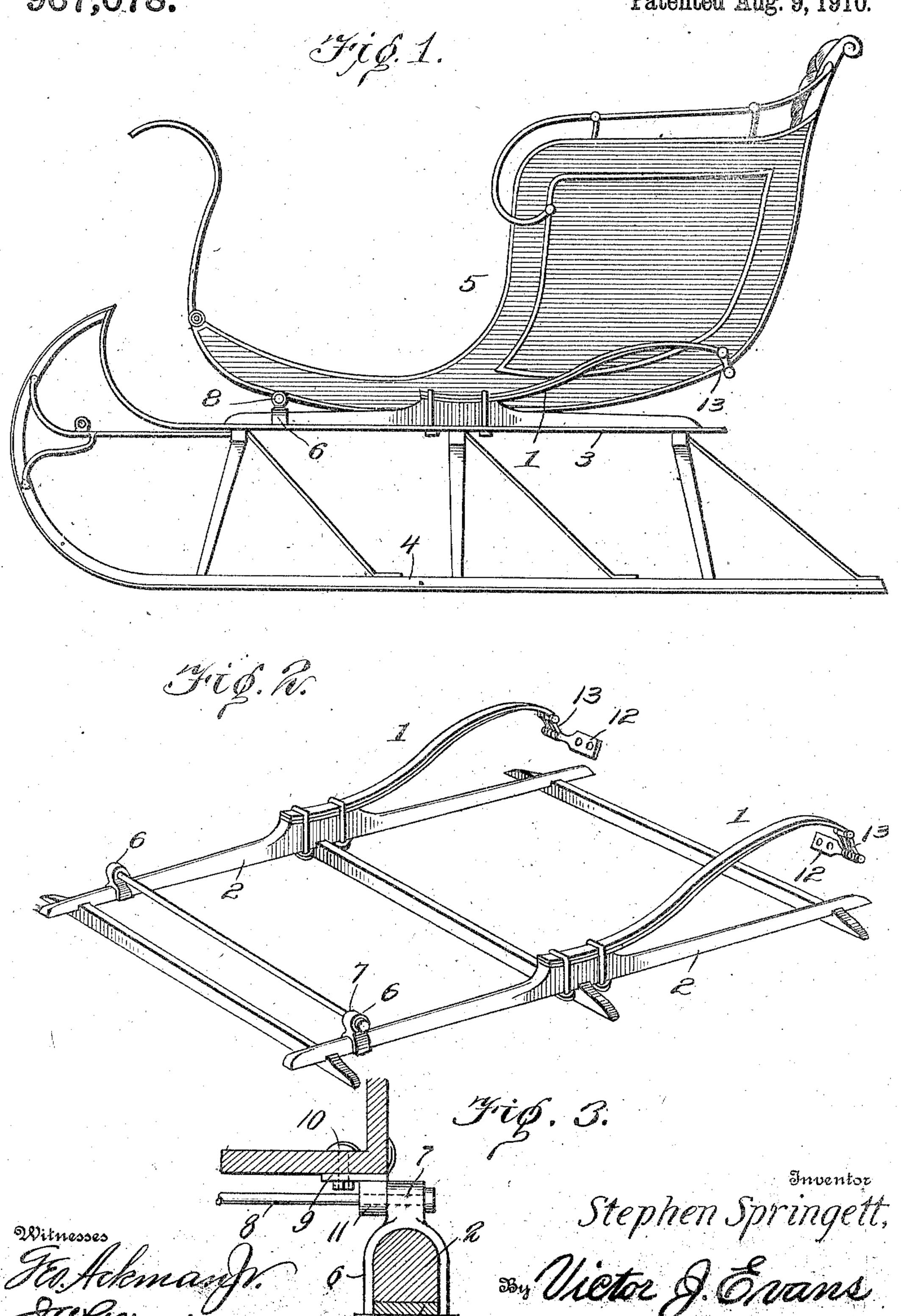
S. SPRINGETT.

SLEIGH.

APPLICATION FILED AUG. 27, 1909.

967,078.

Patented Aug. 9, 1910.



UNITED STATES PATENT OFFICE.

STEPHEN SPRINGETT, OF OWOSSO, MICHIGAN.

SLEIGH.

967,078.

Specification of Letters Patent.

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To all whom it may concern:
Be it known that I, Stephen Springett, a citizen of the United States, residing at Owosso, in the county of Shiawassee and 5 State of Michigan, have invented new and useful Improvements in Sleighs, of which

the following is a specification.

This invention relates to improvements in sleighs and has particular reference to means 10 for connecting the body of the sleigh to the gear and to the springs for supporting the rear portion of the sleigh body so as to prevent what is known as horse motion and the invention consists in a sleigh having the 15 body pivotally mounted at a point near its. front end, leaf springs securing and extending rearwardly on the gear and flexible connections between the rear ends of the springs and the rear portion of the body, said springs supporting the rear portion of the body and permitting the same to swing vertically and the sleigh body to move on the said pivotal connections as hereinafter described and claimed.

In the accompanying drawings:—Figure 1 is an elevation of a sleigh known as a cutter constructed in accordance with my invention. Fig. 2 is a detail perspective view of a portion of the gear. Fig. 3 is a detail 30 section of one of the pivotal connections between the front portion of the sleigh body

and the gear.

In accordance with my invention, the gear of the sleigh is provided with rearwardly 35 and upwardly extending leaf springs 1. The said springs are here shown as having their front ends clipped on the centers of side bars 2, which side bars are secured to the raves 3 of the gear. The runners are indicated at 4 40 and the body at 5. On the side bars, near their front ends, are clips 6 which have upwardly extending heads 7. A rod 8 which is disposed transversely with reference to the gear has its ends extended through openings 45 in the said heads 7. Brackets 9 or other suitable devices which are here shown as secured under the bottom of the sleigh body near the front end thereof by bolts 10 are provided with depending lugs or leaves 11 50 which bear against the inner sides of the heads 7 of the clips 6 and have openings !

through which the rod 8 extends so that the said brackets coact with the said clips and the said cross rod to effect pivotal connections between the front portion of the body 55 and the sleigh gear so that the body is angu-

larly movable in a vertical plane.

Under the bottom of the sleigh body, near the rear end thereof, are secured brackets 12 which project outwardly from the sides of 60 the body and are connected by links 13 to the rear ends of the springs, the said links being pivotally connected to the said brackets and the said springs serving in effect to form flexible connections between the rear portion 65 of the body and the rear ends of the springs to compensate for the end thrusts of the springs caused by the vertical movements of the rear portion of the body when the sleigh is in motion. The said springs form the sole 70 support for the rear portion of the sleigh body and in coaction with the pivotal connections between the front portion of the body and the gear enable the rear portion of the body to swing in a vertical plane and 75 entirely overcome horse motion.

What is claimed is:—

A sleigh having side bars secured to the gear, leaf springs extending rearwardly on the side bars and having their front ends secured 80 thereto, clips secured on the side bars near the front ends thereof and having upwardly extending heads provided with transverse openings, a cross bar extending through the openings of the clip heads, a body having 85 brackets on its under side pivotally mounted on said cross bar and bearing against the heads of the clips, brackets secured under the bottom of the sleigh body near the rear end thereof and projecting outwardly there- 90 from, and links pivotally connected to said brackets and to the rear ends of said leaf springs and forming flexible connections between the rear portion of the body and the rear ends of the said springs.

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

STEPHEN SPRINGETT.

Witnesses:

C. H. TAPP, BEN SMITH.