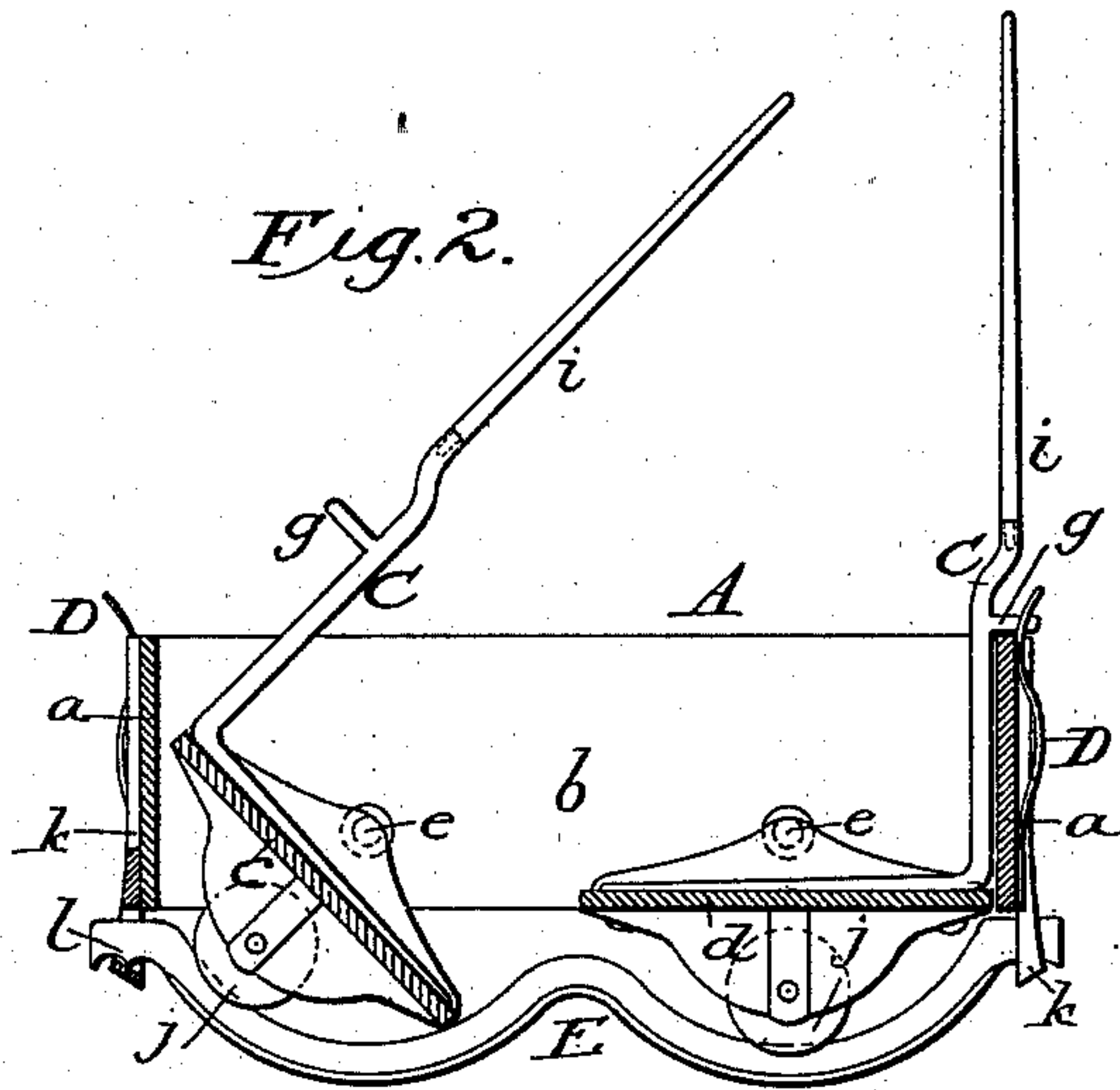
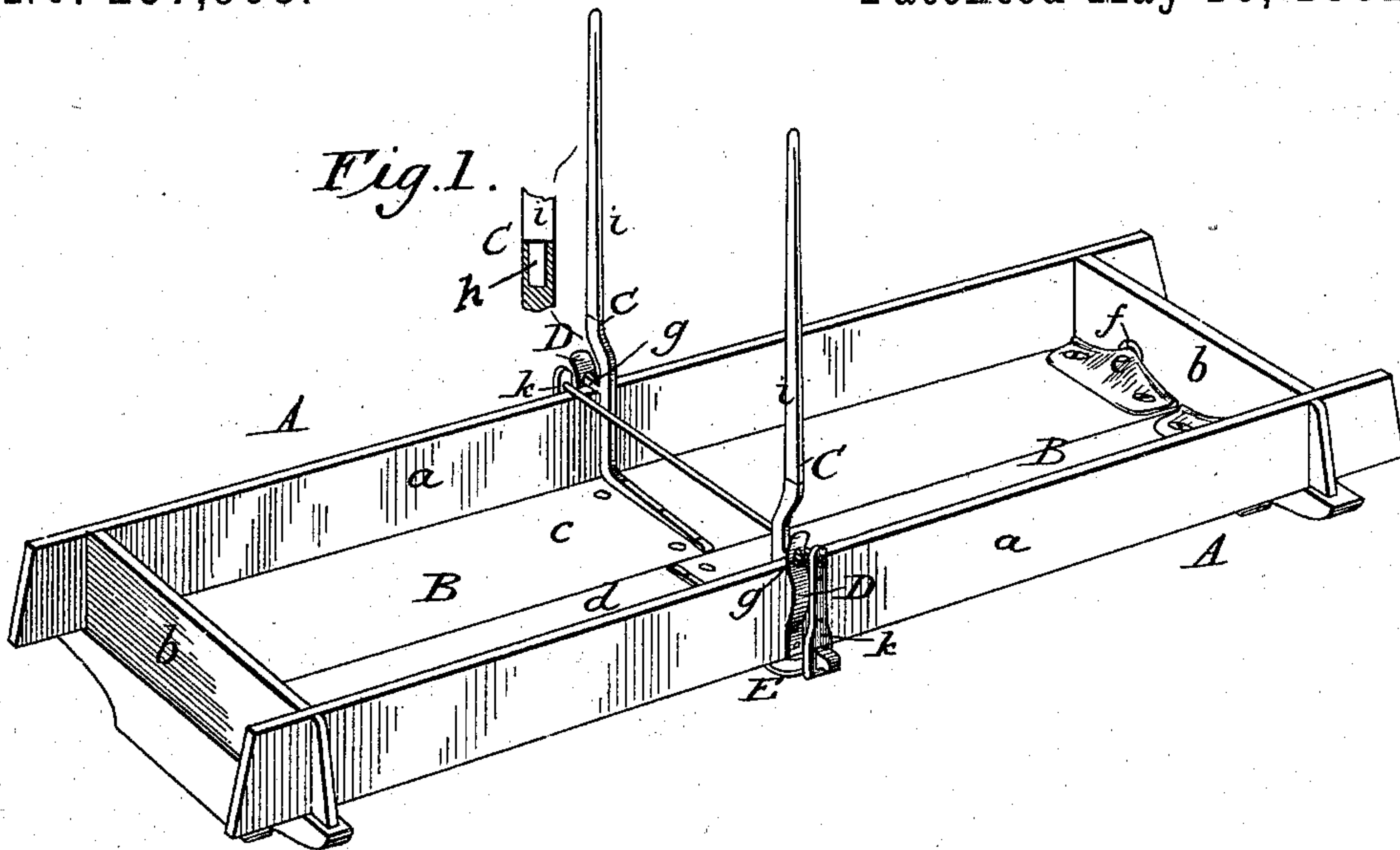


(Model.)

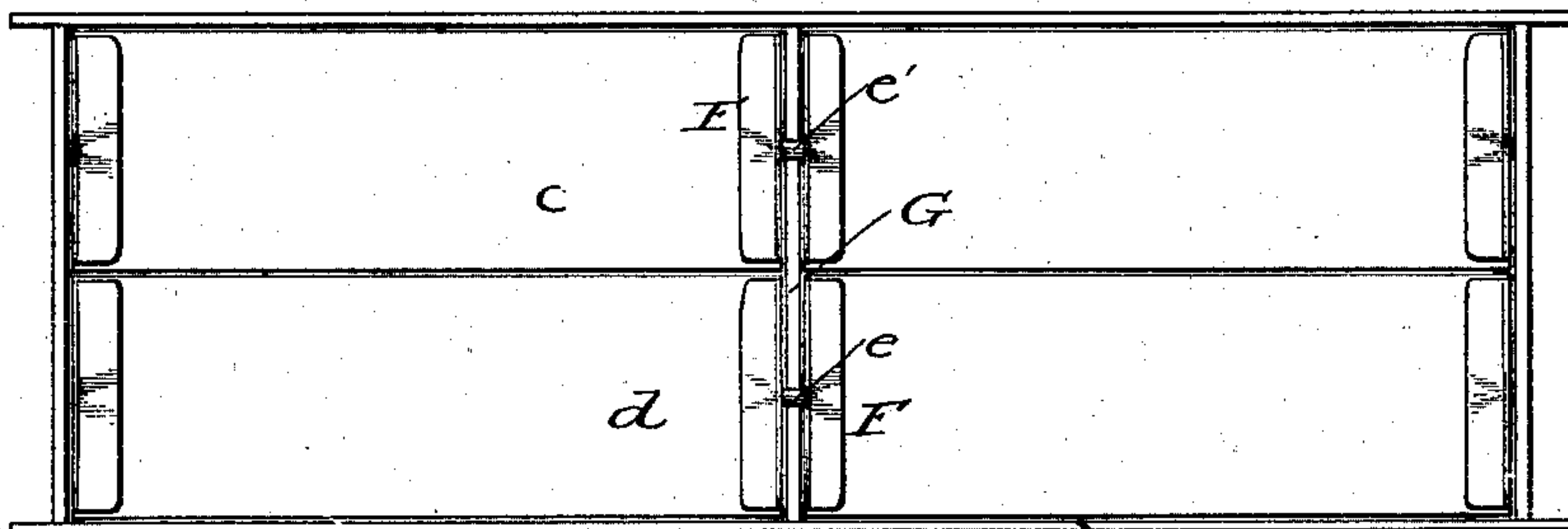
D. S. WATSON.  
DUMPING WAGON.

No. 257,908.

Patented May 16, 1882.



*Fig. 3.*



Attest.

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# UNITED STATES PATENT OFFICE.

DAVID S. WATSON, OF STRATFORD, NEW YORK.

## DUMPING-WAGON.

SPECIFICATION forming part of Letters Patent No. 257,908, dated May 16, 1882.

Application filed March 7, 1882. (Model.)

*To all whom it may concern:*

Be it known that I, DAVID S. WATSON, of Stratford, in the county of Fulton and State of New York, have invented certain Improvements in Dumping-Wagons, of which the following is a specification.

My invention relates to dumping-wagons, and especially to a dumping body adapted to be applied to ordinary farm and lumber wagons.

The invention consists in a box or body adapted to be set upon the bolsters of an ordinary wagon, having its body divided longitudinally through the middle, the sections being pivoted at their ends and arranged to tip or fall apart along the middle, between or within the bolsters, and provided with operating-levers and locking devices for the same.

It further consists in a novel manner of sustaining the bottom sections against sagging, as hereinafter explained.

In the accompanying drawings, Figure 1 represents a perspective view of my improved wagon-body seated upon the bolsters of an ordinary farm-wagon; Fig. 2, a transverse section of the same; and Fig. 3, a plan view, showing a modification.

The object of my invention is to provide a body by which an ordinary farm or lumber wagon may be readily converted into a dumping-wagon at a nominal expense, and to render simple the construction of dumping-wagons generally.

To this end I construct a box or body in the manner indicated in the drawings, in which A represents the box or body as a whole, composed of side-boards *a a* and end-boards *b b*, suitably framed and fastened together; B, the bottom, divided longitudinally through the middle into sections *c d*. Each section is provided at its ends, midway between its sides or edges, with journals or gudgeons *e*, passing through eyes or holes *f* in the end-boards, said holes being bushed with metal or re-enforced by a metallic plate secured to the face of the same. The pins or journals *e* are by preference formed upon a metal plate extending entirely across the section to which it is applied, in order to permit it to be more firmly secured thereto, and in order also the better to sustain said section. The pivots are preferably placed an inch or more above the bottom, in order to cause the weight of the load to keep the sec-

tions in a horizontal position, and for the further purpose of causing the sections to swing farther apart in opening and to more readily clear the reach of the wagon, the under edge of the sections next the sides of the body being rounded to permit the sections to turn freely. The sections thus mounted may be rocked or tipped upon their pivots, and the load of sand, gravel, or like material allowed to fall between them from the box.

In order to facilitate the tipping of the bottom sections at the proper time, to sustain the same while carrying a load, and to prevent the accidental tipping of the sections, they are each provided with an upright hand-lever, C, extending upward close to the inner face of the side-boards, as shown, and provided with a foot-plate or arm extending nearly or quite across the section to which it is applied, in order to form a firm attachment and to strengthen the bottom, locking devices being provided to retain the levers in an upright position. The levers extend above the sides of the body, and are of sufficient length to render the tipping of the sections easy. They are also formed or provided with projecting ears or lugs *g*, which rest upon the upper edges of the side-boards *a a* when the levers are in their upright position, thus serving to receive a portion of the weight of the load and prevent the sagging of the bottom, which might otherwise occur, the levers being for this reason located about midway between the ends of the box or body. The levers C are formed of metal to a point above the sides of the body, and there terminate in sockets *h*, to receive a detachable handle-piece, *i*, preferably of wood, the levers being thus made in two parts in order that the top sections may be removed in driving under sheds, gateways, &c.

In order to prevent the accidental tipping of the sections *c d*, I provide locking spring-catches D, which are attached to the sides *a* and arranged to swing over the arms or ears *g* when the levers are in their upright positions. Instead of these catches, however, hooks, bolts, or other fastening devices may be employed.

The manner of framing and fastening the box or body together is immaterial, provided that a strong and permanent structure is secured. In practice, however, the sides are preferably grooved or recessed to receive the



ends of the end-boards, and the whole then tied together by tie-rods passing from side to side, or by spikes or other equivalent means. Care should be taken that the bottom be short  
 5 enough to clear the bolsters upon which the body or box is placed, and that the body be raised sufficiently high to cause the bottom sections to clear the reach or pole of the running-gear when tipped. If necessary, a strip  
 10 of wood or other material may be placed upon the bolsters beneath the body for this latter purpose.

While, as stated, the body may be permanently attached to or built upon a wagon in  
 15 the first instance, my invention is especially designed for application to ordinary wagons already in use.

When heavy loads are to be carried the bottom sections, if unsupported from end to end,  
 20 would sag and cause the journals or gudgeons to bind and the sections to strike the side of the body and prevent tipping. To overcome this difficulty I provide an intermediate support for the sections, as shown in Fig. 2, which  
 25 consists of a suspended cross-bar or track, E, curved, as shown, concentrically with the journals or gudgeons of the bottom sections, which sections are furnished on their under sides with rollers *j*, traveling upon the curved bar  
 30 or track, and thereby sustaining the weight of the load at that point. The track or cross-bar is carried at its ends by metallic eyes or hangers *k*, bolted to the side-boards of the wagon-body, and preferably perforated just above  
 35 the same to receive a tie-rod, as shown; and in order that said support may be applied to bodies of different widths its ends are notched, as shown at *l*, so that any of the notches  
 40 which come over or in line with the eyes or hangers when the support is in position may engage therewith, as indicated.

In some cases it may be found desirable to form a journal or gudgeon at a point between the ends of the bottom sections, which will be  
 45 done by a double flanged plate, F, having the middle rounded portion, *e'*, as shown, the said rounded portion being seated in a cross-bar, G, as shown. This may be used either with or without a supporting track or tracks be-  
 50 neath the body, as preferred; but ordinarily only one of said arrangements will be employed.

The construction shown and described is advantageous, in that it is simple and strong,  
 55 and, while being capable of easy operation, is not liable to be accidentally discharged, the bottom sections being pivoted at the middle of their ends, and consequently having little or no tendency to tip themselves. No open-  
 60 ings are left in the bottom which might per-

mit the escape or the accumulation of the material carried, and the locking devices receive but little weight or strain.

I am aware that a wagon-body has been heretofore divided longitudinally through the  
 65 middle and provided with locking devices for holding the bottom sections in a horizontal position, and this I do not broadly claim. Under my construction the bottom sections are  
 70 balanced, and the fastening devices are consequently subjected to but little strain. The operating-levers are directly and rigidly connected or attached to the tipping sections, and the lugs or ears of said levers engaging over  
 75 the side of the body and preventing the body from sagging.

Having thus described my invention, what I claim is—

1. The herein-described box or body for wagons, consisting of the fixed ends and sides, the  
 80 longitudinally-divided bottom, having hand-levers rigidly applied to its pivoted sections, and devices, substantially such as described and shown, for locking said levers in an up-  
 85 right position.

2. In combination with a pivoted section of a wagon-box bottom, a tipping or operating lever connected with said section, and provided with an ear to engage over the side of the  
 90 box for the purpose of sustaining said section.

3. The herein-described wagon-box, consisting of the body A, the pivoted bottom sections, *c d*, the hand-levers C, having side ears, *g*, attached to the bottom sections, *c d*, and the  
 95 catching or locking devices D, all combined and operating substantially as described.

4. In combination with the tipping sections *c d*, provided with rollers *j*, the curved supporting track or bar E, substantially as and  
 100 for the purpose set forth.

5. In combination with the body having tipping bottom sections and hangers *k*, the supporting track or cross-bar having its ends notched and passing through the eyes of the  
 105 hangers, as explained.

6. In combination with the sections *c d*, pivoted or journaled at their ends, a support located at a point between the ends and concentric with the pivots or journals, as and for the  
 110 purpose set forth.

7. In combination with the tipping sections *c d*, the levers C, having the sockets *h* and detachable handle *i*, as and for the purpose explained.

DAVID S. WATSON.

Witnesses:

EUGENE BLISS,  
 E. W. LEAVITT.