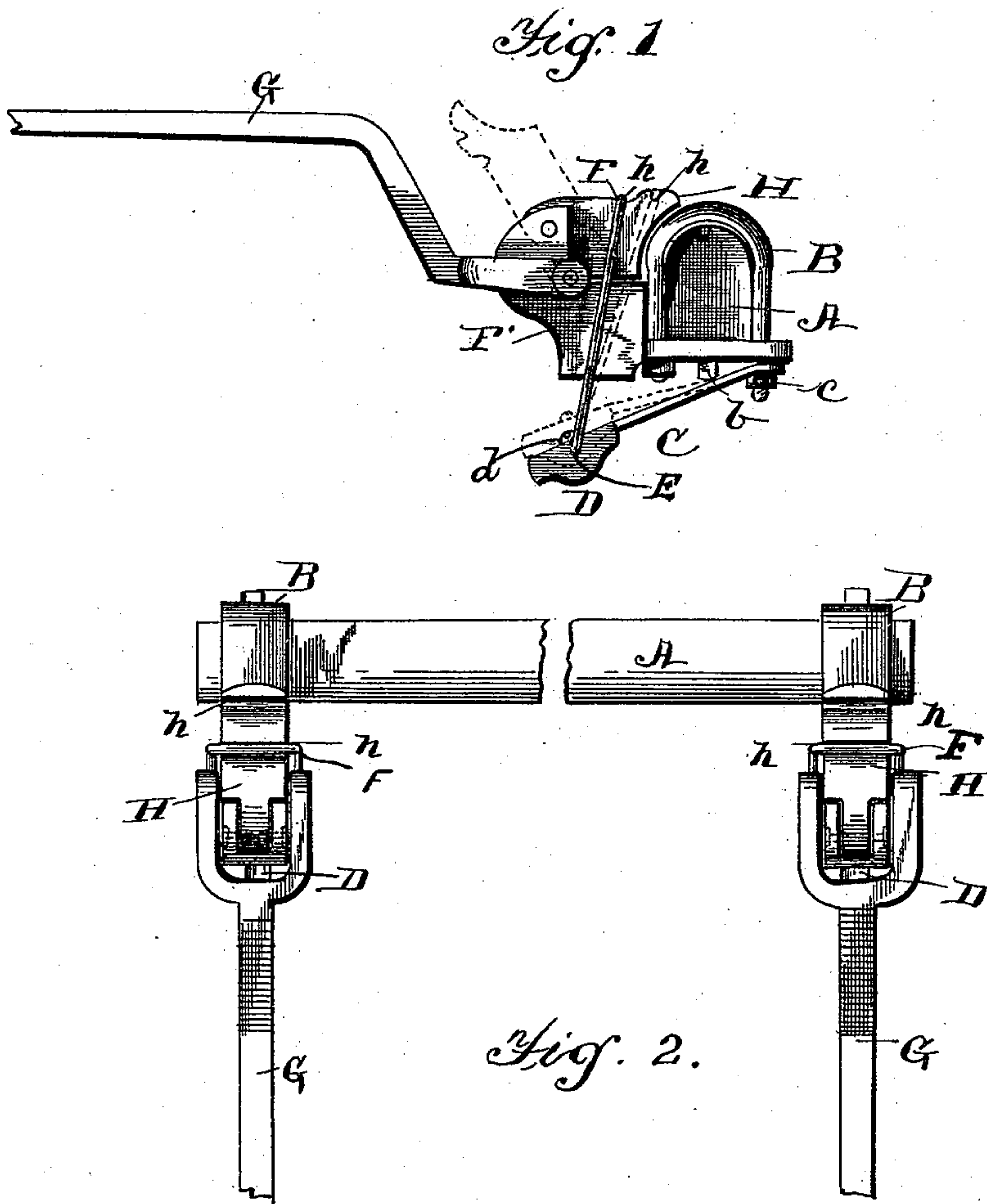


(No Model.)

J. K. PFLEIGER.
THILL COUPLING.

No. 485,426.

Patented Nov. 1, 1892.



WITNESSES

W. Johnson.
E. L. Wells

INVENTOR

Jacob K. Pfeiffer
By Wm. H. Bates Attorney

UNITED STATES PATENT OFFICE.

JACOB K. PFLEIGER, OF RICHLAND CENTRE, PENNSYLVANIA.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 485,426, dated November 1, 1892.

Application filed June 8, 1892. Serial No. 435,951. (No model.)

To all whom it may concern:

Be it known that I, JACOB K. PFLEIGER, a citizen of the United States, residing at Richland Centre, in the county of Bucks and State of Pennsylvania, have invented certain new and useful Improvements in Anti-Rattling Thill-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in anti-rattling thill-couplings; and the object of the invention is to improve, simplify, and cheapen the cost of construction of this character or class of devices, and at the same time provide a device which will be expeditious and effective in the operation of coupling and uncoupling the thills or shafts to and from the clip-jaws or extensions of the clips of the device, as occasion requires.

With these ends in view the invention consists in the novel construction and combination of the several parts, as will be hereinafter more fully described in detail, and particularly pointed out in the appended claim.

In the accompanying drawings, to which reference is had and which fully illustrate my invention, Figure 1 is a side elevation of the device embodying my improvements, and Fig. 2 is a top or plan view of the same.

Similar letters of reference indicate corresponding parts in both the figures.

Referring to the drawings, A indicates an axle, and B B are clips secured thereto by nuts or any suitable fastening means, and embracing or surrounding the axle, both of which—that is, the axle and clips—in this example are of the usual, but may, if desired, be of any suitable or preferred form. Centrally secured to the under side of the clip-bars is a stud or projection *b*, which is clearly shown in Fig. 1 of the drawings, the purposes and functions of which will be hereinafter explained.

C indicates suitable operating-springs, the rear ends of which are secured to the threaded depending ends of the clips by means of nuts *c*, the forward or free ends of said springs having secured to them blocks D, by means of screws *d* or other analogous fastenings. These blocks D are transversely perforated, as

at E. Through these perforations are passed wire loops or locking-latches F, which are passed over and loosely embrace the jaws or extensions of the clips, serving to couple and uncouple a pair of shafts or thills G G to and from the jaws or extensions of the clips B B. Pivotaly secured to the upwardly-extending curvilinear ends of the jaws or extensions F' are suitable flaps or cap-pieces H H, having formed upon their upper and outer surfaces and parallel with each other transverse grooves *h h* for the reception of the free or upper ends of the locking-latches or loops F, which lock in place to the jaws or extensions F' of the clips or release at will therefrom the rear ends of the thills or shafts G G, which are loosely fitted in bearings in the upper horizontal portion of the jaws or extensions F' of the clips B B. The loops or locking-latches F F when in their normal position lock and hold securely together both the flaps and jaws or extensions F' of the clips B B, as shown clearly in full lines in coupled position and in dotted lines when in uncoupled position in Fig. 1 of the drawings. The front portions of these flaps are curved to conform to the curvatures of the clips, so that they may fit closely and snugly against the clips. The studs or projections *b*, which are centrally secured to the under side of the clip-bars, give a resilience to the springs C when the forward or free ends of the springs are raised, and consequently force upwardly the locking latches or loops F, which releases the flaps H H and uncouples the shafts or thills from the clip jaws or extensions, this operation of coupling and uncoupling, as before mentioned, being shown in full and dotted lines in Fig. 1 of the drawings. The springs C effectually prevent all rattling or tendency to rattle of the shafts or thills. The force of the tension of the springs, being great, draws downwardly with sufficient pressure upon the flaps to keep them firmly in position and prevent any play whatever of the rear ends of the shafts in their bearings to cause rattling when the vehicle is in motion.

My invention is simple in its construction, not easily gotten out of order, durable, and cheap to manufacture.

From the foregoing description, taken in connection with the accompanying drawings,

the operation of my device will be obvious, and further description thereof is herein deemed unnecessary.

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

In a thill-coupling, the combination, with
the axle A and clips B B, of the projection or
stud *b* upon the under side of the clip-bars,
10 clip jaws or extensions F', flaps H H, locking-

latches or loops F, springs C, blocks D, and
shafts or thills G G, all operated substan-
tially as herein described, and for the pur-
poses set forth.

In testimony whereof I affix my signature in 20
presence of two witnesses.

JACOB K. PFLEIGER.

Witnesses:

JAMES PARKER,

T. J. WALP.