

No. 840.966.

PATENTED JAN. 8, 1907.

F. SHERSMITH.
HINGE.

APPLICATION FILED JULY 5, 1906.

Fig. 3.

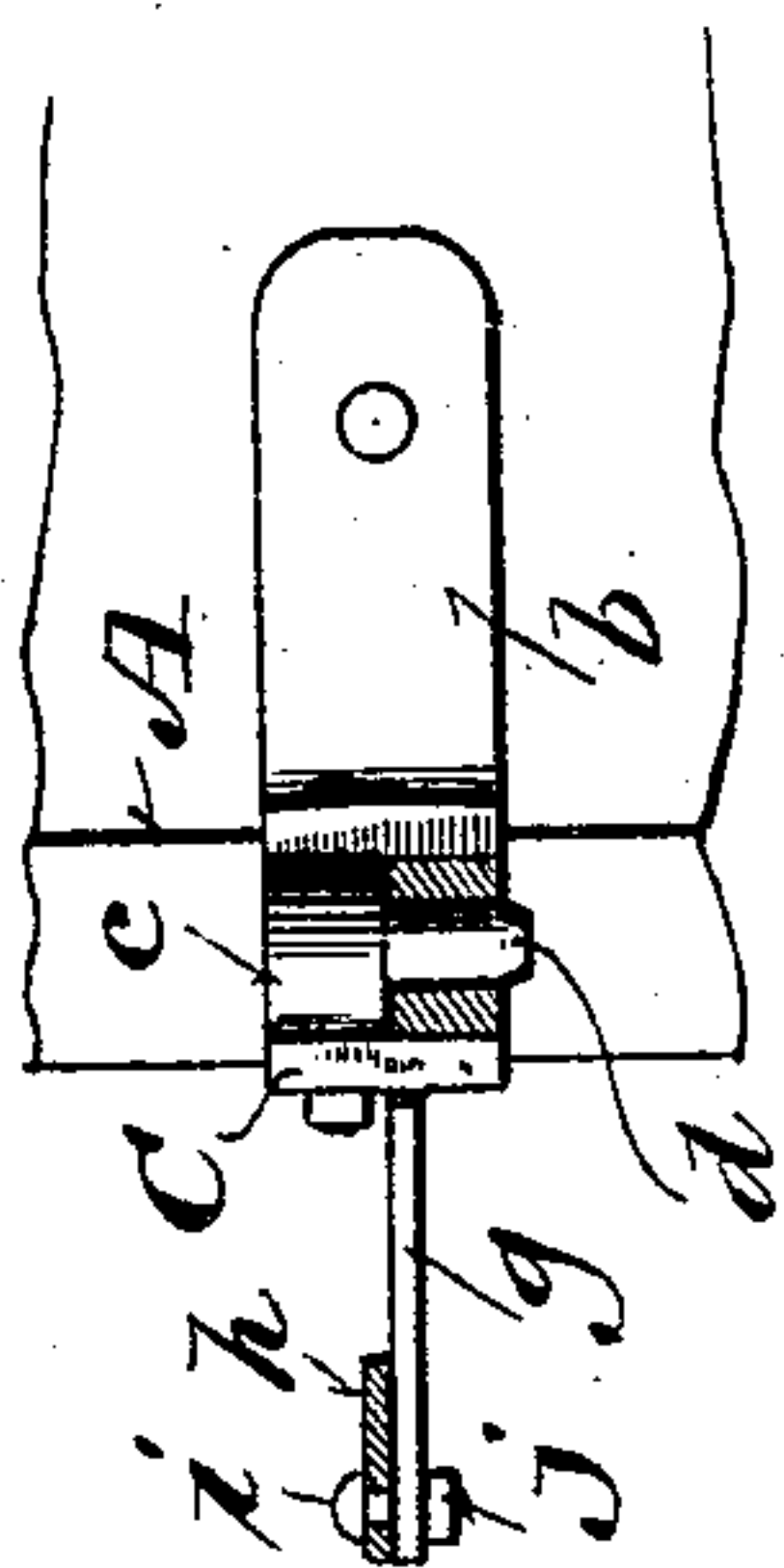


Fig. 2.

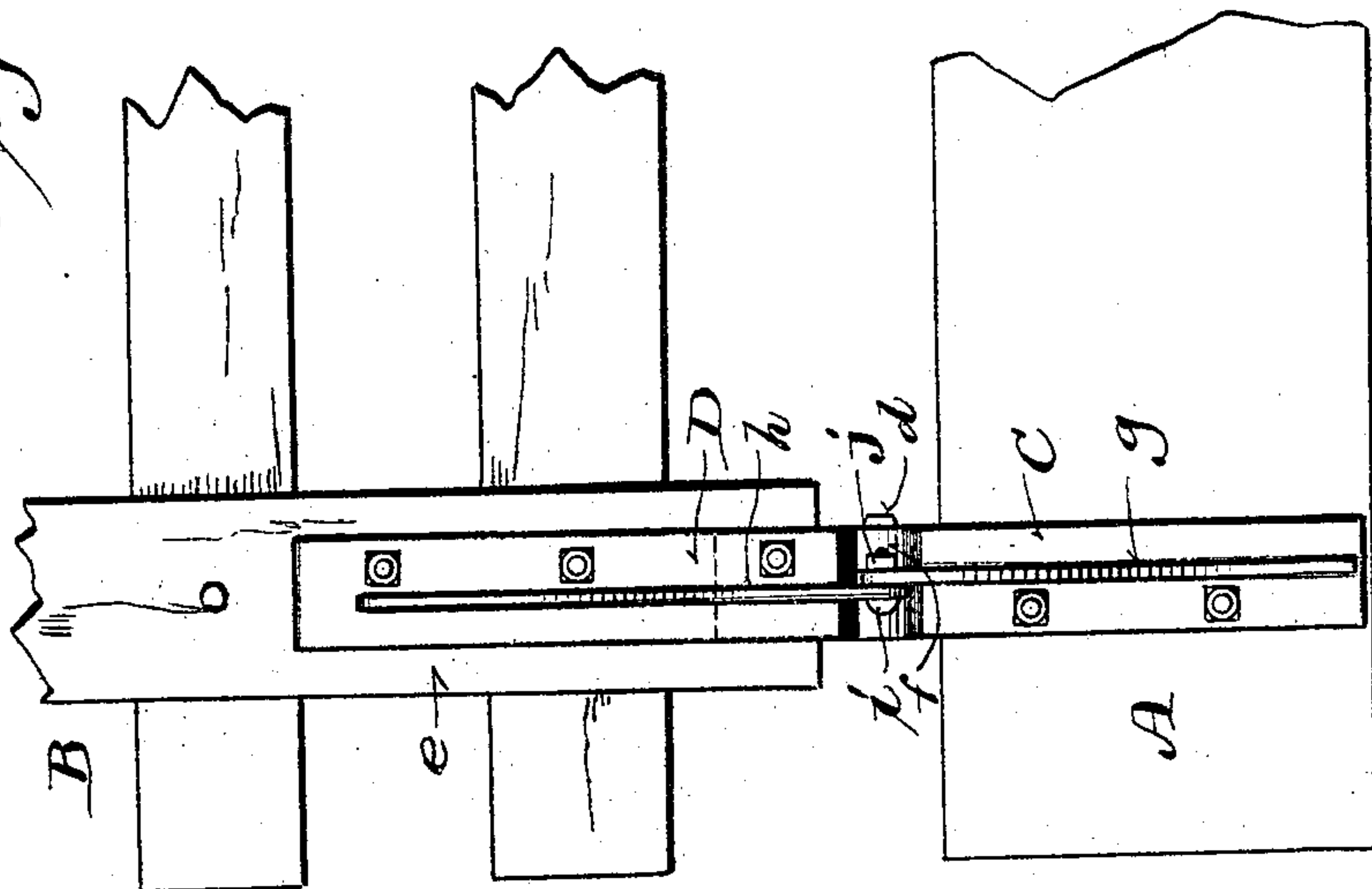
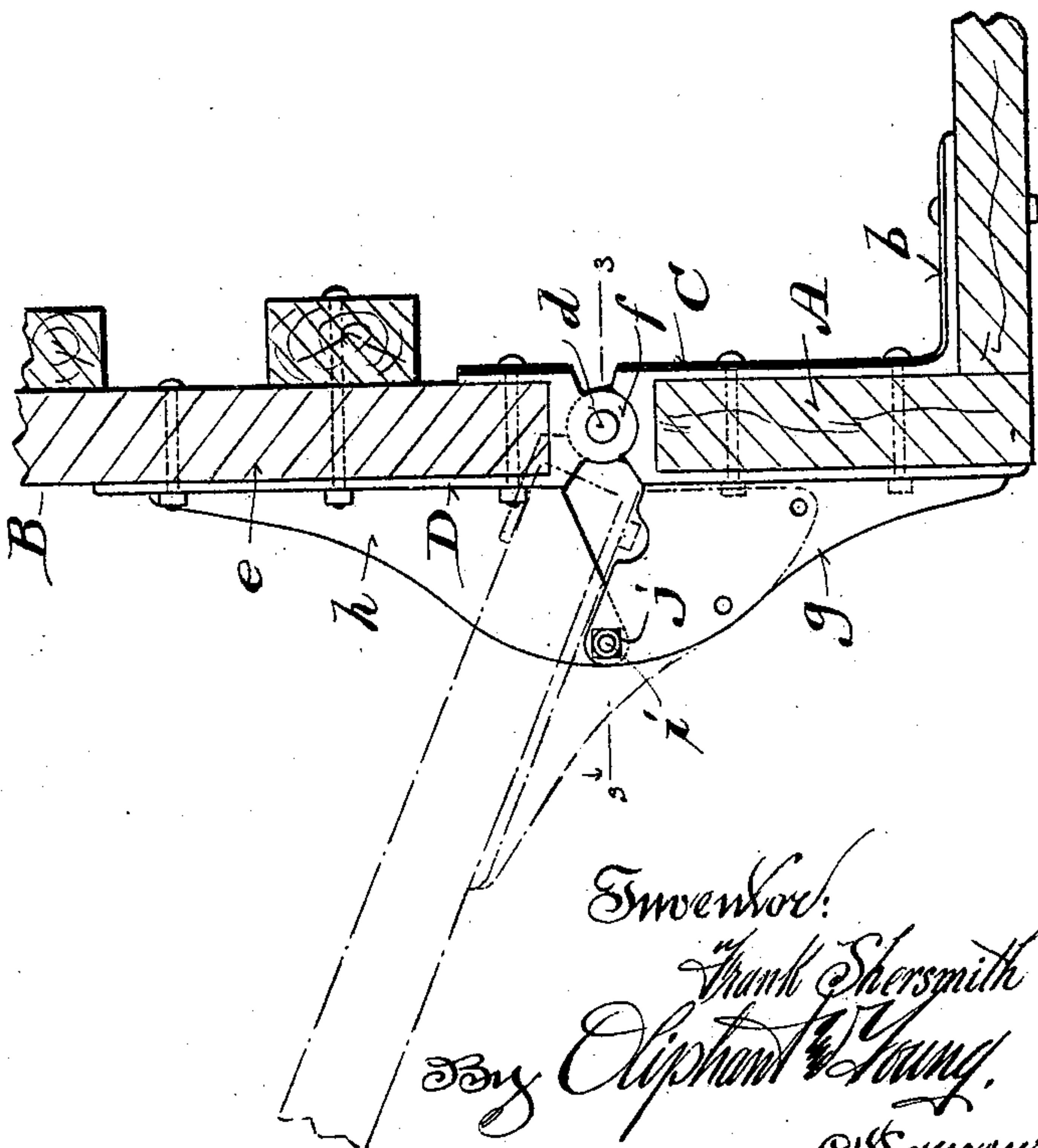


Fig. 1.



Witnessed
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FRANK SHERSMITH, OF OCONOMOWOC, WISCONSIN.

HINGE.

No. 840,966.

Specification of Letters Patent.

Patented Jan. 8, 1907.

Application filed July 5, 1906. Serial No. 324,781.

To all whom it may concern:

Be it known that I, FRANK SHERSMITH, a citizen of the United States, and a resident of Oconomowoc, in the county of Waukesha and State of Wisconsin, have invented certain new and useful Improvements in Hinges; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention consists in what is herein shown, described, and claimed, its object being to provide simple economical hinges especially designed for detachable and adjustable connection of racks with sides of wagon-bodies in order to adapt the same for the transportation of large quantities of hay or other loose stuff or for animals, such as calves, hogs, and sheep.

Figure 1 of the accompanying drawings represents a front elevation of a hinge in accordance with my invention connecting a rack with a side of a wagon-body, the rack being shown by full and dotted lines in two positions of adjustment; Fig. 2, a side elevation of what is shown by full lines in Fig. 1, and Fig. 3 a horizontal section indicated by lines 3-3 in said Fig. 1.

Referring by letter to the drawings, A indicates the side of a wagon-body, and B a rack in hinge connection with the same.

One section C of a hinge in accordance with my invention is made to straddle a side of the wagon-body to which it is bolted or otherwise rigidly secured, and a right-angle foot *b* of the inner leg of said hinge-section is likewise secured to the bed of said wagon-body. The hinge-section aforesaid has a partly-concave upper end and a convex ear *c* adjacent to the concavity. A pintle *d* extends from the center of one side of the ear *c* over the adjacent concavity concentric with said ear.

The other section D of the hinge is made to straddle a cross-piece *e* of the rack B at the inner end of same and is bolted or otherwise rigidly secured to said cross-piece. This section D of the hinge is provided with a convex centrally-apertured ear *f*, that engages the concavity of the other section C of said hinge, and the pintle *d* aforesaid engages the aperture of said ear. A concavity of the hinge-section D is engaged by the convex ear *c* of the hinge-section C aforesaid.

The outer leg of the hinge-section C is provided with a web *g* of suitable contour, and the upper edge of this web is preferably inclined. The hinge-section D is provided with an outer web *h* of suitable contour, and

the lower edge of this web is preferably inclined. The disposition of the webs is such that one laps the other in practice, the web *h* of the hinge-section D being forward or back of the web *g* of the hinge-section C, according as the pintle *d* aforesaid points toward the rear or front of the wagon-body. Hence it requires that said webs be clear of each other when the hinge-sections are joined or separated to connect the rack with a side of a wagon-box or detach it therefrom. The web *g* of the hinge-section C being opposed to the web *h* of the hinge-section D in the proper direction, automatic separation of said hinge-sections is impossible.

The web *g* of the hinge-section C is provided with suitable apertures at intervals of an arc of a circle concentric with the pintle *d*, and registrable with any one of these apertures is an aperture in the outer corner of the web *h* of the hinge-section D, the registering apertures being engaged by a bolt *i*, that also engages a nut *j*, whereby the latter hinge-section is held in adjusted position. The hinge-section D being laid at the angle shown by dotted lines in Fig. 1, it abuts the upper edge of the web *g* of the other hinge-section C and the web *h* of said hinge-section D abuts the outer leg of said hinge-section C, whereby there is no strain on the bolt *i* aforesaid when the rack is positioned to support hay or other loose stuff.

When the hinge-section D and rack therewith are vertical, as shown by full lines in Fig. 1, said rack constitutes an upper side extension of the wagon-body when animals, as aforesaid, are to be confined therein.

A plurality of hinges similar to the one herein shown and described are employed in connection with a side of a wagon-body and a rack, the pintles of the several hinges being all pointed in the same direction, so that said rack can be readily attached to said wagon-body or detached therefrom, clearance of the webs of the hinge-sections being had when the aforesaid rack is being put in or taken out of working position.

A side attachment for the wagon-body other than a rack may be connected to the sections D of the several hinges.

I claim—

1. A separable hinge each section of which has a partly-concave head and a convex ear, the concavity of one section being engaged by the ear of the other section, a pintle projecting from the center of one of the ears to

have engagement with a central aperture in the other ear, webs projecting outward from said hinge-sections in position to lap one another when both sections of the hinge are
5 alined or the swing-section at an angle to the other outward therefrom, and a bolt engageable with registering apertures in the webs, said hinge-sections being respectively for connection with a side of a wagon-body and
10 an attachment for the same.

2. A separable hinge one section of which is made to straddle a side-board of a wagon-body and has its inner leg provided with a foot at a suitable angle thereto, the head of
15 the hinge being provided with a concavity and convex ear, the other section of the hinge being made to straddle a side attachment for the wagon-body and provided with a concavity and convex ear having match fit

respectively with the ear and concavity 20 aforesaid, a pintle extending from the center of one of the ears to have engagement with a central aperture in the other ear, webs projecting outward from said hinge-sections in position to lap one another when both sec- 25 tions of the hinge are alined or the swing-section at an angle to the other outward therefrom, and a bolt engageable with registering apertures in the web.

In testimony that I claim the foregoing I 30 have hereunto set my hand, at Oconomowoc, in the county of Waukesha and State of Wisconsin, in the presence of two witnesses.

FRANK SHERSMITH.

Witnesses:

CHAS. D. PROBERT,
E. C. THEOBOLD.