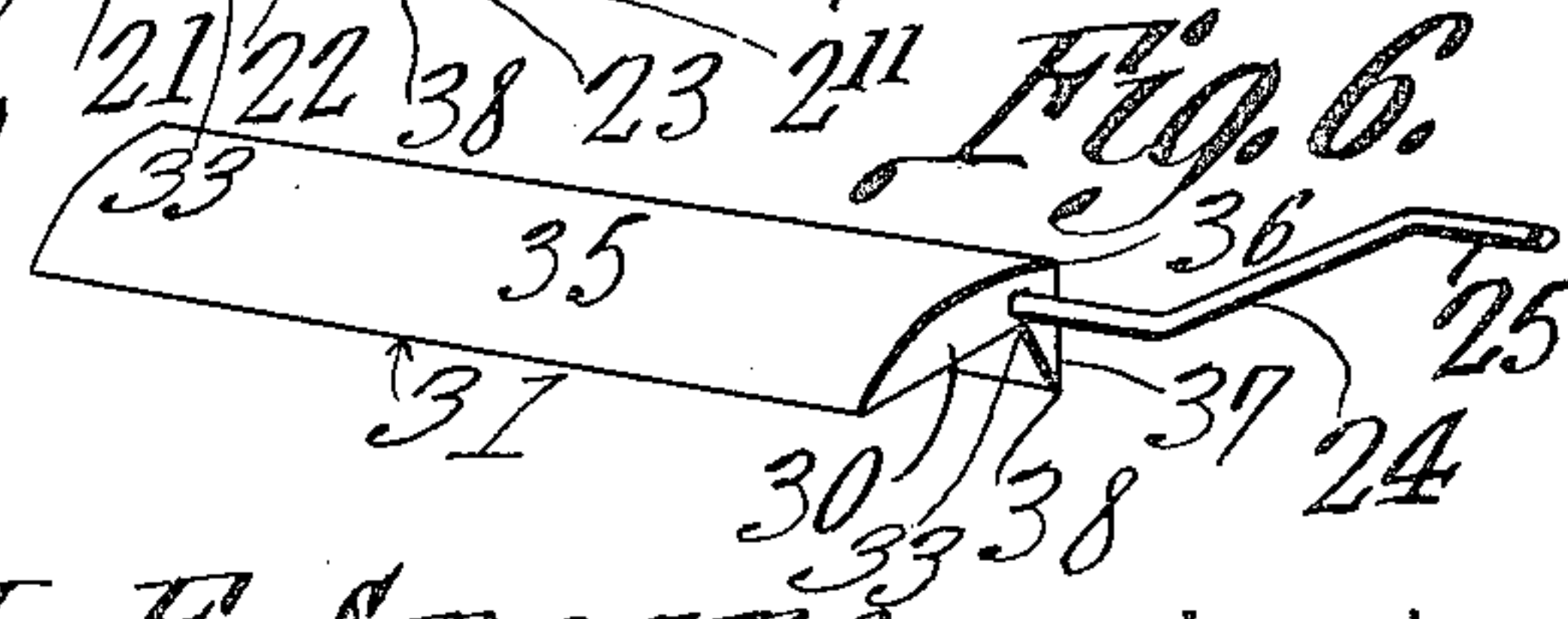
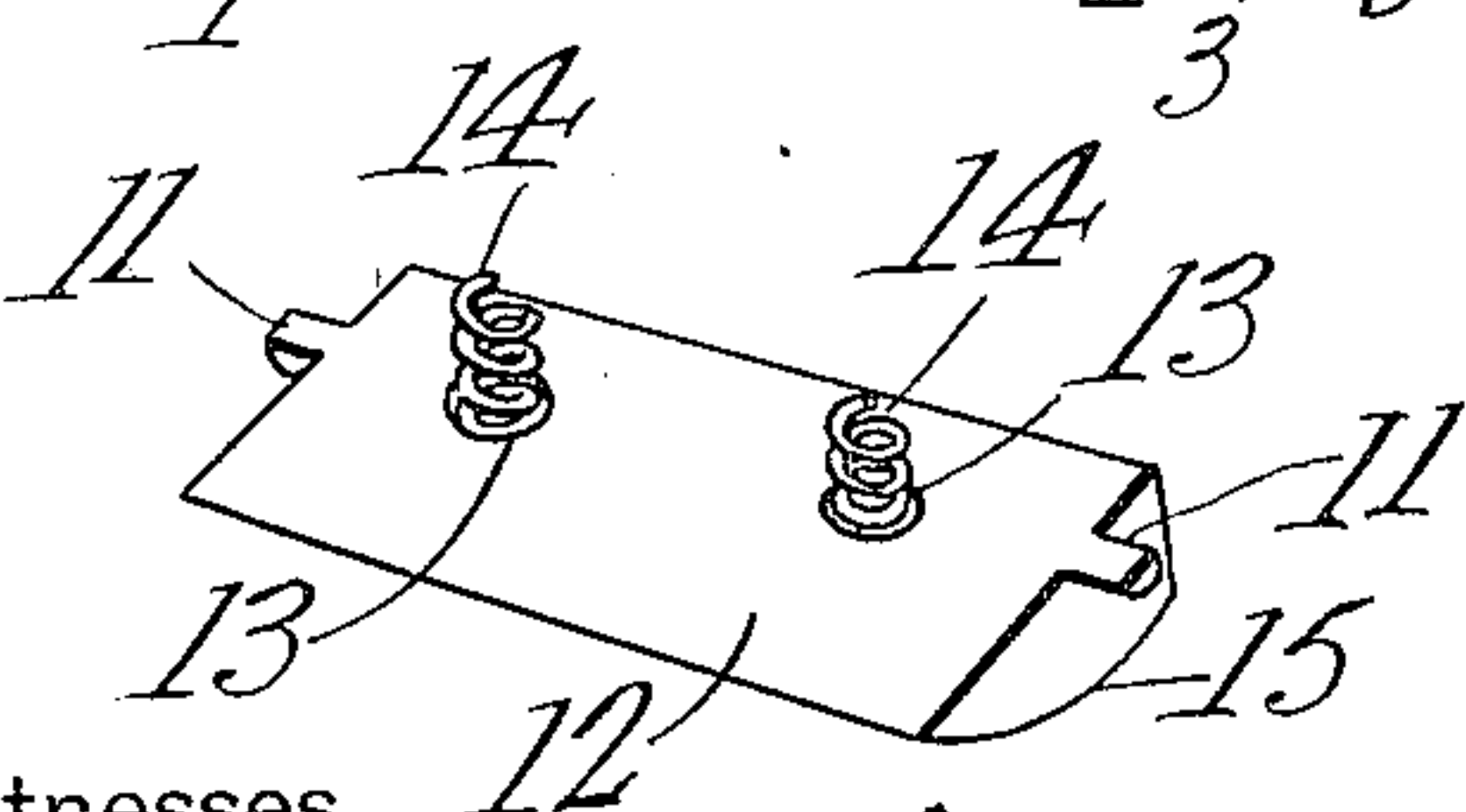
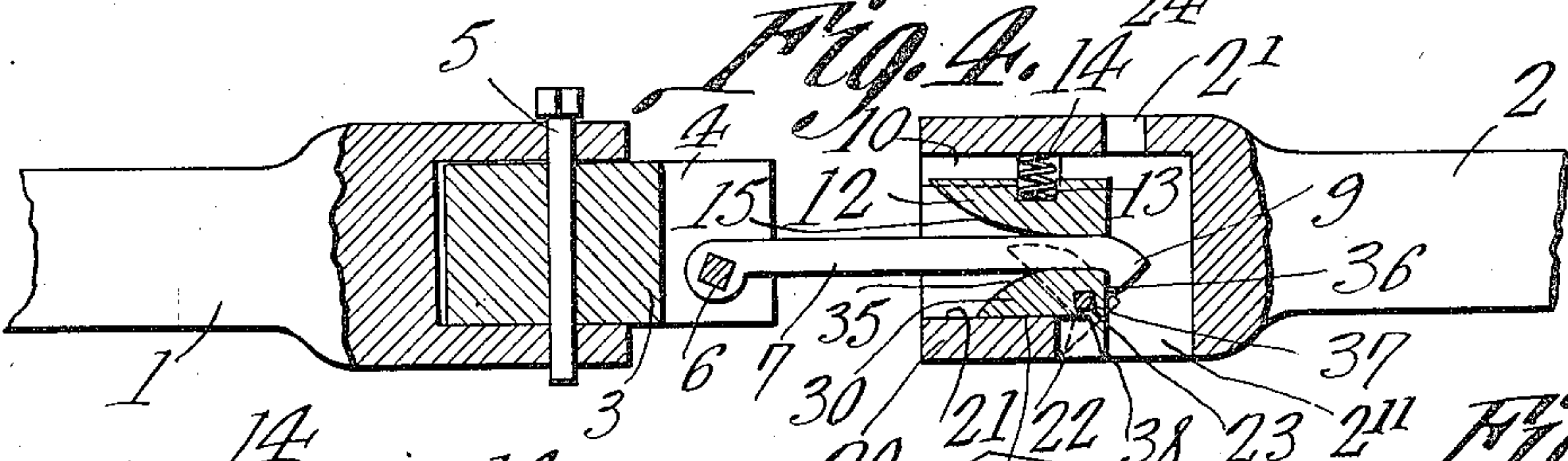
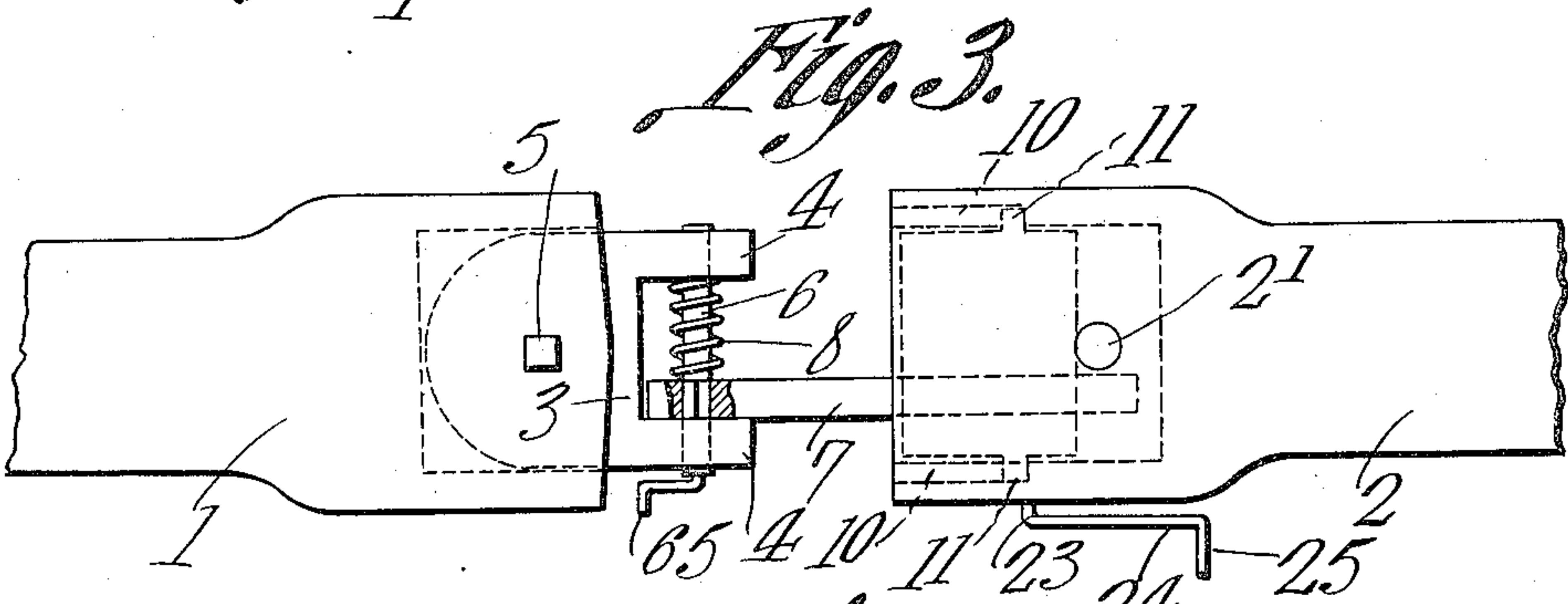
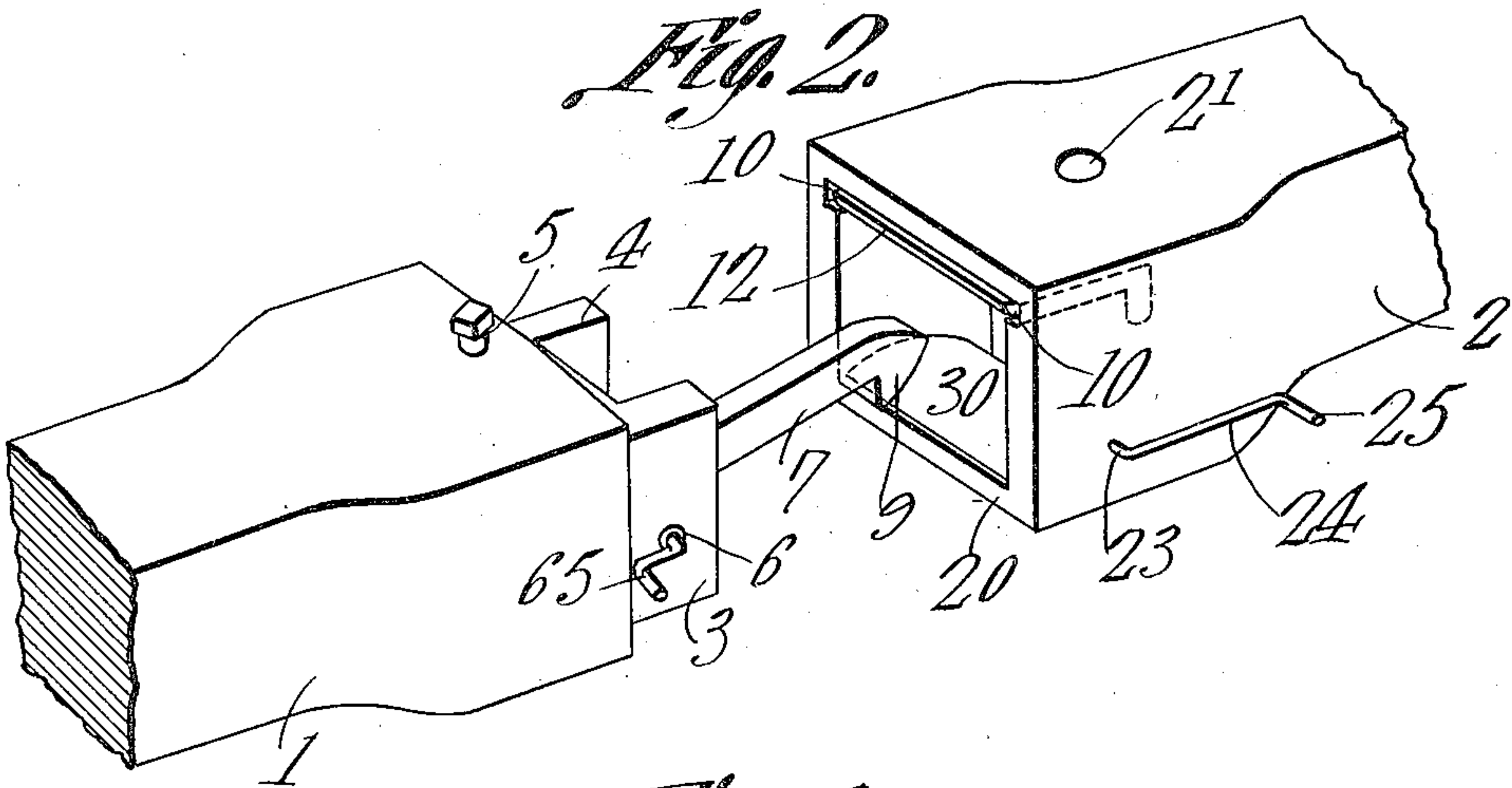
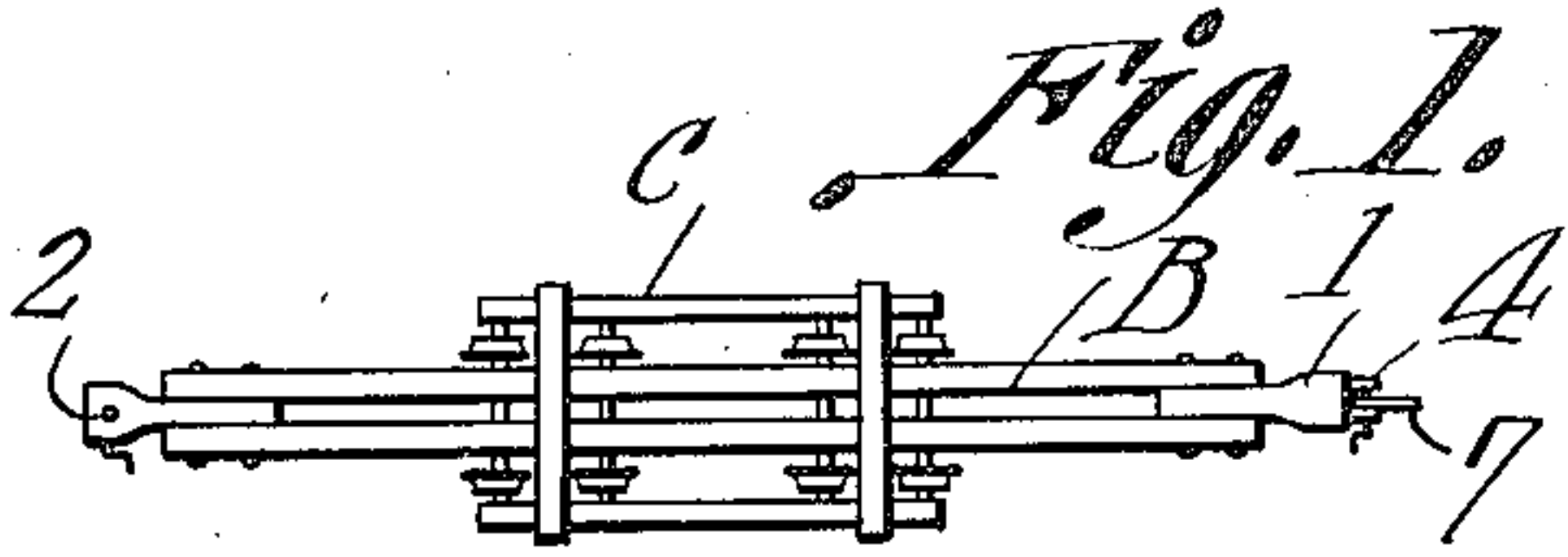


M. E. SPEARS.
 LOGGING CAR COUPLING.
 APPLICATION FILED JAN. 16, 1911.

999,348.

Patented Aug. 1, 1911.



Witnesses

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LOGGING-CAR COUPLING.

999,348.

Specification of Letters Patent.

Patented Aug. 1, 1911.

Application filed January 16, 1911. Serial No. 603,000.

To all whom it may concern:

Be it known that I, MATHEW E. SPEARS, a citizen of the United States, residing at Singer, in the parish of Calcasieu and State of Louisiana, have invented a new and useful Logging-Car Coupling, of which the following is a specification.

This invention relates to railway rolling stock, and more especially to car couplings; and the object of the same is to produce a coupling adapted for use particularly on logging cars.

To this end the invention consists in the construction described and claimed below whereby a greater latitude of movement both vertically and laterally is permitted to the connected draw heads than is usual in car couplings, for the reason that such latitude is required on logging cars.

In the drawings—Figure 1 is a plan view of a logging car equipped with my couplings. Fig. 2 is a perspective view of the parts of this coupling slightly separated. Fig. 3 is a plan view. Fig. 4 is a central vertical longitudinal section showing the parts connected. Fig. 5 is a perspective detail of the presser plate. Fig. 6 is a perspective detail of the rocking jaw.

In the drawings the numerals 1 and 2 designate respectively the two draw heads, whose rear ends extend between the beams B of the logging car C and are connected therewith in a manner not important in the present instance. To the front end of one draw head is pivoted a member 3, preferably by means of a vertical pivot pin 5 passing through the draw head and member. The latter is forked as at 4, and in the fork arms is journaled a rod 6 on which is fixed a hook 7 whose inner end is mounted on the rod adjacent a spring 8 so as to hold it frictionally supported, and whose outer end or bill 9 has a working face standing at right angles to the length of its shank, as best seen in Fig. 4. The mouth of the companion draw head 2 is provided at the top of its sides with L-shaped grooves 10 to receive lugs 11 at the extremities of a presser plate 12 whose shape in section is best seen in Fig. 4, and in the upper flat side of this plate are cavities 13 in which are seated expansive spiral springs 14 pressing the plate normally downward and holding its lugs 11 normally at the lower ends of the upright portions of the grooves 10. The lower face 15 of this plate

is rounded as shown, and when the front end of the bill 9 enters this draw head it strikes said face and the presser plate is forced upward. Across the bottom of the mouth of this draw head 2 stands a fixed lip 20 whose upper face 21 is preferably flat while its rear face 22 is vertical as best seen in Fig. 4. Pivoted through the sides of this draw head is a crank shaft 23 whose crank 24 has a hand piece 25; and fixed on this shaft within the draw head is a rocking jaw 30 whose upper face 35 is rounded back to an angle 36 and then flat as at 37, while its lower face 31 is flat back to an obtuse angle 33, and then beveled obliquely to the sharp lower edge 38.

The transverse pivotal movement of the member 3 on the pin 5 will be clear, as well as the vertical pivotal movement of the hook with the turning of the rod 6 by means of its crank handle 65. In the coupling of two cars the handle 65 is manipulated to direct the front end of the hook into the mouth of the draw head 2, and its bill passes beneath the rounded lower face 15 of the plate 12 so that the latter is raised slightly against the tension of its springs 14. Meanwhile the bill rides over the rounded upper face 35 of the jaw 30 and drops behind the angle 36, after which tension on the parts will draw the bill against the rear face 37 of the jaw 30 and will throw its flat lower face 31 downward on the flat upper face 21 of the lip 20. In this position the bill of the hook has considerable latitude of movement within the draw head 2, and the parts will not become detached even in the rough usage and lateral swing to which they are subjected when employed on logging cars. When it is desired to uncouple, the operator grasps the hand piece 25 and moves it downward and thereby turns the jaw to the position shown in dotted lines in Fig. 4 and releasing the hook.

Thus it will be seen that I have produced a coupling for logging cars whereof the acts of coupling and uncoupling do not require the insertion of the operator's hands at points where his safety will be jeopardized. It is quite possible to remove the pin 5 and member 3, and to use the remainder of the draw heads as a part of the ordinary pin-and-link coupling now so commonly employed, the draw head 2 having a vertical hole 2' for the other pin and its bottom being open at 2''

What is claimed is:—

1. In a logging car coupling, the combination with one draw head having a hook mounted on a horizontal pivot the bill of the
5 hook standing at right angles to the length of its shank; of a companion draw head, a lip fixed across the bottom of the mouth of this draw head and having a flat upper face, a rocking jaw pivotally mounted within the
10 draw head and having its upper face rounded from its front edge backward, its rear face standing at a right angle to said upper face, and its lower face flat and adapted to rest on the flat upper face of said lip and
15 then beveled downward at an oblique angle beyond the rear edge of said lip to a sharp lower edge at the bottom of its rear face, and means for rocking said jaw on its pivot.

2. In a logging car coupling, the combination with one draw head having a hook
20 mounted on a horizontal pivot; of a companion draw head having L-shaped grooves in the inner faces of its side walls, a presser

plate having lugs at its ends loosely fitting said grooves and cavities in its flat upper
25 face, its lower face being rounded, expansive springs seated in said cavities and bearing against the upper face of the mouth of the draw head, a lip fixed across the bottom of the mouth of this draw head and having a
30 flat upper face, a rocking jaw pivotally mounted within the draw head and having its upper face rounded from its front edge backward, its rear face standing at an angle to said upper face, and its lower face flat
35 and adapted to rest on the flat upper face of said lip, and means for rocking said jaw on its pivot.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

MATHEW E. SPEARS.

Witnesses:

J. E. McMAHON,

C. S. LEWIS.