F. G. KOEHLER.

FASTENER FOR CAR AXLE BOXES.

APPLICATION FILED JUNE 15, 1903.

NO MODEL. Fig.IV.

United States Patent Office.

FRANK G. KOEHLER, OF ST. LOUIS, MISSOURI.

FASTENER FOR CAR-AXLE BOXES.

SPECIFICATION forming part of Letters Patent No. 755,886, dated March 29, 1904.

Application filed June 15, 1903. Serial No. 161,461. (No model.)

To all whom it may concern:

Be it known that I, Frank G. Koehler, a citizen of the United States, residing in the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Fasteners for Car-Axle Boxes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

The object of my invention is to provide a simple and effective fastener for the lids of car-axle boxes and one that will be self-catching when the lid is dropped to its closed position and which will be self-tightening, so that the jarring of the boxes will tend to cause the

lids to be drawn closer to their seats.

Maximum consists in features of novel

My invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a vertical section through the box, taken on line I I, Fig. II. Fig. II is a vertical section taken on line II II, Fig. I. Fig. III is an enlarged detail horizontal section taken on line III III, Fig. I. Fig. IV is a perspective view of the catch. Fig. V is a perspective view of the locking-bolt.

Referring to the drawings, 1 represents part of the shell of a car-axle box, which may be

of any type or form.

2 is the lid. The lid is formed with a hole to receive a bolt 3, the head 4 of which fits in a socket 5, formed in the outer face of the lid, and this head is provided with a non-circular extension 6 to receive a key or wrench, or in lieu thereof it may be provided with a turning-handle 7. The bolt 3 is made round where it passes through the lid, and inside of this rounded portion it is provided with a non-circular part 8 to receive the catch 9, which has a socket 10 to fit the part 8 of the bolt and which is held to the bolt by a nut 10°. The catch has an offset portion 11 and a down-

turned end 12, formed with a beveled nose 13. The front wall of the box is formed with an opening or notch 14 for the passage of 45 the end 12 of the catch, and one end of the vertical wall of this notch is beveled, forming an inclined nose 15. Between the head 4 of the bolt and the inner end of the socket 5 is a coil-spring 17, one end of which fits in a 5° hole 19, formed in the head 4, and the other end of which fits in a hole 20, formed in the lid 2. When the lid is dropped to its closed position, the beveled nose 13 on the catch comes against the beveled nose 15 on the box, 55 and the spring 17 will allow the catch to turn sufficiently to pass the nose 15, and when it has passed the spring will throw the catch in the direction of the arrow, Fig. I, thereby causing the catch to engage with the box and 60 draw the lid close up against its seat, and any jarring of the box will tend to cause the catch (owing to the tension of the spring) to draw the lid still tighter against the box.

I claim as my invention—

1. The combination with the axle-box having the front wall at its top provided with a notch one of the walls of which is beveled on both sides to provide an inclined nose, of the cover, and a spring-pressed catch carried by 7° the cover and beveled on both sides to provide an inclined nose adapted for engagement with the inclined nose on the box.

2. The combination with the axle-box having the front wall provided with an inclined 75 nose, the cover, a bolt mounted to rotate in the cover having a non-circular portion; a catch having an offset and a downwardly-turned inclined nose; and a coil-spring connected to the bolt and the cover.

FRANK G. KOEHLER.

In presence of— E. S. Knight, Geo. H. Knight.