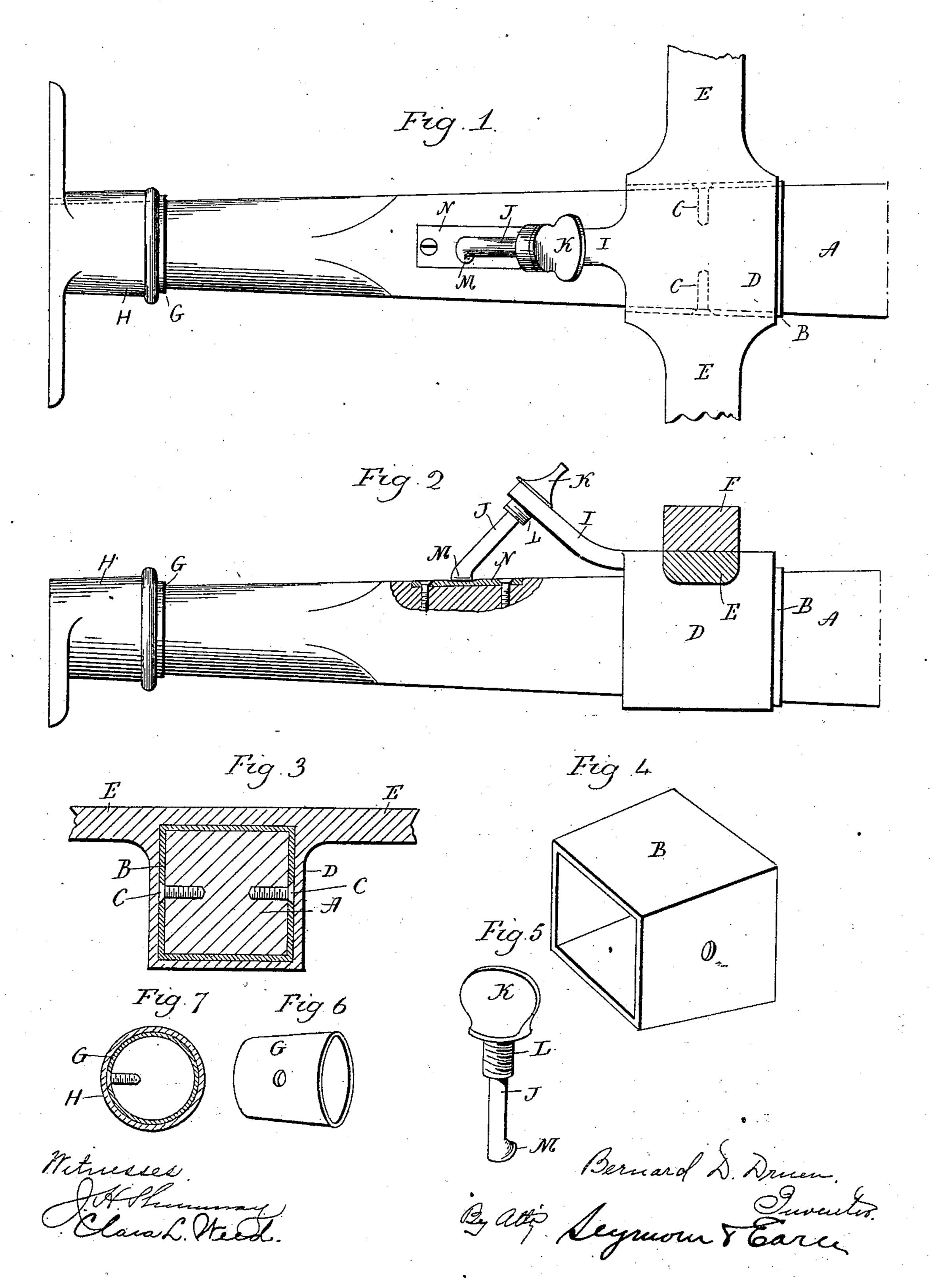
## B. D. DRUEN. POLE SOCKET.

APPLICATION FILED FEB. 13, 1903.

NO MODEL.



## United States Patent Office

BERNARD D. DRUEN, OF NEW HAVEN, CONNECTICUT.

## POLE-SOCKET.

SPECIFICATION forming part of Letters Patent No. 725,685, dated April 21, 1903.

Application filed February 13, 1903. Serial No. 143,239. (No model.)

To all whom it may concern:

Be it known that I, BERNARD D. DRUEN, of New Haven, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Pole-Sockets; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a top or plan view of a pole-socket with a pole therein constructed in accordance with my invention; Fig. 2, a side view, partially in section, of the same; Fig. 3, a transverse sectional view through the socket; Fig. 4, a perspective view of the pole-sleeve detached; Fig. 5, a perspective view of the pole-locking key; Fig. 6, a perspective view of the pole-end tip; Fig. 7, a sectional view through the pole-end socket with the pole end therein.

This invention relates to an improvement in pole-sockets for coaches, carriages, &c., the object of the invention being a construction by which the pole is securely held in its socket and rattling prevented; and the invention consists in the construction as here inafter described, and particularly pointed

out in the claims.

In the usual construction of pole-sockets the pole is inserted through a socket and by constant jar or movement soon becomes worn 35 and loose. To prevent this, I place upon the pole A, which is rectangular in cross-section, a sleeve B, corresponding in shape to the pole, so as to fit closely thereon, and tapered to conform to the shape of the pole. This sleeve 40 may be secured by screws C or otherwise. This sleeve enters the usual socket D, which is formed with arms E for attachment to the under side of the trace-bar F in the usual manner. The inner end of the pole, which 45 is reduced in diameter, is provided with a metal cap G, which enters a socket H, mounted at a convenient point on the running-gear. The socket D, which is otherwise of usual construction, is formed with a rearwardly-ex-50 tending upwardly-bowed centrally-arranged arm I, in which there is an inclined threaded

opening to receive a key J, which includes a thumb-piece or head K, a threaded neck L for engagement with the threads in the arm I, and a flattened point M, the key J being 55 bowed, so that the point moves in an eccentric path. In the upper face of the carriage-pole A, I arrange a metal block N, upon which the point M of the key bears and so that as the key is turned the point M will be 60 forced upon the plate with binding action to hold the pole in the socket. By forming the sleeve B to closely fit the socket it follows that the pole cannot become worn, and consequently there will be no rattling.

Should the pole shrink, and so as to be loose in the sleeve, wedges may be readily inserted between the pole and the sleeve to compensate for such shrinkage; but this is a remote possibility, as the wood from which 70 poles are formed is usually well seasoned, and the sleeve closely fitting the pole and being secured thereto will prevent wear or

chafing of the pole.

I am aware that poles have been provided 75 with metal plates on their upper faces adapted to receive a binding-screw, and therefore do not wish to be understood as claiming broadly such as my invention.

Having fully described my invention, what 80 I claim as new, and desire to secure by Letters

Patent, is—

1. The combination with the pole-socket, of a pole having a metal sleeve secured to and surrounding said pole and closely fitting the 85 said socket, substantially as described.

2. The combination with the pole-socket, of a pole, a metal sleeve secured to and surrounding said pole and closely fitting said socket, a metal tip surrounding the inner end 90 of the pole, and a cup-like socket which said tip enters and closely fits, substantially as described.

3. The combination with a pole-socket, having rearwardly-extending, upwardly-bowed 95 arm, of a key mounted in said arm, a pole having a metal sleeve secured thereto and adapted to enter said socket, and a metal block in the upper face of said pole upon which said key may bear, substantially as 100 described.

4. The combination with a pole-socket, of

a rearwardly-extending, upwardly-bowed arm, a bowed key mounted in said arm, a pole having a metal sleeve secured thereto and adapted to enter said socket, and a metal block in the upper face of said pole upon which said key may bear, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

BERNARD D. DRUEN.

Witnesses:

GEORGE D. SEYMOUR, FREDERIC C. EARLE.