

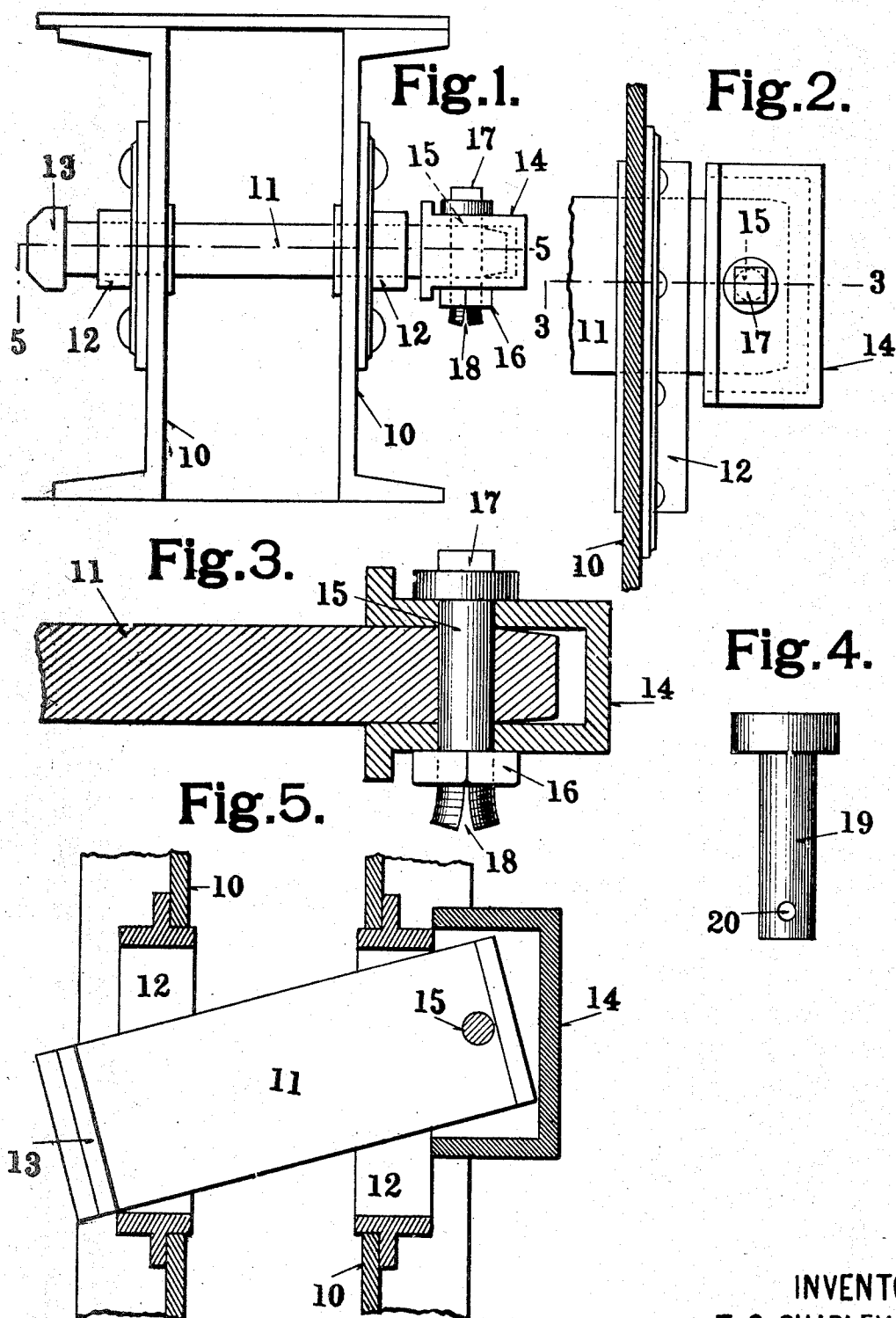
Nov. 29, 1927.

T. G. SHIPLEY

DRAFT GEAR

Filed Aug. 5, 1925

1,650,772



INVENTOR
T. G. SHIPLEY

BY *E. E. Huffman*
ATTORNEY

UNITED STATES PATENT OFFICE.

TOLBOTT G. SHIPLEY, OF ST. LOUIS, MISSOURI, ASSIGNOR TO WESTERN RAILWAY EQUIPMENT COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF MISSOURI.

DRAFT GEAR.

Application filed August 5, 1925. Serial No. 48,196.

My invention relates to improvement in draft gears, and particularly to improved means for holding the keys of the draft gear in position. Heretofore it has been customary to secure the key at one end by a cotter pin either bearing directly against the draft sill, or against a snugly fitting collar which in turn contacts with the sill; the other end being either secured in the same way or provide with an integral head. Such a construction not only forms a poor bearing contact for the sill against which it must slide, but it is likely to be sheared off by the great strain to which it is subjected. The use of the collar between the pin and sill fails to materially improve the bearing contact as the ends only come in contact with the sill when the key is exactly at right angles to the sill. Furthermore, the increased leverage when the end of the collar strikes the sill increases the liability of shearing the pin. The object of my invention is to overcome these objections by the construction hereinafter set forth.

In the accompanying drawings, which illustrate so much of a draft gear as is necessary to illustrate my invention, Figure 1 is an end view; Figure 2 is a top plan view of the key fastening means together with a portion of the adjacent draft sill; Figure 3 is an enlarged section taken on the line 3—3 of Figure 2; Figure 4 is an elevation showing a modified form of fastening bolt; and Figure 5 is a section taken on the line 5—5 of Figure 1.

Indicated at 10 are the draft sills between which are arranged the draft yoke, draft springs, etc., which are not shown as they form no part of the present invention. Formed in the draft sills are slots for the passage of the draft key 11. As shown in the drawings these slots are lined by castings 12 forming inner and outer bearing surfaces, but these surfaces may be integral with the sills. One end of the key is provided with an integral head 13, as shown in Figures 1 and 5.

The end of the key 11, opposite the head

13, is preferably slightly beveled to facilitate its insertion into a hollow rectangular bearing member 14, which is pivotally secured to the key by a bolt 15. The opening in the interior of the member 14 is of sufficient length and breadth to allow the member to assume a position parallel with the sills 10 when the key 11 assumes the position of greatest angularity thereto, as shown in Figure 5. The bolt 15 is preferably threaded at its lower end and engaged by a nut 16, the upper end being provided with means such as the square boss 17 for engagement with a wrench to hold the bolt while the nut is applied. A slot 18 is shown in the end of the bolt to provide locking means for the nut by spreading the end of the bolt. While I have shown the bearing member 14 as applied to only one end of the key, the head 13 may be replaced by a similar bearing member if so desired.

In Figure 4 I have shown a modified form of bolt 19 in which the threads are omitted and in lieu thereof the bolt is provided with a hole 20 for the reception of a cotter pin. In this form of bolt the square boss 17 is unnecessary. This form is similar to an ordinary air brake pin so that by making the bolt of the same diameter as the regulation air brake pin the latter may be substituted in case of loss of the original bolt.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:

1. In a device of the class described, the combination of a pair of draft sills provided with key slots, a draft key extending horizontally through said slots and free to take an angular position therein, and key retaining means having elongated contact faces one above and the other below the key, said means being pivotally mounted on one end of the key and so related to the key as to be capable of substantial relative movement in either direction with respect thereto, whereby the elongated contact faces of the retaining means may assume a position parallel with the sills in all positions of the key,

said pivot being so positioned that the key may assume both extreme angular positions permitted by the slots.

2. In a device of the class described, the
5 combination with a pair of draft sills, of a draft key projecting through said sills, a bolt extending vertically through said key adjacent to one end thereof, and a hollow

box-shaped contact member completely surrounding the end of the key and pivotally 10 secured thereto by said bolt and being free for angular movement about the pivot.

In testimony whereof, I hereunto affix my signature, this 3rd day of August, 1925.

TOLBOTT G. SHIPLEY.