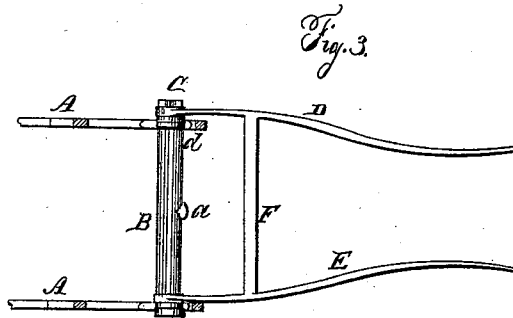
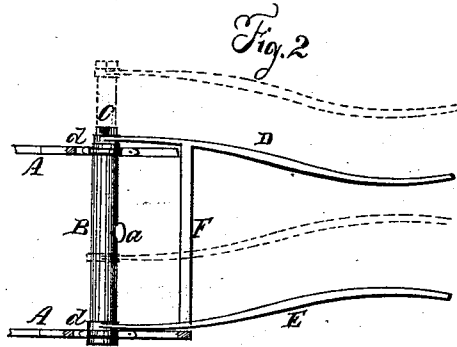
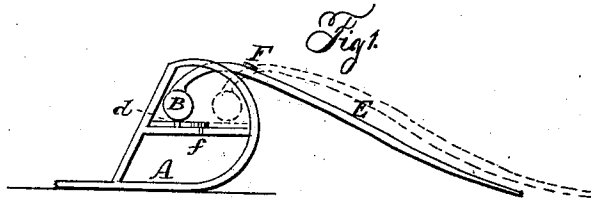


A. J. SPENCER.
Shifting Bar for Sleighs.

No. 100,206.

Patented Feb. 22, 1870.



Witnesses,
J. H. Shumway
a. J. Tibbitts

Inventor.
A. J. Spencer
By his Attorney
John E. Earle

United States Patent Office.

A. J. SPENCER, OF MIDDLETOWN, CONNECTICUT.

Letters Patent No. 100,206, dated February 22, 1870.

IMPROVED SHIFTING-BAR FOR SLEIGHS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, A. J. SPENCER, of Middletown, in the county of Middlesex, and State of Connecticut, have invented a new improvement in Shifting-Bar for Sleighs; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent in

Figure 1, a side view;

Figure 2, a top view, with the shafts as thrown back; and in

Figure 3, a top view, the shafts thrown forward.

This invention relates to an improvement in the attachment of shafts to sleighs, the object being to make the connection adjustable, so as to shift the shafts from a central to a side draft, to accommodate the sleigh to running on country or city roads.

It is well known, that in the track beaten by travel in the snow through country roads, the horse stands in line with the left-hand runner. While this is necessary in country roads, it is not in city or smoothly-beaten roads; hence, when it is not essential that the shafts be in such position that the horse will travel in the track of the runner, except where the roads require it, it is desirable that, where the roads will admit of it, the horse stand centrally, as in wheel carriages.

Various devices have been produced to accomplish this result, but either the bar has necessarily projected from one side to the other, or the construction has been too expensive and complicated for practical use.

My invention consists in the arrangement of a tubular bar attached to the runners, with a rod fitted into the tubular bar, and the left-hand shaft fitted to the said rod, the other shaft encircling or fitted to the tubular bar, so as to slide thereon when the rod, with one shaft attached, is drawn out, so that the shaft may be set at the desired point, and secured by a set-screw or other convenient device.

A are the runners, of common construction, upon which is fixed a tubular bar, B, with a rod, C, fitting into the said tube, entering from the left-hand end, and so as to slide freely within the bar B, and fixed in any desired position by a set-screw, *a*, or other suitable device.

To the said rod C, one shaft, D, is fixed, and the other shaft, E, fitted to the bar B, so as to slide freely thereon.

The shafts are constructed and joined by the whiffletree-bar F, in the usual manner.

As represented in fig. 2, the shafts are in the position that the horse stands centrally forward of the sleigh. When it is desired that the horse travel in the same track with the left-hand runner, free the rod C by loosening the fastening *a*, and draw the rod C out, which will bring the shafts to the desired position, as denoted in broken lines, fig. 2. To return the shafts, reverse the operation; thus, the shafts are made adjustable, if need be, without the occupant getting out of the sleigh.

It is desirable that the horse travel as near the sleigh as possible; therefore, when standing centrally, his hind feet can throw between the runners; hence, in that position, the shafts can be short, but when drawn out as denoted in broken lines, then his feet would strike the runner; therefore, the shafts for this arrangement, as thus far described, should be made sufficiently long for the horse to travel when the shafts are set to the left.

To avoid the necessity of making the shafts longer than is required for the central position, I arrange the tubular bar B upon a plate, *d*, (see fig. 1,) the said plate being pivoted to the runner at *f*, so as to permit the turning of the plate *d*. As shown in figs. 1 and 2, the said plate *d* is turned to the rear, so that the bar B lies back of the pivots *f*, one of these plates *d* being arranged upon each runner, as denoted in fig. 2.

When it is desired to throw the shafts forward, swing the plates with the bar B around, to bring the said bar front of the pivot *f*, as denoted in broken lines, fig. 1, and as seen in fig. 3. This will take the horse sufficiently far forward to clear the runners, and the adjustment of the shafts in that position is the same as before described. The plates *d* are secured in either position by any suitable catch.

I do not wish to be understood as broadly claiming the arrangement of shafts in sleighs, so as to be adjusted from a central to a left-hand position, as such is not new; but

What I do claim, is—

In combination with the tubular bar B and rod C, and the shafts arranged thereon, as described, the turning plates *d*, to throw the shafts forward or back in the manner described.

A. J. SPENCER.

Witnesses:

JOHN H. SHUMWAY,
A. J. TIBBITS.