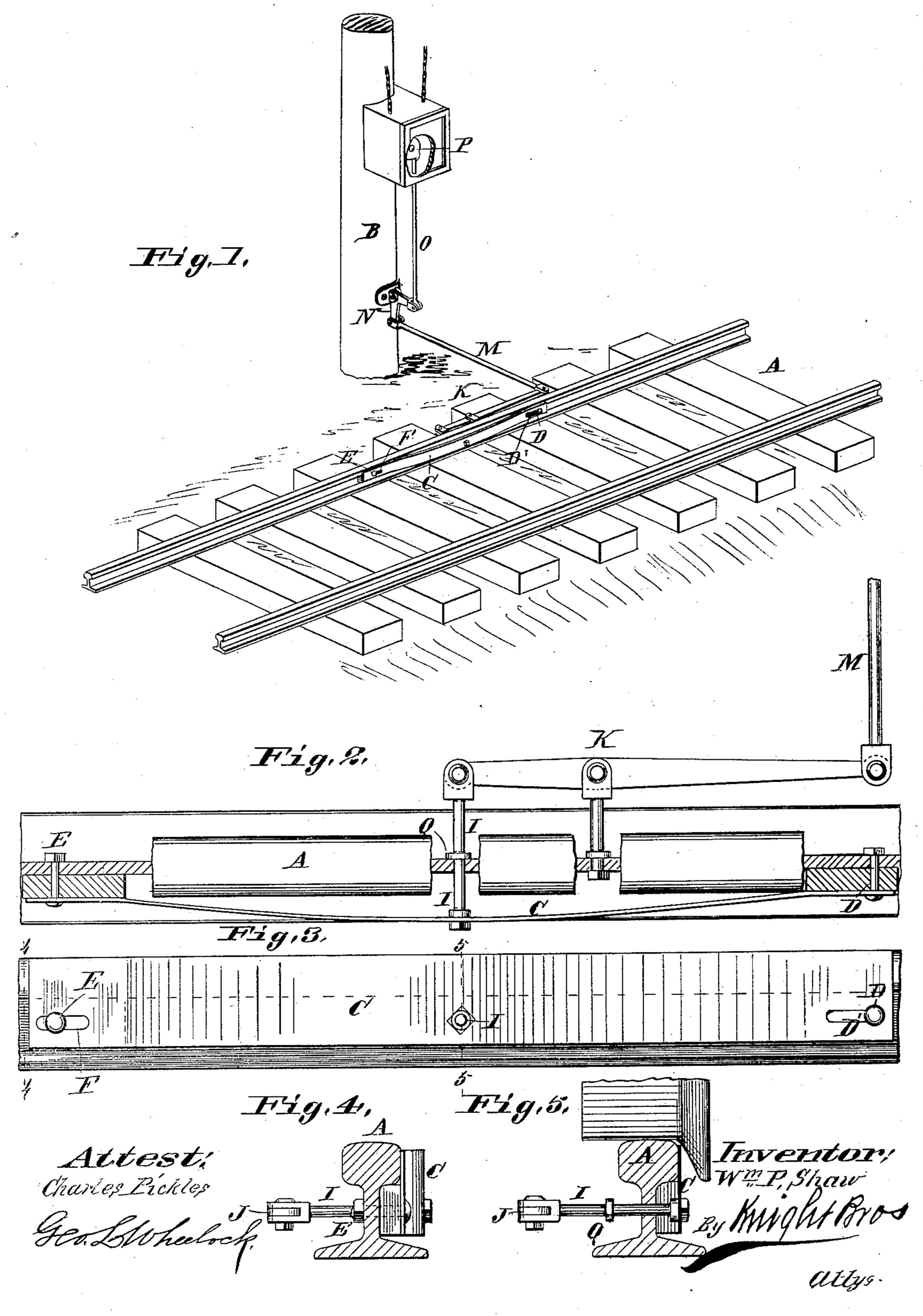
W. P. SHAW.

RAILWAY SIGNAL.

No. 341,061.

Patented May 4, 1886.



United States Patent Office.

WILLIAM P. SHAW, OF ST. LOUIS, MISSOURI.

RAILWAY-SIGNAL.

SPECIFICATION forming part of Letters Patent No. 341,061, dated May 4, 1886.

Application filed September 12, 1885. Serial No. 176,925. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM P. SHAW, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Im-5 provement in Railway-Signals, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specifica-

tion, and in which—

Figure 1 is a perspective view illustrating the parts of my signal connected to the track. Fig. 2 is a detail top view showing part of the head of the rail, to which the attachment is secured, broken away. Fig. 3 is a side 15 view of the spring, showing part of a railwayrail, to which the spring is secured. Fig. 4 is a transverse section taken on line 4 4, Fig. 3, with the spring in its outward position. 20 5 5, Fig. 3, showing part of the wheel of a railway-truck, the spring being forced in against the head of the rail by the flange of the wheel.

My invention relates to that class of rail-25 way-signals in which a passing train sounds an alarm; and my invention consists in features of novelty hereinafter fully described and pointed out in the claims.

Referring to the drawings, A represents 30 part of a railway-track, and B represents a

telegraph or other post.

C represents a spring-plate, secured at one end to one of the rails of the track by a bolt, D, fitting in a slot, D', as shown, and con-35 nected by its other end to the rail by means of a pin or bolt, E, fitting in a slot, F, in this end of the spring-plate, and it will thus be seen that with this means of connecting the plate with the rail the former can be forced 40 inward against the head of the latter, and will thus be forced inward by the flanges of the wheels of the cars coming against it, as shown in Fig. 5. Connected to this plate and extending through the web of the rail is a rod, 45 I, to the outer end of which is connected one end of a lever, J, fulcrumed at K to a

suitable support, K', projecting from the web of the rail and made fast at its other end to end of a link or rod, M, the other end of which is made fast to one member of a bell- 50 crank lever, N, the other member of the bellcrank lever being connected to a rod, O, that extends upward therefrom and operates upon a lever, P, of an electric or other alarm.

I have not shown any alarm, as my inven- 55 tion does not relate to that part of a signal

apparatus, and such an alarm as is shown in the application of H. H. Liemke, filed June 8, 1885, No. 168,046, can be used, the lever P in this application corresponding with the 60 lever over the elastic bulb, as shown in Fig. 6 of Mr. Liemke's application. The rod I has preferably a collar, Q, on the outside of the flange of the rail, to prevent the spring-Fig. 5 is a transverse section taken on line | plate C from expanding too far from the rail, 65 as shown in Fig. 2.

An alarm of this kind is cheap and durable, and can be applied by any inexperienced per-

son.

I claim as my invention—

1. In a railway-signal, the combination of a rail having a perforated web, a curved platespring secured to the inside of the rail by bolts and slots, a rod extending through the web of the rail, a lever upon the outside of the 75 rail, connected at one end to said rod and at the other with the signal, and a support projecting from the web of the rail upon which said lever is fulcrumed, substantially as set forth.

2. In a railway-signal, the combination, with a perforated rail and a curved spring-plate secured to the inside thereof, of a rod extending through a perforation in the web of the rail and connected at its respective ends to 85 said spring and with the signal, and a collar fixed to said rod outside of the rail, to limit the movement of the spring, as set forth. WILLIAM P. SHAW.

In presence of— BENJAMIN A. KNIGHT, GEO. H. KNIGHT.