(No Model.)



PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

HENRY S. PFEIL, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO RICHARD M. POPHAM, OF SAME PLACE.

RAILROAD OR OTHER SIGNAL.

SPECIFICATION forming part of Letters Patent No. 349,285, dated September 14, 1886.

Application filed October 8, 1885. Serial No. 179,360. (No model.).

- To all whom it may concern: Beit known that I, HENRY S. PFEIL, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsyl-5 vania, have invented a new and useful Improvement in Railroad and other Signals, which improvement is fully set forth in the following specification and accompanying drawings, in which-
- Figure 1 represents a side elevation of a IO part of a railroad-signal having my invention applied to it. Figs. 2 and 3 represent views of opposite faces of the portion of a railroadsignal embodying my invention, the same be-
- 15 ing on an enlarged scale. Fig. 4 represents a section in line x x, Fig. 1, on an enlarged scale. Fig. 5 represents a view of a detached portion of Fig. 4 on an enlarged scale.
- Similar letters of reference indicate corre-20 sponding parts in the several figures.
- My invention consists of means for preventing the breakage of the lens of semaphore, railroad, and other signals, as will be hereinafter fully set forth.
- Referring to the drawings, A represents the 25 arm of a railroad-signal, and B represents the lens which is secured thereto, said signal being constructed, supported, and operated in wellknown manner.
- C represents a packing, which is interposed 30 between the periphery of the lens B and adjacent portion of the arm A, it being noticed that the peripheral portion of the lens is set in a recess in said arm and retained by an annu-
- 35 lus or ring, D, which is secured to the arm and embraces the lens near the periphery thereof. The packing C consists of a band, C', which is in contact with the periphery of the |

lens, and flanges C² C³, which embrace opposite sides of the peripheral portion of the lens, so 40 that the contiguous portions of the arm and the annulus D are in contact with the packing, the latter being composed of soft rubber, felt, paper, or other pliable or flexible material, the object whereof is to provide a cushion for the 45 lens at the place of its connection and support, whereby it will not be injuriously affected or broken when the signal is operated or moved, such operation or motion being often abrupt and harsh, as is well known. The packing 50 also prevents breakage of the lens should the ring D, when tightened, exert severe pressure thereon.

In order to increase the yielding or cushion nature of the packing, I form the same with a 55 corrugated surface, as more particularly seen in Figs. 4 and 5, so that when the package is compressed by the ring D it retains sufficient elasticity to prevent dead-pressure of the ring and arm on the lens. 60

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

1. The signal-arm A, having lens B, in combination with pliable packing C, formed of the 65 peripheral band C' and side flanges, C² C³, and the annulus D, substantially as and for the purpose set forth.

2. Packing for the lens of a signal, formed of corrugated material of pliable nature, substan- 70 tially as described.

H. S. PFEIL.

Witnesses: JOHN A. WIEDERSHEIM, A. P. GRANT.