

(No Model.)

H. M. WOODFORD.
WAGON TONGUE SUPPORT.

No. 284,529.

Patented Sept. 4, 1883.

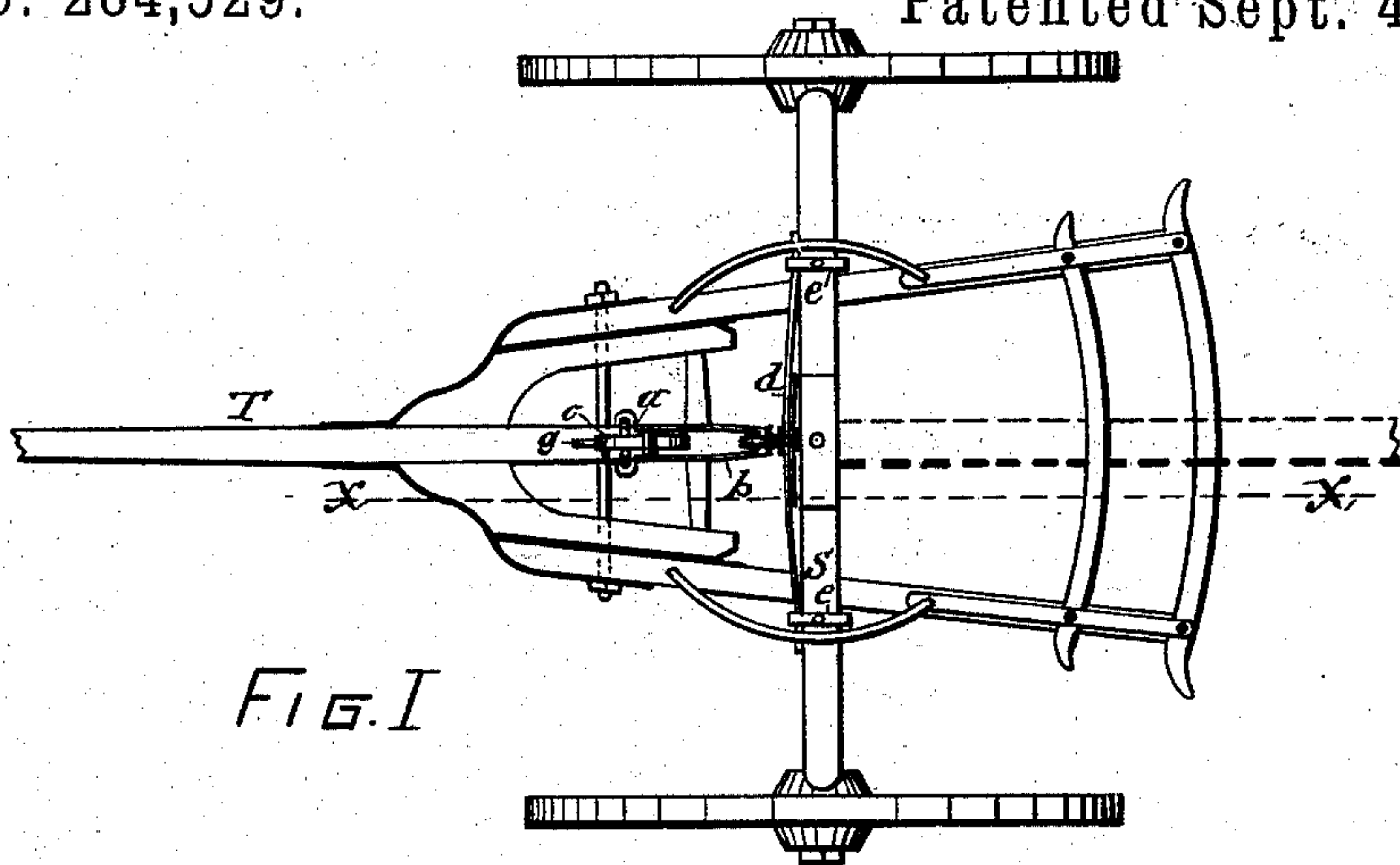


FIG. I

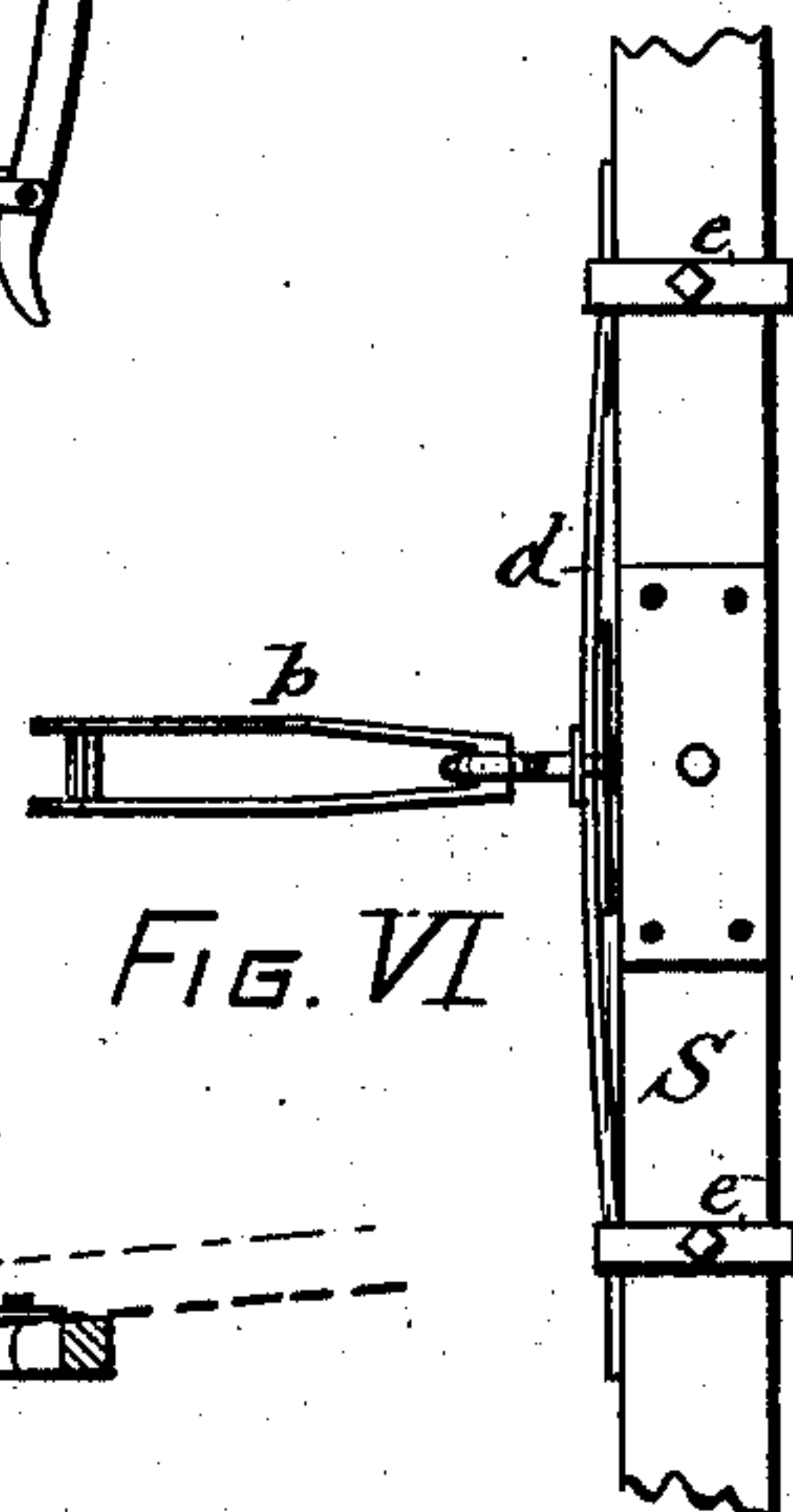


FIG. VI

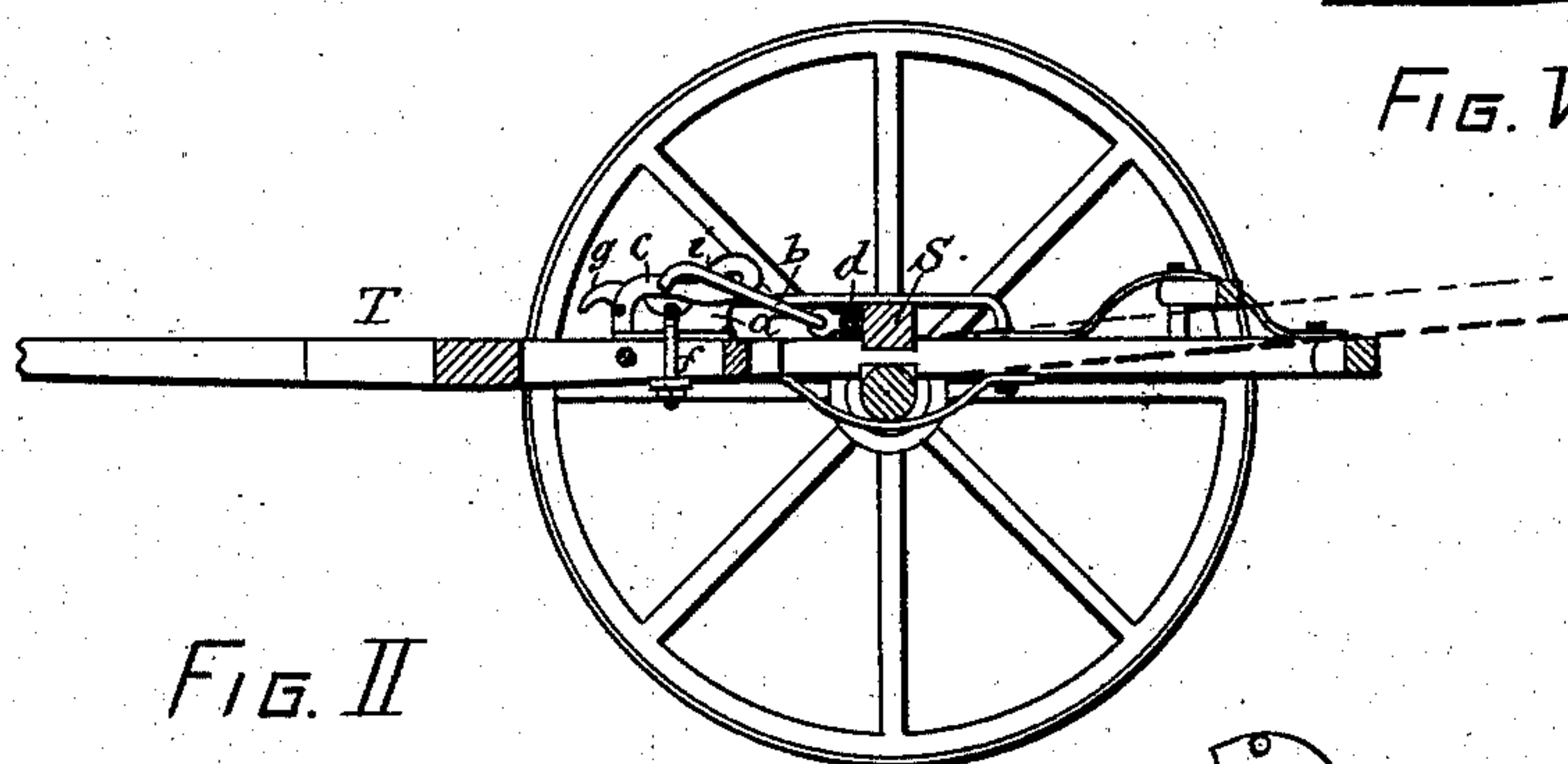


FIG. II

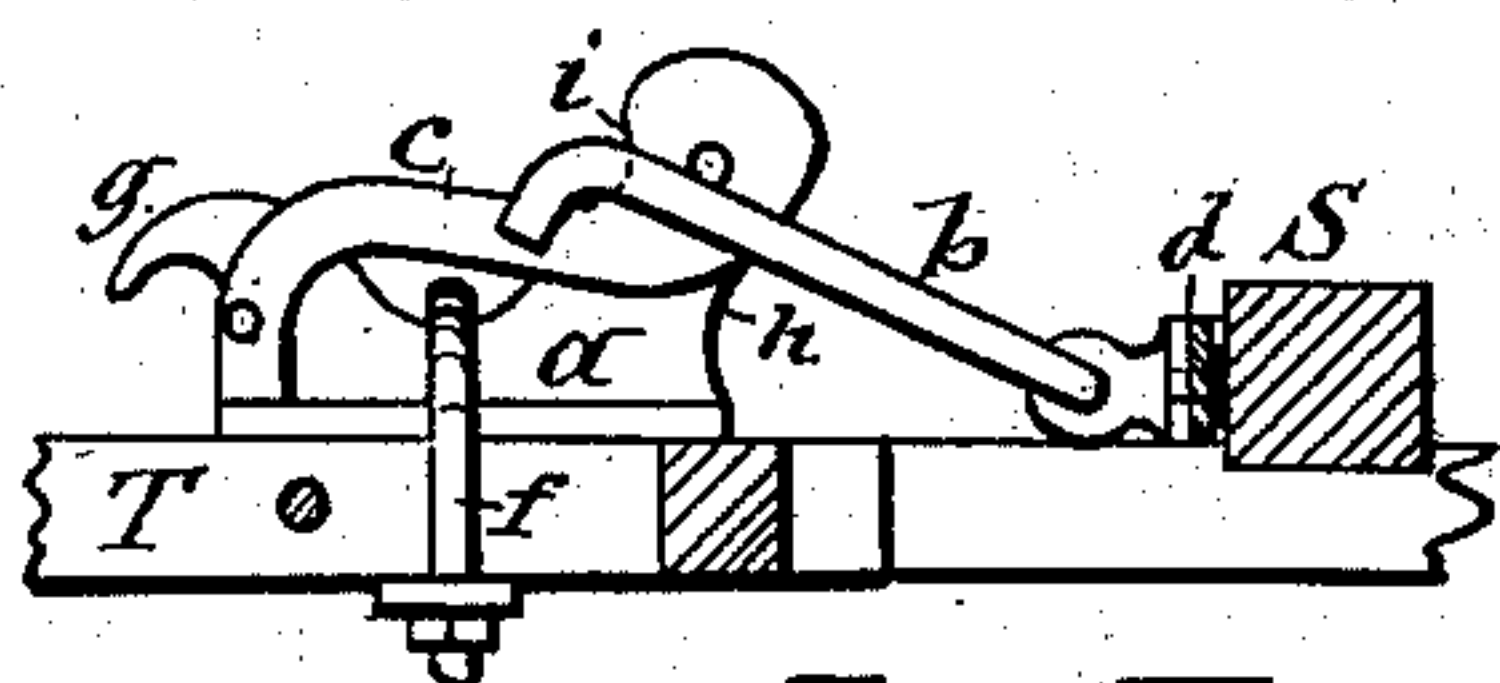


FIG. III

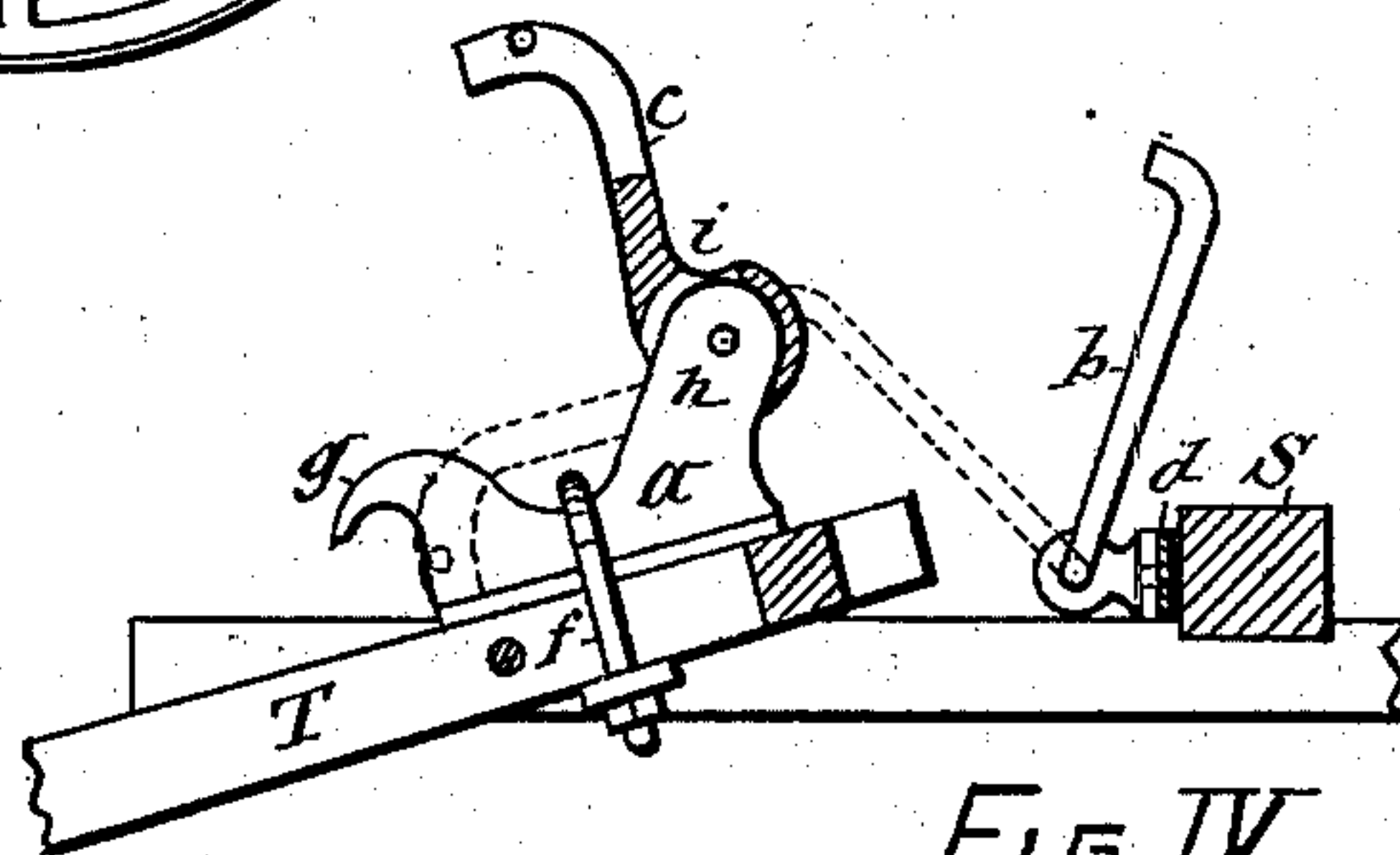


FIG. IV

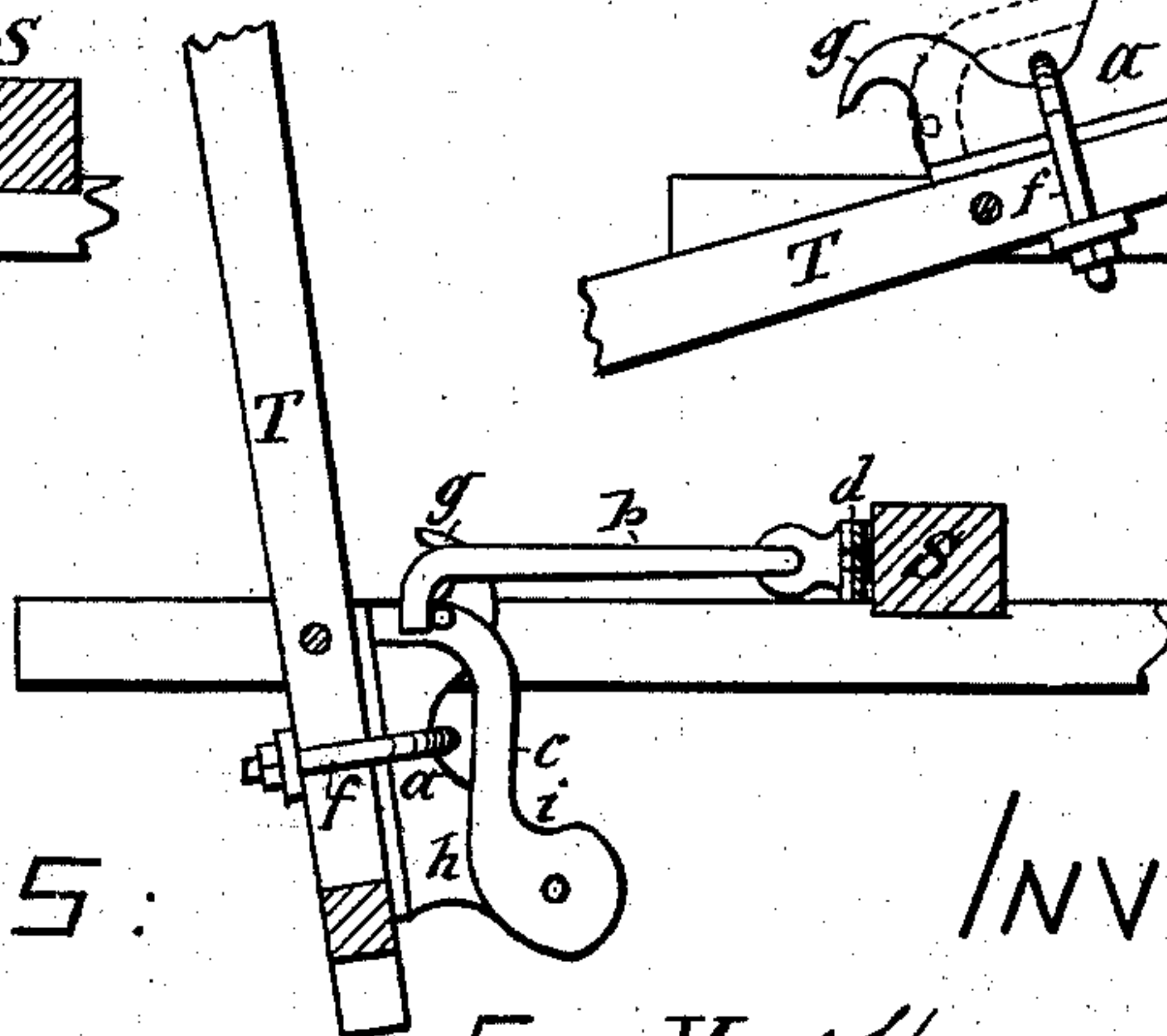


FIG. V

WITNESSES:

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UNITED STATES PATENT OFFICE.

HERVEY M. WOODFORD, OF MARCELLUS, NEW YORK.

WAGON-TONGUE SUPPORT.

SPECIFICATION forming part of Letters Patent No. 284,529, dated September 4, 1883.

Application filed June 2, 1883. (No model.)

To all whom it may concern:

Be it known that I, HERVEY M. WOODFORD, of Marcellus, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Wagon-Tongue Supports, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

10 This invention consists in improved devices for adjustably and yieldingly supporting the tongue of a vehicle either in a horizontal or a vertical position, as hereinafter fully described, and set forth in the claims.

15 The invention is fully illustrated in the annexed drawings, wherein Figure 1 is a plan view of the forward running-gear of a wagon provided with my improved tongue-support. Fig. 2 is a vertical section of the same, taken on line *x x* in Fig. 1. Figs. 3, 4, and 5 are enlarged detail views, showing the invention in different positions, and Fig. 6 is an enlarged plan view of the link and its spring-connection with the sand-board.

25 Similar letters of reference indicate corresponding parts.

30 *T* represents the tongue, connected to the hounds by a cross-bolt passing through said parts, and allowing the tongue to vibrate vertically in the usual manner.

35 *a* denotes a cast-iron block, secured to the tongue by a clip, *f*, which allows said block to be shifted longitudinally on the tongue, and fastened at a greater or less distance from the rear end thereof. The forward end of the block *a* is provided with a hook, *g*, and the rear end is formed with an upward projection, *h*, on which is hinged an arm, *c*, which is adapted to lie with its free end on the forward end of the block and swing upward therefrom. The top of the arm *c* is deflected or curved toward the tongue, to form thereon a recess or shoulder, *i*, which, when the said arm is in its normal position and lying on the block, is brought below the pivot of the arm, or between said pivot and the tongue, as shown in Fig. 3 of the drawings.

45 *b* represents a link attached to the center of the leaf-spring *d*, which is adjustably connected to the so-called "sand-board" *s* of the running-gear by means of clips *e e*, connected to the sand-board and embracing the ends of the

spring. Said clips are adapted to be fastened at different points in the length of the sand-board, thereby allowing the distance between the link *b* and the aforesaid attachment of the spring to be shortened and lengthened, to increase or diminish the tension of the spring, according to the weight of the tongue to be supported. By interlocking the free end of the link with the shoulder *i* of the arm *c*, the tongue is sustained in a horizontal position, as illustrated in Fig. 3 of the drawings. The before-described position of the shoulder *i* in relation to the pivot of the arm causes the strain to automatically retain the arm in its horizontal and interlocked position.

When it is desired to drop the free end of the tongue, the same can be readily accomplished by raising the free end of the arm *c* sufficiently to allow the link to be thrown out of its engagement with the shoulder *i*, as shown in Fig. 4 of the drawings. After the tongue has been lowered and the arm *c* dropped back into its normal position on the block *a*, the link *b*, when dropped onto the arm *c*, rests with its free end back of the shoulder *i*, as shown by dotted lines in Fig. 4 of the drawings. The link is thus in position to automatically re-engage with the shoulder *i* when the tongue is raised for that purpose.

It will be observed that the before-described construction and combination of parts allows the operator to raise the tongue by its free end, and the coupling of the support is effected automatically, thereby greatly facilitating the operation.

When the tongue is to be supported in a vertical position, as shown in Fig. 5 of the drawings, the tongue is to be raised to allow the link to be connected with the hook *g* on the forward end of the block *a*. The action of the described tongue-support can be further adjusted by shifting the block *a* longitudinally on the tongue, thereby increasing or diminishing the distance between the block *a* and the support of the link *b*, and varying accordingly the angles of the tongue required to make the connection between the link and hook *g* and shoulder *i*.

Having described my invention, what I claim as new is—

1. In combination with the link *b*, the block *a*, adjustably secured to the tongue by the clip

f, and provided at its forward end with the hook *g*, and the arm *c*, hinged to the rear end of the block and formed with the depression *i*, substantially in the manner and for the purpose shown and set forth.

2. In combination with a hook or shoulder on the tongue, the link *b*, adapted to engage and release the same, and the spring *d*, adjustably secured to the sand-board by clips *e e*, adapted to be shifted thereon, substantially as specified and shown, for the purpose set forth.

In testimony whereof I have hereunto signed my name and affixed my seal, in the presence of two attesting witnesses, at Syracuse, in the county of Onondaga, in the State of New York, this 23d day of May, 1883.

HERVEY M. WOODFORD. [L. s.]

Witnesses:

J. LAASS,

WILLIAM C. RAYMOND.