

H. WOLF. Hose-Coupling.

No. 154,536.

Patented Aug. 25, 1874.

Fig. 1.

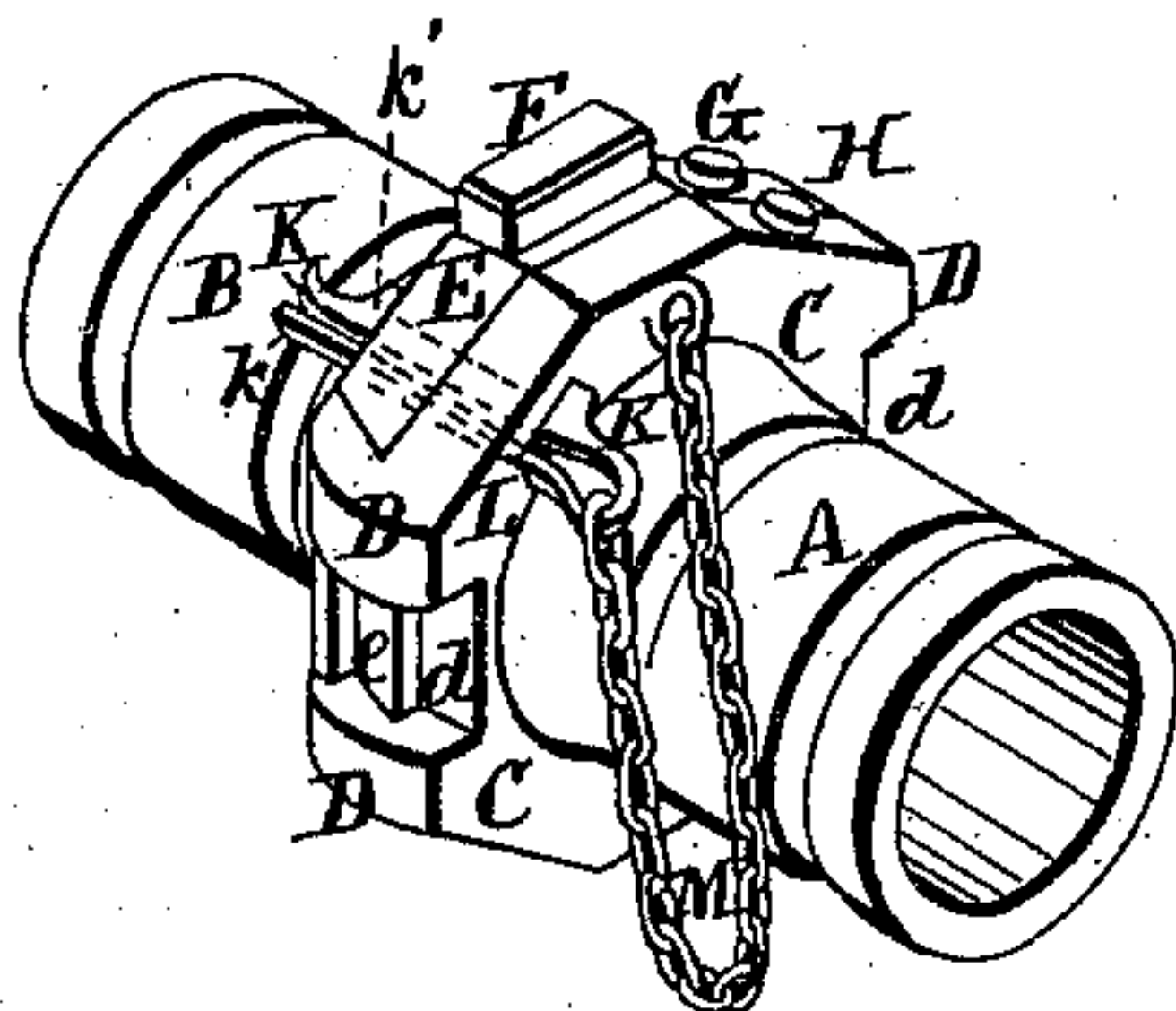


Fig. 2.

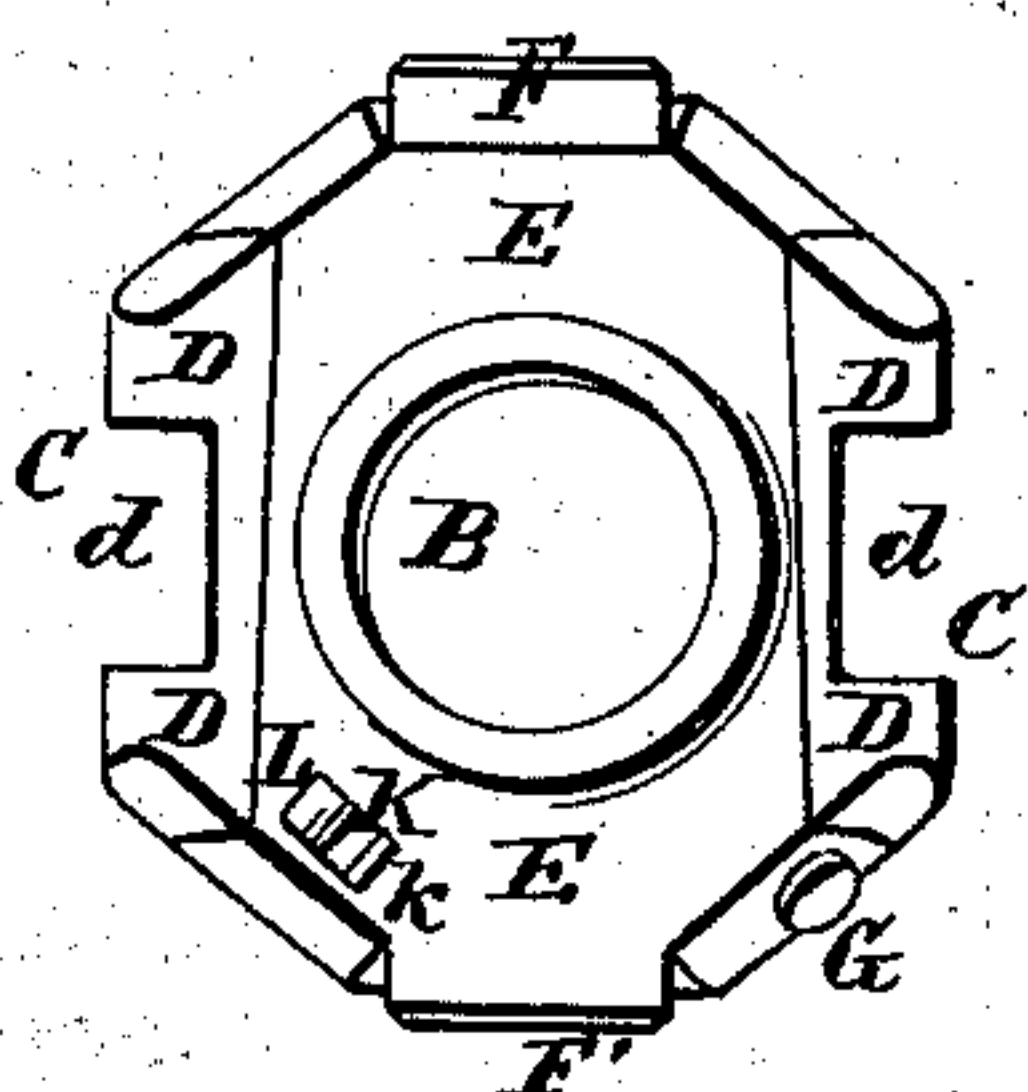


Fig. 3.

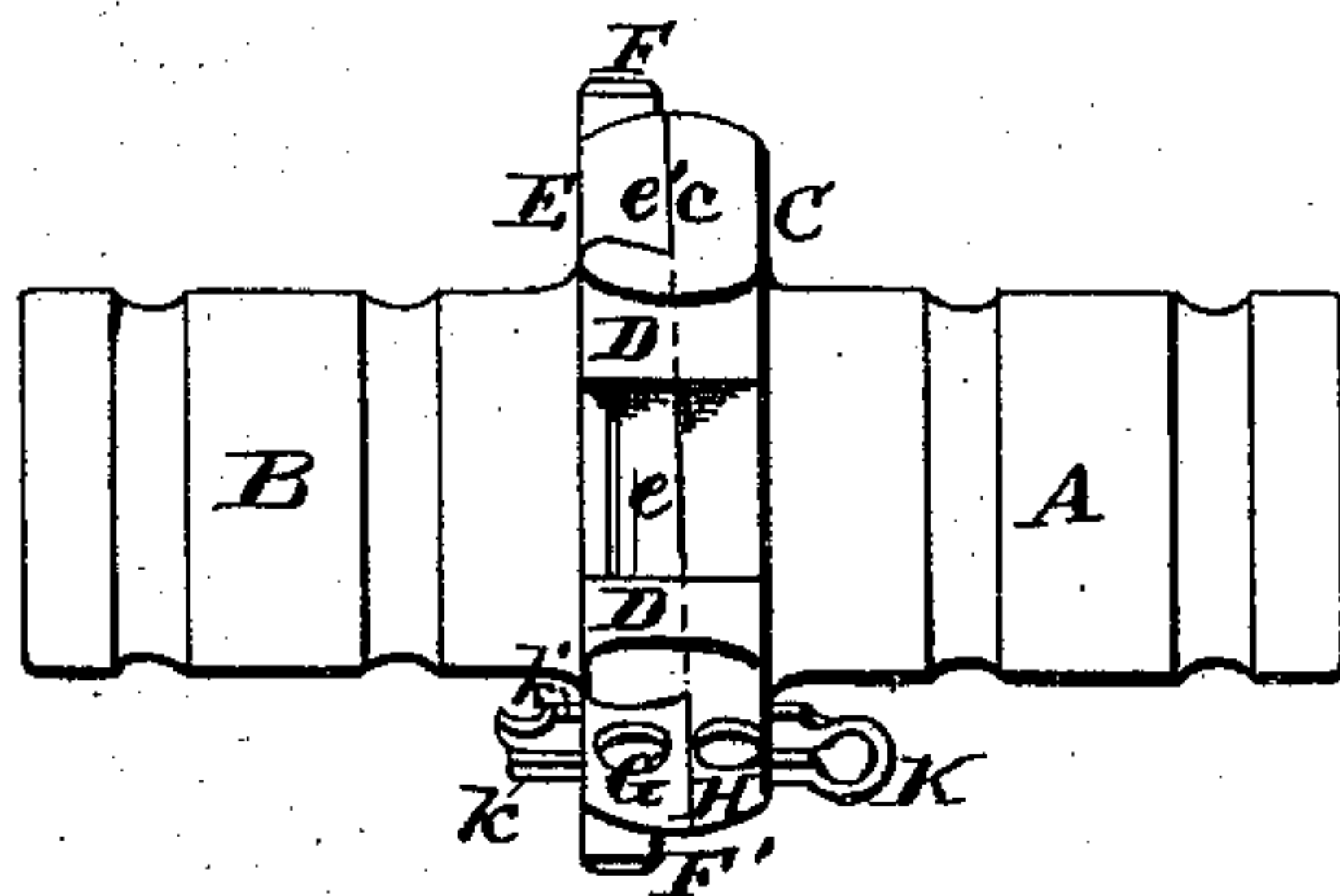


Fig. 4.

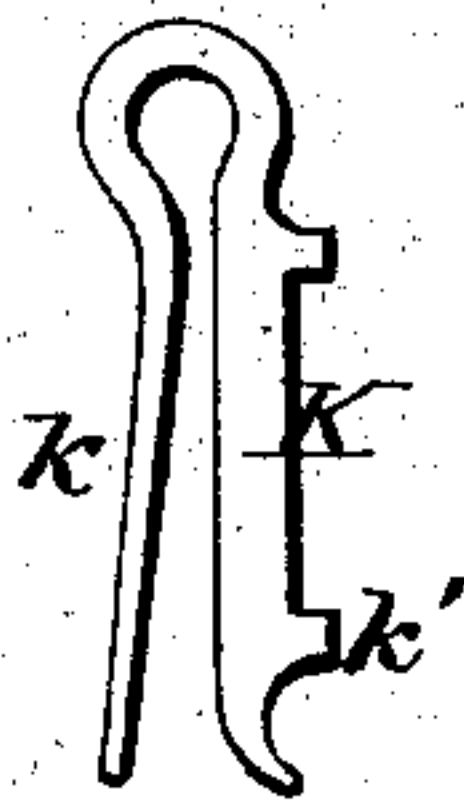
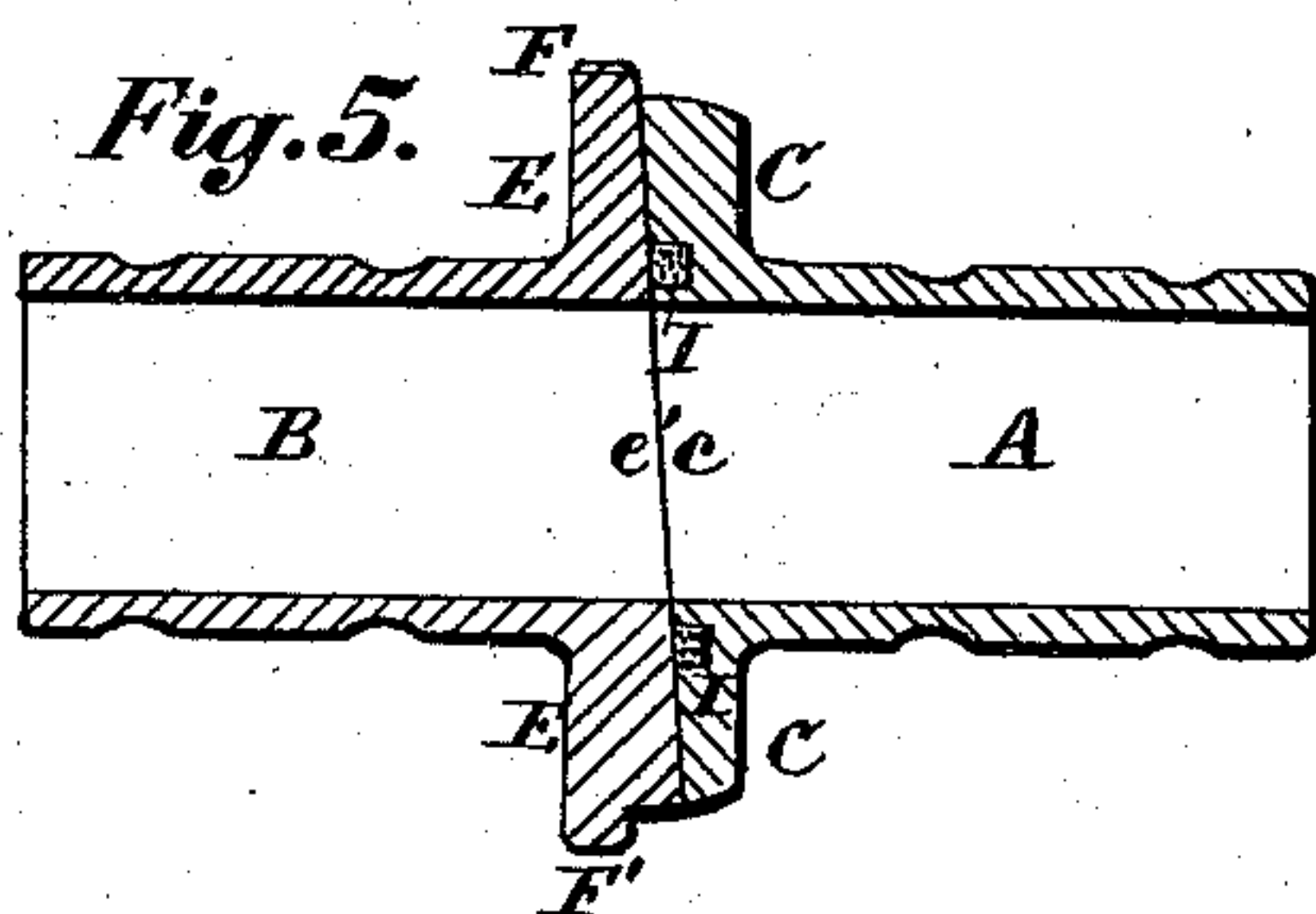


Fig. 5.



ATTEST:

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UNITED STATES PATENT OFFICE.

HIRAM WOLF, OF ST. LOUIS, MISSOURI, ASSIGNOR TO MISSOURI WOLF AND CALPHUNIA FITZGERALD, OF SAME PLACE.

IMPROVEMENT IN HOSE-COUPPLINGS.

Specification forming part of Letters Patent No. **154,536**, dated August 25, 1874; application filed May 8, 1874.

To all whom it may concern:

Be it known that I, HIRAM WOLF, of St. Louis, St. Louis county, State of Missouri, have invented a certain new and useful Improvement in Hose-Couplings, of which the following is a specification:

This is an improvement on that class of couplings in which the two members are connected by sliding together transversely with a dovetail attachment.

The first part of my improvement consists in the construction of the lips or clamps forming the outer portion of the dovetail. These have their central portions removed so as to afford no secure harbor for dirt, which, otherwise, in winter-time, would be subject to collect and freeze in the dovetail, and would render the coupling difficult and less perfect.

The second part of my improvement consists in providing the members of the coupling with slots to enable the key to be passed through to prevent uncoupling. The key has a side lug, and has upon the other side a spring by which the lug is caused to engage the side of the slot to prevent the extraction of the key without the in-pressure of the spring.

In the drawings, Figure 1 is a perspective view. Fig. 2 is an end view. Fig. 3 is a side view. Fig. 4 is an axial section. Fig. 5 is a side view of the spring-key.

A and B are two similar necks, which enter the ends of the sections of hose, and are secured thereto as usual by straps or wrapping. On the neck A is a flange, C, having upon opposite sides dovetail lips or lugs D, to engage the dovetail edges *e* of the flange E upon the other part of the coupling. *d* is an aperture in the central part of each lip D. These apertures are to destroy the harbor for mud which the dovetails would afford if they extended all across the coupling, the said mud being liable to freeze hard in winter-time and make coupling difficult, whereas, with this aperture the holding surfaces of the dovetail groove are so short that the flange E would

readily clear its way on entering. F F' are lugs on the ends of the flange E to receive the blows of the hammer, where one is used in coupling or uncoupling. The flange E narrows toward the end F', which enters first, so that it as is driven in it becomes tighter, and forces the face *e'* against that, *e*, of the flange C. The faces *e* and *e'* are not perpendicular to the axis of the coupling, but are inclined, as shown in Figs. 3 and 4. This inclination is such that a tensional strain upon the hose will tend to draw the coupling tighter. G and H are studs or projections upon one end of the flanges C and E, to indicate the proper position to enter the flange E between the lugs or lips D, the studs being in contiguity when the coupling is engaged. This is an important provision, as the couplings are often put together in the dark in cases of fires, and an indicator, such as G H, sensible to the touch, would save valuable time. In the face *e* is a circular groove containing a rubber gasket or packing, I, which is compressed by the face *e'* to make a tight joint. K is a spring-key passing through a slot, L, in the flanges C and E. The key has a spring-back, *k*, and is recessed out on the front side, leaving at the end a lug, *k'*, so that the spring causes the lug to engage the edge of the slot and hold the key in place. The purpose of this key is to prevent the accidental disengagement of the coupling. The key may be attached by a chain, M.

I claim herein as new and of my invention—

1. The dovetailed lips D, having orifices *d*, as described, in combination with the matching-flange E, for the purpose specified.
2. The hose-coupling A B, having flanges C E, and key-slot L, in combination with the spring-key K *k*, as and for the purpose set forth.

HIRAM WOLF.

Witnesses:

SAML. KNIGHT,
ROBERT BURNS.