(No Model.)

G. E. WATSON

SLEIGH.

No. 282,811. Patented Aug. 7, 1883.

Fig 1

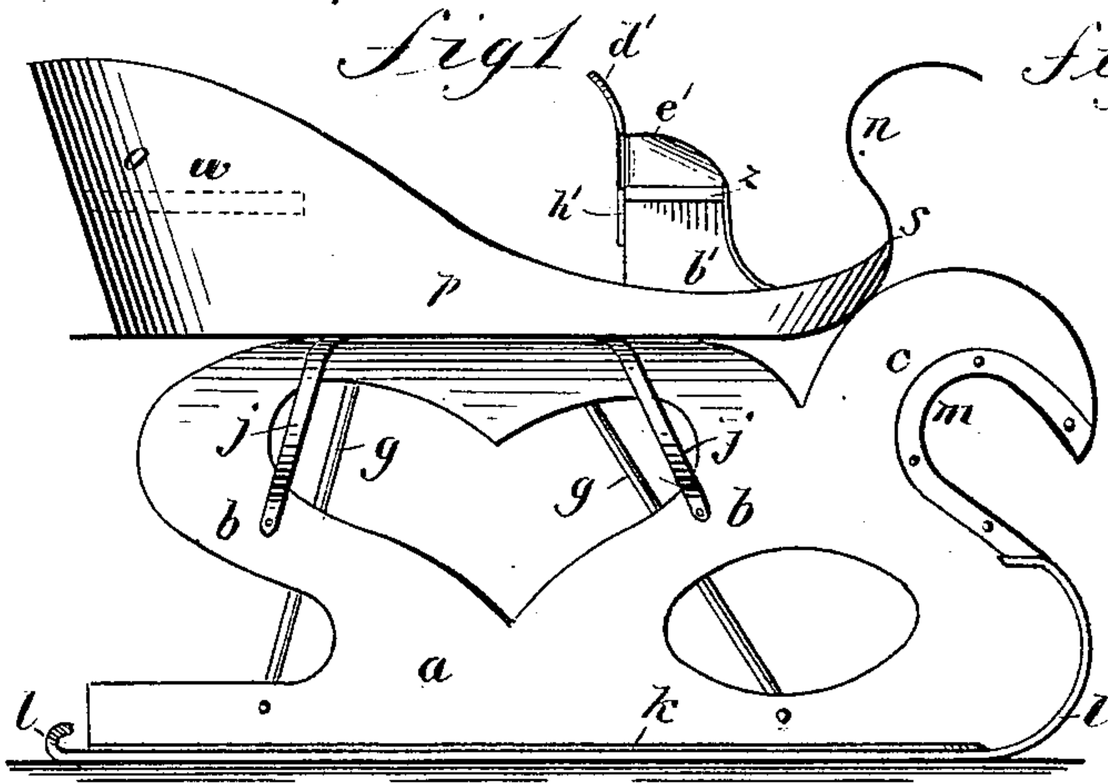


Fig 2

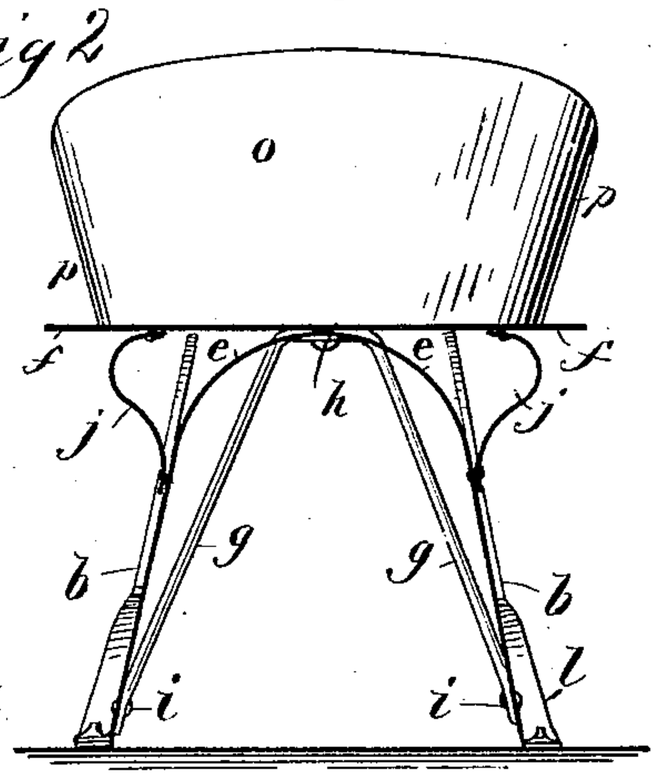


Fig 3

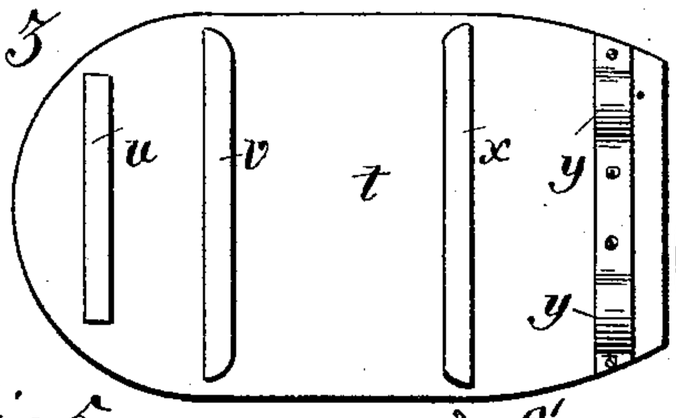


Fig 4

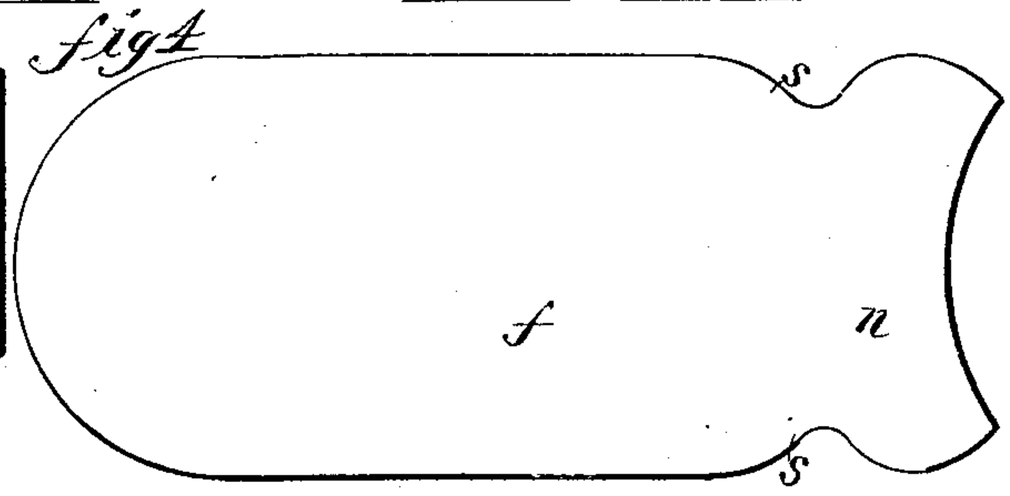


Fig 5

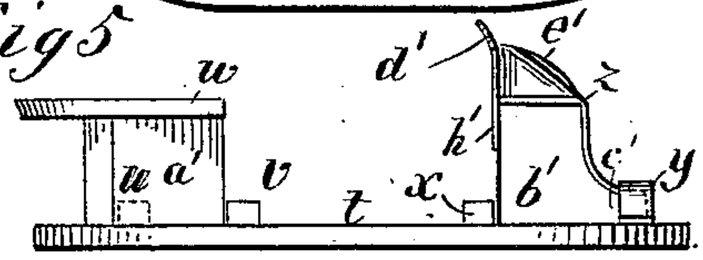


Fig 6

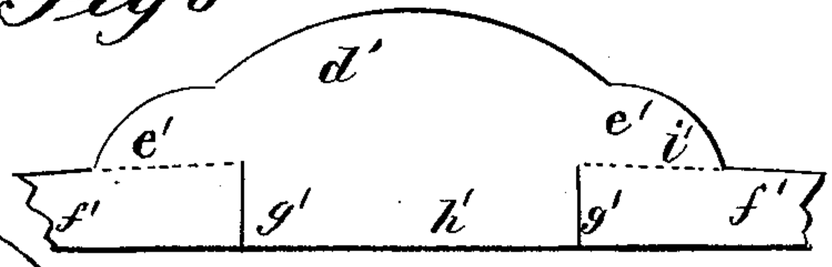


Fig 7

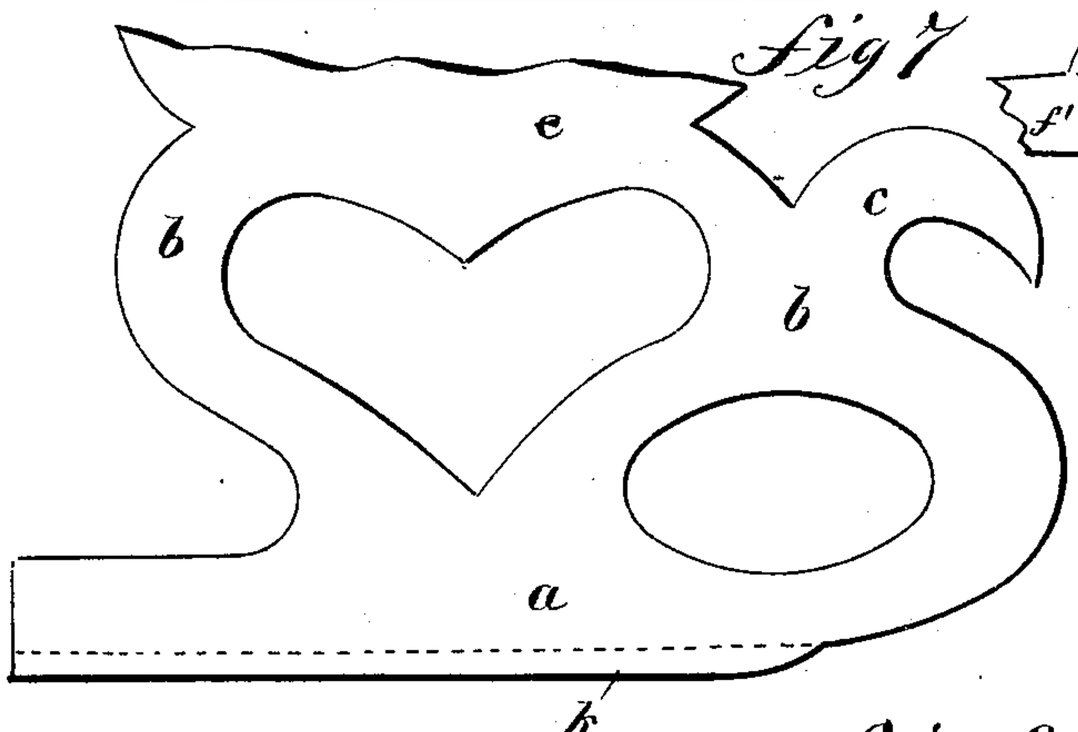


Fig 8

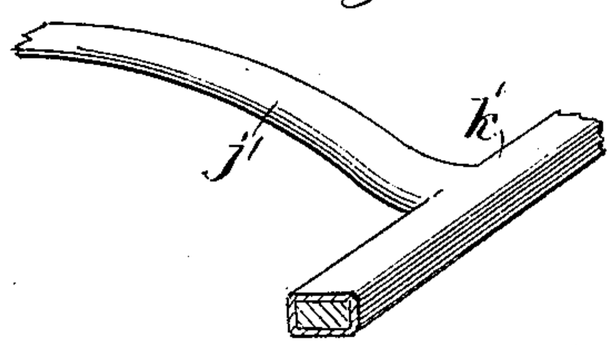
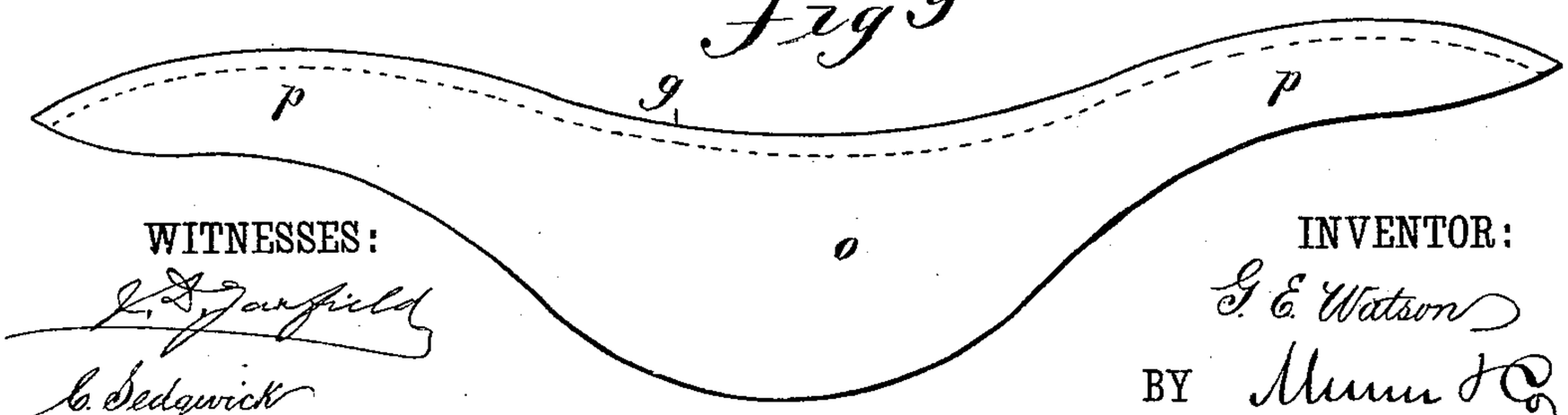


Fig 9



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UNITED STATES PATENT OFFICE.

GEORGE E. WATSON, OF BANNACK CITY, MONTANA TERRITORY.

SLEIGH.

SPECIFICATION forming part of Letters Patent No. 282,811, dated August 7, 1883.

Application filed May 14, 1883. (No model.)

To all whom it may concern:

Be it known that I, GEORGE EDWARD WATSON, of Bannack City, in the county of Beaver Head and Territory of Montana, have invented a new and Improved Sleigh, of which the following is a full, clear, and exact description.

My invention consists of improvements in the construction of sleighs whereby thin sheet metal may be employed for all the essential parts in a very simple way, enabling them to be constructed with much less labor than as commonly made, and making more durable and substantial sleighs than the common kinds, all as hereinafter fully described.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of a sleigh constructed according to my improvements. Fig. 2 is an end elevation. Fig. 3 is a plan view of a false bottom for the box. Fig. 4 is a plan of the main bottom to the box or body. Fig. 5 is a side elevation of the false bottom and the seats applied to it. Fig. 6 is a plan view of the piece of sheet metal which I employ for the back and sides of the front seat. Fig. 7 is a side elevation of one-half of the runner portion of the sleigh. Fig. 8 is a perspective view of the tongue, and Fig. 9 is a plan of the piece that forms the back and sides of the box or body.

To make runners *a*, also the parts *b*, corresponding to the knees, also parts *c*, which constitute the goose-neck, and also the parts *e*, taking the place of the beams of the ordinary sleigh, I propose to take thin boiler-plate or sheet-iron of suitable length and breadth, and cut said parts about in one piece, of which Fig. 7 represents one-half in the flat form of the plate. Then I bend the top part, *e*, as represented in Fig. 2, and apply the plate *f*, which is the bottom of the body, and also apply the strong braces *g*, and fasten them together at *h*; also, fasten the braces to the inside of the runners at *i*, firmly riveting the braces to the runners, but preferring to bolt the parts together at *h*. Besides braces *g*, I also apply outside braces, *j*, to the sides *b* and the bottom *f*. Along the bottom of the runners I turn up a flange, *k*, to which I connect a flat shoe, *l*, which turns up a sufficient distance at the front of the runner for the purposes of a shoe, and meets a stiffening goose-neck, *m*, riveted on for staying the part *c*.

The bottom of the box or body, which is represented in plan view in Fig. 4, is turned up forward to make the dash-board *n*, and the back *o* and sides *p*, which consist of the sheet-metal piece represented in Fig. 9, are attached by flanging the lower edge inward along the dotted line *q* and riveting the flange on the upper surface of the bottom, the ends of the sides *p* terminating about at the points *s* of the bottom plate. These three parts form the running-gear and body, together with the braces, runners, and stiffeners, all of which are very simple to make and fasten together, and making, as it will be seen by the cutting away of the surplus portions of the metal from the running parts, a light structure.

For re-enforcing the bottom *f* to sustain the weight of the loading and the shocks to which said bottom is sometimes subject, I propose to employ a false bottom, *t*, of zinc or other material, on which I propose to arrange the cleats *u* and *v*, for keeping the hind seat, *w*, in its position, and the cleat *x* and clips *y*, for confining the front seat, *z*. The seat *w* has two end standards, *a'*, which stand behind cleat *v* and at the ends of cleat *u*, so that with the back of the seat *w* touching the back of the body, as shown by the dotted lines *w*, Fig. 1, the seat cannot get out of place while occupied by the rider, while said seat rests in its place without being attached, and so that it can be readily lifted out when it may be required to do so. The standards *b'* of the front seat have toes *c'*, that enter under clips *y* when the standards drop down in front of cleat *x*, so that said seat *z* is secured in its position, and so that it cannot be overturned backward by sudden forward jerks by the horses. For the back and sides of the seat, I cut a piece of thin sheet metal of the form represented in Fig. 6, of which *d'* forms the back, *e'* the sides, and *f'* strips that extend down the front edges of the standards *b'* to form stays for the support of the back. The slits *g'* separate the part *h'*, which extends down the back of the

standards, from the stay parts f', that are bent to a right angle along the dotted line i', so that said parts f' lie flat on the upper surface of the seat z, to be nailed thereto, and also down along the front edges of the standard, as before stated. I also propose to make the tongue j' and its T-head k' of thin sheet metal; but in that case will use lighter and smaller pieces of wood for fillers to the sheet metal, which is made substantially in the form of a tube, the wood pieces being mainly to give form to the metal.

The tongue may be connected to the runners in any ordinary or other approved way.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The runners a and parts b c, corresponding to the knees and beams of a sleigh, all constructed of one piece of sheet metal, and said piece bent in the part e, and provided with braces g and attached to bottom f, substantially as described.

2. The sheet-metal runners a, having flanges k, shoes l, and stiffeners m, substantially as described.

3. The combination of braces j with the sheet-metal runners a, sides b, and top e, and with the sheet-metal bottom f, substantially as described.

4. A one-piece seat, back, and sides consisting of the back d', sides e' e', the part h', and the strips f', separated by slits g' from said part h', in combination with the standards b' and seat z, as shown and described.

5. The combination of the false bottom t, having cleats u v for the back seat and cleat x and clips y for the front seat, with the sheet-metal bottom f, sides p, and back o of the sleigh-body, substantially as described.

6. A sleigh constructed substantially as shown and described, and consisting of runners and body-support formed of sheet metal, and a body formed of sheet metal, and provided with a false bottom having seats detachably secured thereto, also of sheet metal or wood.

GEORGE EDWARD WATSON.

Witnesses:
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PAT. DEMPSEY.