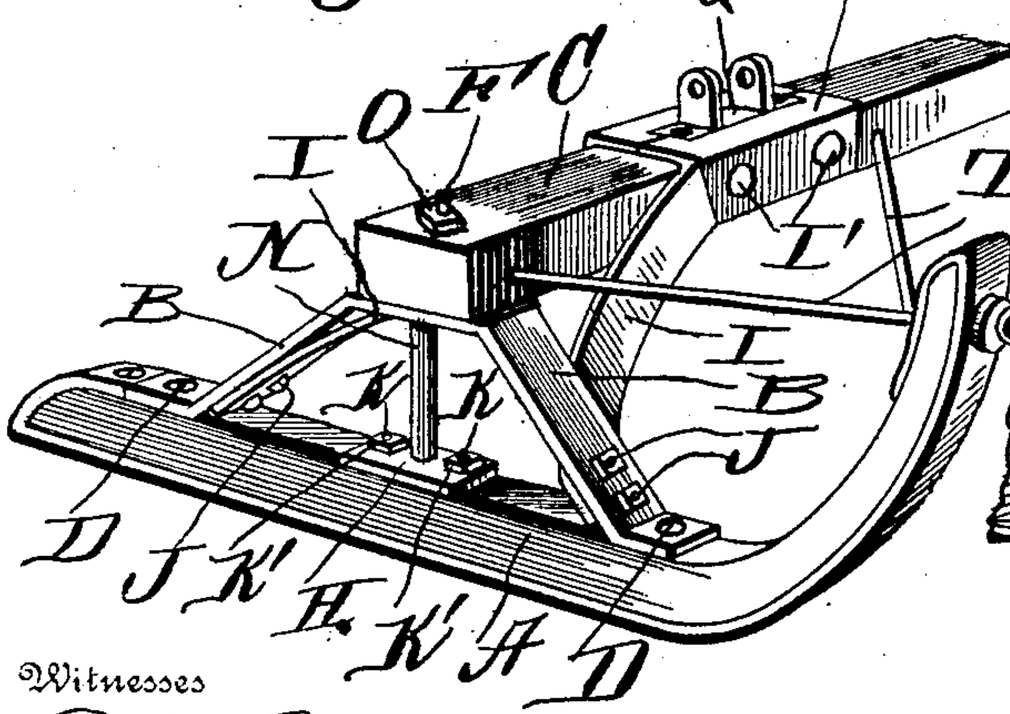
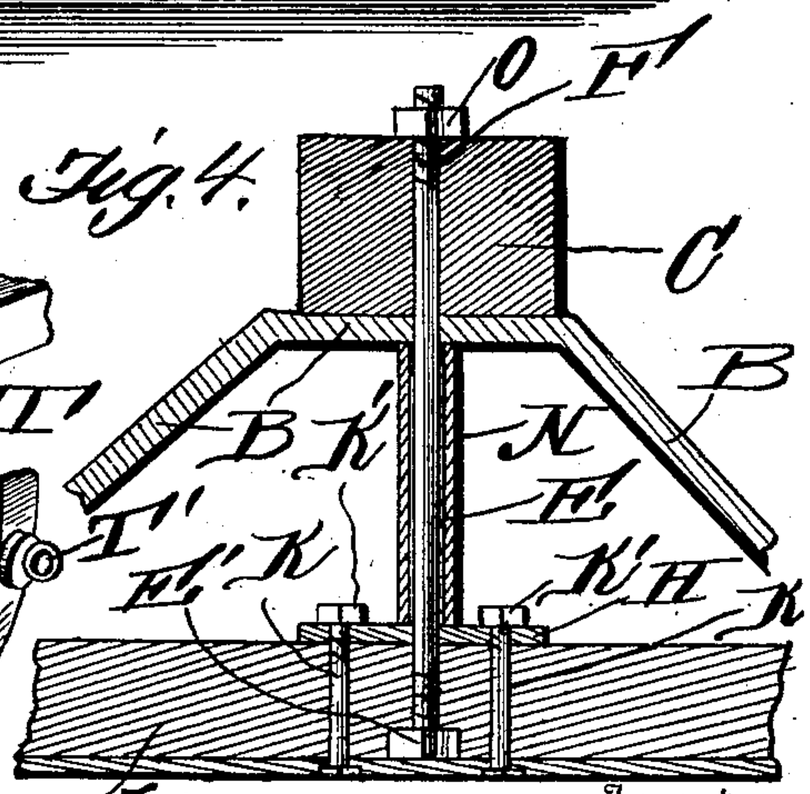


Fig. 4.



Witnesses

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SLEIGH.

No. 829,847. Specification of Letters Patent. Patented Aug. 28, 1906.

Application filed January 10, 1906. Serial No. 295,367.

To all whom it may concern:

Be it known that I, WILLIAM H. COYLE, a citizen of the United States, residing at Lowville, in the county of Lewis and State of New York, have invented certain new and useful Improvements in Sleighs; and I do declare the following to be 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in sleighs; and the object in view is to produce an efficient sleigh which will be simple in construction and which comprises a truss-frame which supports a bolster above the runner and so braced as to stand heavy pressure with a minimum simplicity of construction.

The invention comprises various details of construction and combinations and arrangements of parts, which will be hereinafter fully described and then specifically defined in the appended claims.

I illustrate my invention in the accompanying drawings, in which—

Figure 1 is a side elevation of a sleigh made in accordance with my invention. Fig. 2 is a front view of the sleigh. Fig. 3 is a detail perspective view, and Fig. 4 is a vertical section through one of the truss-bars, showing the manner of supporting the same.

Reference now being had to the details of the drawings by letter, A A designate two runners of a sleigh, and to each runner is fastened a metallic truss-bar B, the middle portion of which is parallel with the runner and adapted to form a support for the cross-piece C. Said truss-bar has its ends bent parallel to the runner, to which said ends are secured by means of bolts D.

E designates a bolt having a head E′ preferably countersunken in the bottom of the runner, as shown in elevation in Fig. 4 of the drawings. Said bolt also passes through the truss-bar and also through said cross-piece C and has a nut O fitted upon its threaded end F. The shoe of the sleigh, which is fitted to the runner, is held against the lower end of said head E′ by means of the bolts K, which pass through the shoe, said runner, and an apertured plate H, and suitable nuts K′ are fitted upon the threaded ends of the bolts K and adapted to hold the shoe and said plate against opposite sides of the runner. Said plate H is centrally apertured to receive the bolt E and also forms a support for the open-ended tubular shell N, upon the upper end of which the central portion of said truss-bar rests.

I I designate flat metallic brace-bars, the lower ends of which are bent so that their opposite edges will be parallel with the opposite edges of the truss-bar, and bolts J serve to hold the lower ends of said brace-bars I securely to the truss-bar, the lower ends of said bars I resting against the upper surface of the runner. The upper end of each of said brace-bars I has an angled flange I^2, adapted to fit over the upper edge of the cross-piece C, and the inner edge of one flange of each brace-bar has a recess formed therein adapted to partially surround the base of the clip Q, which is secured to the upper surface of the cross-piece. The two flanges of said brace-bars I when adjusted in place are adapted to entirely surround and brace said clip and serve to securely brace ands trengthen the parts. Suitable brace-rods I are provided, which are fastened at their rear ends to the cross-piece C and their forward ends fastened to the forward upwardly-curved end of the runner, as shown, and to each runner is connected an eyebolt T′, whereby a neap may be attached thereto. Bolts Q′ are mounted in the clips Q, and a fifth-wheel is provided having apertured lugs S, which are pivotally mounted upon said bolts Q′, and a bolster R is mounted and rests upon said fifth-wheel.

In Figs. 3 and 4 of the drawings I have shown a slight modification in the form of the truss-bar in which the central portion of the bar is constructed so as to form a rectangular-outlined casing adapted to fit over the end of the cross-piece C, and thereby forming a more rigidly braced construction.

From the foregoing it will be noted that by the provision of a sleigh made in accordance with my invention a construction is afforded comprising a truss-frame which, with the peculiar arrangement of the parts and the curved braces which are fastened to the truss-frame, produces a sleigh having great strength with a minimum arrangement of parts and affording a simple means for the attachment of buggy-boxes or regular sleigh-bodies, as may be desired.

What I claim is—

1. In combination with the runners of a sleigh, truss-bars fastened at their lower ends thereto, a cross-piece resting upon said truss-bars, a rod passing through said runner and truss-bar, an apertured plate fitted to the runner and through which said rod passes, an open-ended tubular shell resting upon said plate and upon which the truss-bar rests, and through which said rod passes, curved brace-bars fastened to said truss-bar, the upper ends of said brace-bars having angled flanges fitting over said cross-piece, the inner edge of one flange of each bar having a recess, a clip secured to the cross-piece and adapted to be held in said recesses, as set forth.

2. In combination with the runners of a sleigh, truss-bars fastened at their lower ends thereto, a cross-piece resting upon said truss-bars, a rod passing through said runner and truss-bar, an apertured plate fitted to the runner and through which said rod passes, an open-ended tubular shell resting upon said plate and upon which the truss-bar rests, and through which said rod passes, curved brace-bars fastened to said truss-bar, the upper ends of said brace-bars having angled flanges fitting over said cross-piece, the inner edge of one flange of each bar having a recess, a clip secured to the cross-piece and adapted to be held in said recesses, a fifth-wheel pivotally connected to lugs integral with said clip, and a bolster mounted upon said fifth-wheel, as set forth.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

WILLIAM H. COYLE.

Witnesses:

C. D. MITCHELL,

F. G. BARRETT.