2 Sheets—Sheet 1.

C. H. KELLOGG & J. W. SEAVER.

Car-Truck.

No. 218,126. **Patented Aug. 5, 1879.**

Fig. 1.

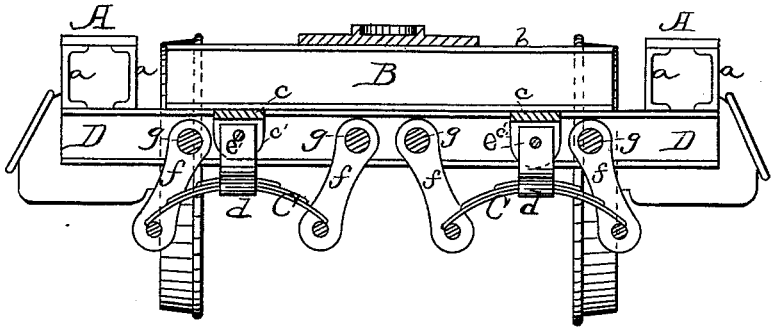
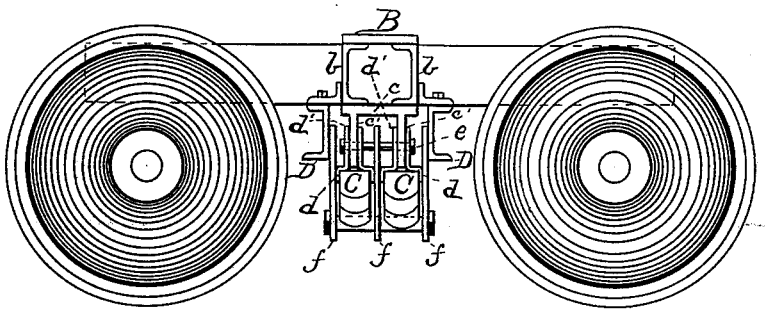


Fig. 2.



Witnesses:
T. H. Parsons.
J. R. Drake.

C. H. Kellogg and J. W. Seaver
Inventors,
by J. R. Drake,
Atty.

2 Sheets—Sheet 2.

C. H. KELLOGG & J. W. SEAVER.

Car-Truck.

No. 218,126. Patented Aug. 5, 1879.

Fig. 3.

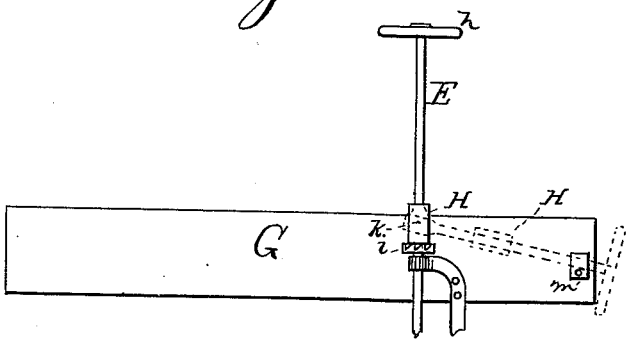
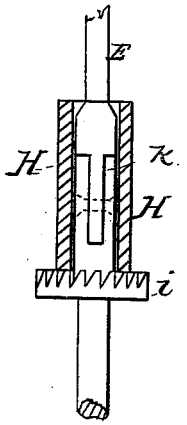


Fig. 4.



Witnesses:
T. H. Parsons.
J. R. Drake.

C. H. Kellogg and J. H. Seaver
Inventors
by J. R. Drake,
Atty.

UNITED STATES PATENT OFFICE

CHARLES H. KELLOGG AND JOHN W. SEAVER, OF BUFFALO, NEW YORK.

IMPROVEMENT IN CAR-TRUCKS.

Specification forming part of Letters Patent No. **218,126**, dated August 5, 1879; application filed October 29, 1878.

To all whom it may concern:

Be it known that we, CHARLES H. KELLOGG and JOHN W. SEAVER, of Buffalo, New York, have invented new Improvements in Car-Trucks, of which the following is a specification.

This invention relates to car-trucks, and more especially such as are provided with springs for allowing sidewise motion in turning curves.

The nature of said invention consists chiefly in the peculiar construction, arrangement, and combination of the springs so employed, and of the other parts connected therewith, as hereinafter fully set forth in the claims.

It also consists in the peculiar construction and combination of the brake-rod and attached devices.

In the drawings, Figure 1 represents a front elevation of a car-truck in transverse section through the center; Fig. 2, a side elevation; Fig. 3, elevation of the end of a platform-car, showing the jointed brake-stem; Fig. 4, detail of same.

A A represent the side bars of a car-truck, made of channel-irons *a a*, and suitably bolted or riveted together, thereby making an exceptionally light and strong side bar. These are intended to take the place of wood, or wood and iron bars, for the purpose of giving greater strength and lightness to the truck.

The swing-beam B is also constructed of channel-irons *b b*, also suitably riveted, bolted, or fastened together. This beam is also so constructed as to combine lightness and strength. The swing-beam rests on springs C C beneath, and swings from side to side, or rises, as follows: To the under side of the beam are attached two cross-plates, *c c*, with downwardly-projecting tongues *c' c'*. Around the middle of each spring C is a strap or band, *d*, which holds the spring, and has two vertical ears, *d' d'*, between which the tongues *c' c'* stand. A bolt or pin, *e*, passes through the ears and tongues, allowing a slight swinging thereby.

The springs C C are half-elliptic, made in leaves. Their ends are connected to hangers *f f*, so as to allow the hangers to swing, the other ends of the hangers swinging on bars or pins *g g*, fastened to the cross-frame D. These springs are arranged transversely in the truck and in sets of two at one end and two at the other; but it is obvious that a large single elliptic spring would give nearly the same effect if arranged as stated.

It is common to employ elliptic (whole) springs; but their disadvantages are that when the car is thrown out of a level position, as is the case in running curves, and other causes, the whole elliptic springs are subjected to a great strain, liable to be wrenched, twisted, or broken, as the strain is so unequal. As the beam swings to one side it twists the springs of the other side, and vice versa. To overcome this, I employ only half-elliptic springs, with the ends curved downward and held in swinging hangers, while the middle of the spring is held by a strap, &c., and in connection with the swing-beam, which bears the weight of the load on the car, and allows an easy swing to the beam, without any twist on the springs, as hereinbefore stated.

E is the brake-stem of a platform-car, with the brake-wheel *h* and ratchet-wheel *i*, as usual. This brake-stem is jointed or hinged at or near *k*, generally below the platform G, so as to allow the turning down of the brake-stem, as shown in dotted lines, Fig. 3, where it rests in a loop or hook, *m*. The object of this hinged stem is to get it out of the way when platform-cars are loading with certain kinds of freight, which, at times, overruns the length of one car and rests on the next car. In such cases the brake-stem is an impediment and has to be broken off and thrown away, thereby damaging the car so that it cannot be used again unless repaired. By jointing the upright stem it can be thrown down out of the way. A loose sleeve or collar, H, incloses the stem where it is jointed, so as to virtually make it one piece when upright and in use, and by merely slipping it up, as shown in dotted lines, Fig. 3, it allows the brake-stem to be thrown over, as before explained.

We claim—

1. The combination, with the swing-beam of a car-truck, of a series of springs arranged in sets of two or more, as shown, beneath the swing-beam, and connected to it by means of the jaws, the ends of the springs being sustained

by the bangers, as shown, and free to move in a lateral direction.

2. The combination, with the swing-beam B, of springs C C and hangers *f f*, the said swing-beam being arranged above the points of suspension of said hangers, substantially as set forth.

3. The combination of a swing-beam with springs C and inclined hangers or links, substantially as shown, for the purpose of obviating the necessity for using guide-springs to keep the car-body in a central position.

4. In a car-truck or platform-car, the upright brake-stem E, jointed or hinged at *k*, and with the loose sleeve H in combination therewith, substantially as and for the purpose specified.

In witness whereof we have hereunto signed our names in the presence of two subscribing witnesses.

C. H. KELLOGG.
JOHN W. SEAVER.

Witnesses:
J. R. DRAKE,
T. H. PARSONS.