

No. 630,633.

Patented Aug. 8, 1899.

W. J. STAHMANN.
SLEIGH KNEE.

(Application filed Jan. 25, 1899.)

(No Model.)

FIG. 1.

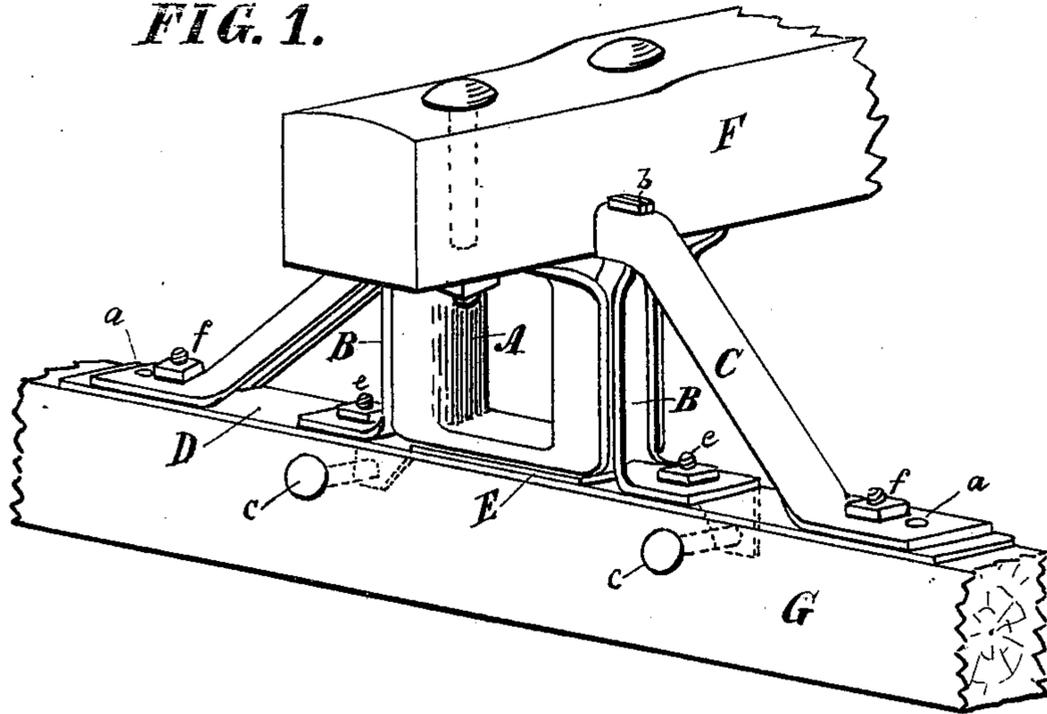


FIG. 2.

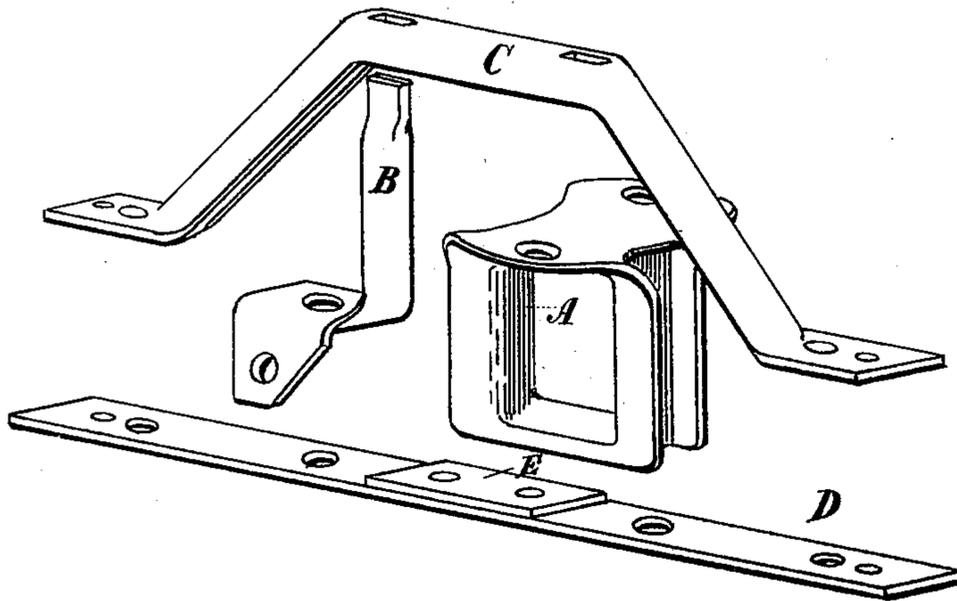
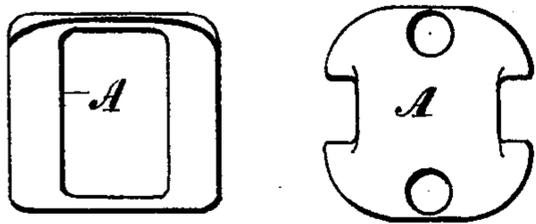


FIG. 3.



WITNESSES:

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WILLIAM JOHN STAHMANN, OF WEAVER, MINNESOTA.

SLEIGH-KNEE.

SPECIFICATION forming part of Letters Patent No. 630,633, dated August 8, 1899.

Application filed January 25, 1899. Serial No. 703,341. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM JOHN STAHMANN, a citizen of the United States, residing at Weaver, in the county of Wabasha and State of Minnesota, have invented a new and useful Sleigh-Knee, of which the following is a specification.

My invention relates to improvements in sleigh-knees; and the objects of my invention are, first, to provide a light and strong knee that can be bolted direct to beam and runner; second, to give the runner a slight oscillation, so that runner may run over uneven surface without twisting beam or causing beam to tip backward or forward, thus breaking reach, and, third, to give a long bearing on runner in order that a lighter runner may be used. I attain these objects as set forth in the following specification and illustrated in the accompanying drawings.

Figure 1 is a vertical section of complete knee with part of beam and runner attached. Fig. 2 represents parts of knee detached. Fig. 3 is a top and side view of part A.

Similar letters refer to similar parts throughout the several views.

A represents the knee proper and is bolted direct to beam and should be made of flat soft steel with its sides bent U-shaped for braces B B to fit in. Its bottom and top should be flat. The braces B B, riveted at top in brace or bridge C, bolted and riveted on ends to plate D, constitute the frame in which the knee A oscillates. This frame is a trestle for runner and has a very long bearing on runner, greatly strengthening said runner. The runner oscillates on knee A direct to runner, and said knee having a flat bottom its tendency is to stand perpendicular or square with runner. Consequently the usual bracing of the beam from reach is not necessary, as it does not give the strain on reach that oscillators do having the oscillation next to beam with the usual round bearing.

The braces B B are bent channel or U shaped for lightness and strength. It is bent at an angle of ninety degrees at *e*, Fig. 1, and

the edges or lips are upset in bending, greatly strengthening said angle. The foot is bent right-angled between *e* and *f* to facilitate bolting to side of runner and is doubled flat, as shown in Fig. 1, at *b*, in order that full size of brace can be maintained in riveting in bridge C, and does not necessitate the cutting of a hole in bridge C, that would materially weaken said bridge. The bridge C is also bent channel or U shaped and at *b b* is bent at an angle of forty-five degrees. The edges or lips are upset in bending, thereby strengthening that part where the oblong holes are punched for the braces B B to fit in. The ends of bridge are left flat, giving a wider bearing on runner.

The plate D is a flat plate or band-iron with holes punched at *a a* and *e e* to admit bolts and rivets, as shown in Fig. 1. It is intended to prevent the bridge C from spreading when carrying a load. The plate E is riveted to center of plate D and takes the wear occasioned by knee A.

The beam F and runner G, as shown in Fig. 1 of the drawings, form no part of my present invention.

I am aware that prior to my invention sleigh-knees have been made that give the runner oscillation. I therefore do not claim that combination broadly; but

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

1. A steel knee having U-shaped sides, and flat bottom and top substantially as set forth.
2. The U-shaped braces B, B, that support the knee as described.
3. The bridge C, bent U-shaped having oblong holes as described.
4. The U-shaped bridge C, riveted at *a, a*, to plate D, with wear-iron E, attached; and braces B, B, riveted at *b, b*, in bridge C, and bolted at *c, c*, and *e, e*, constituting a trestle for runner all substantially as described.

WILLIAM JOHN STAHMANN.

Witnesses:

EUGENE F. BOWMAN,
WILLIAM HARUMBIEGER.