

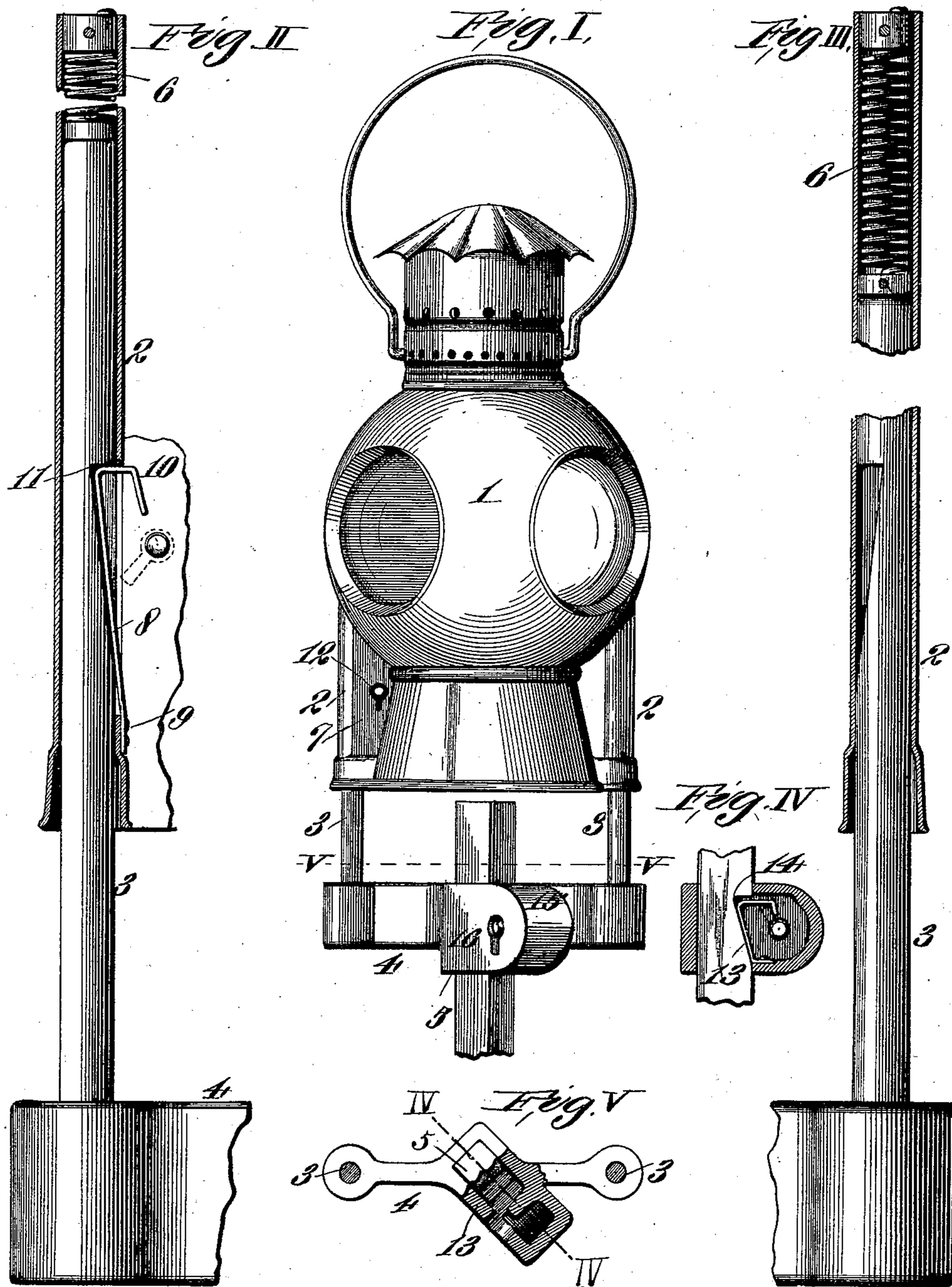
(No Model.)

2 Sheets—Sheet 1.

A. H. HANDLAN.
SIGNAL LAMP.

No. 557,382.

Patented Mar. 31, 1896.



Witnesses
E. Knight
H. F. Daley

Alex. H. Handlan
Inventor

By *T. J. Knight* Attorney

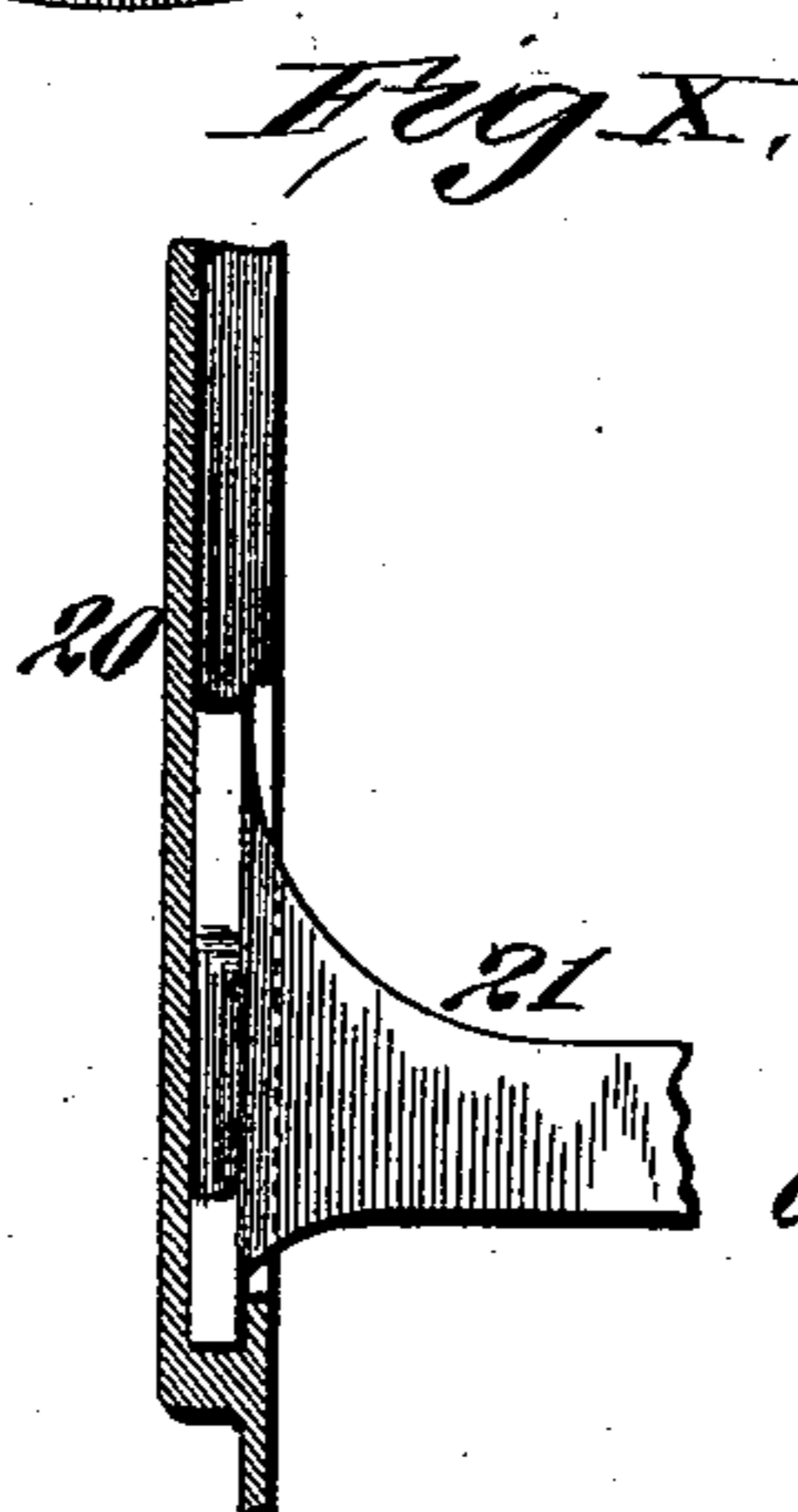
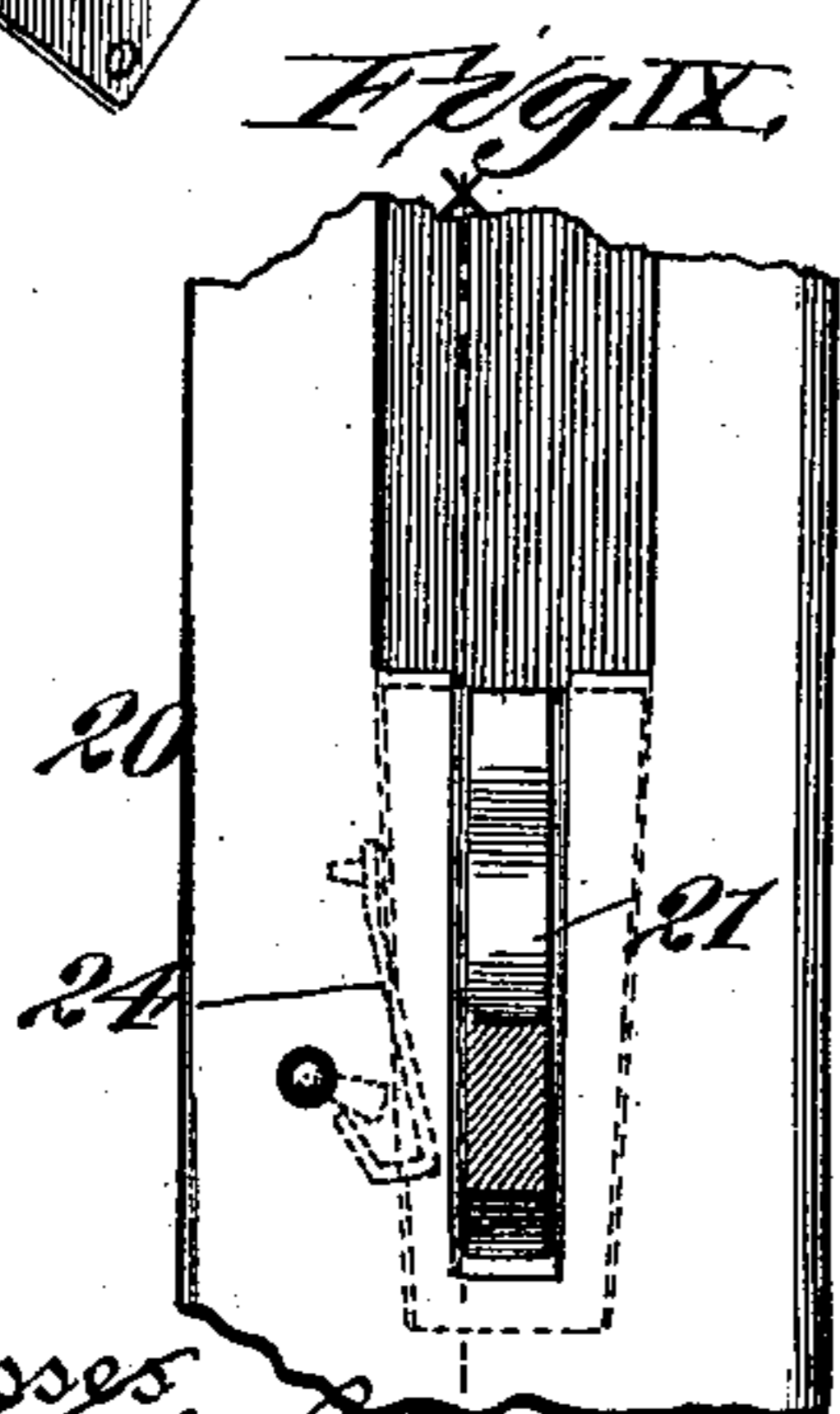
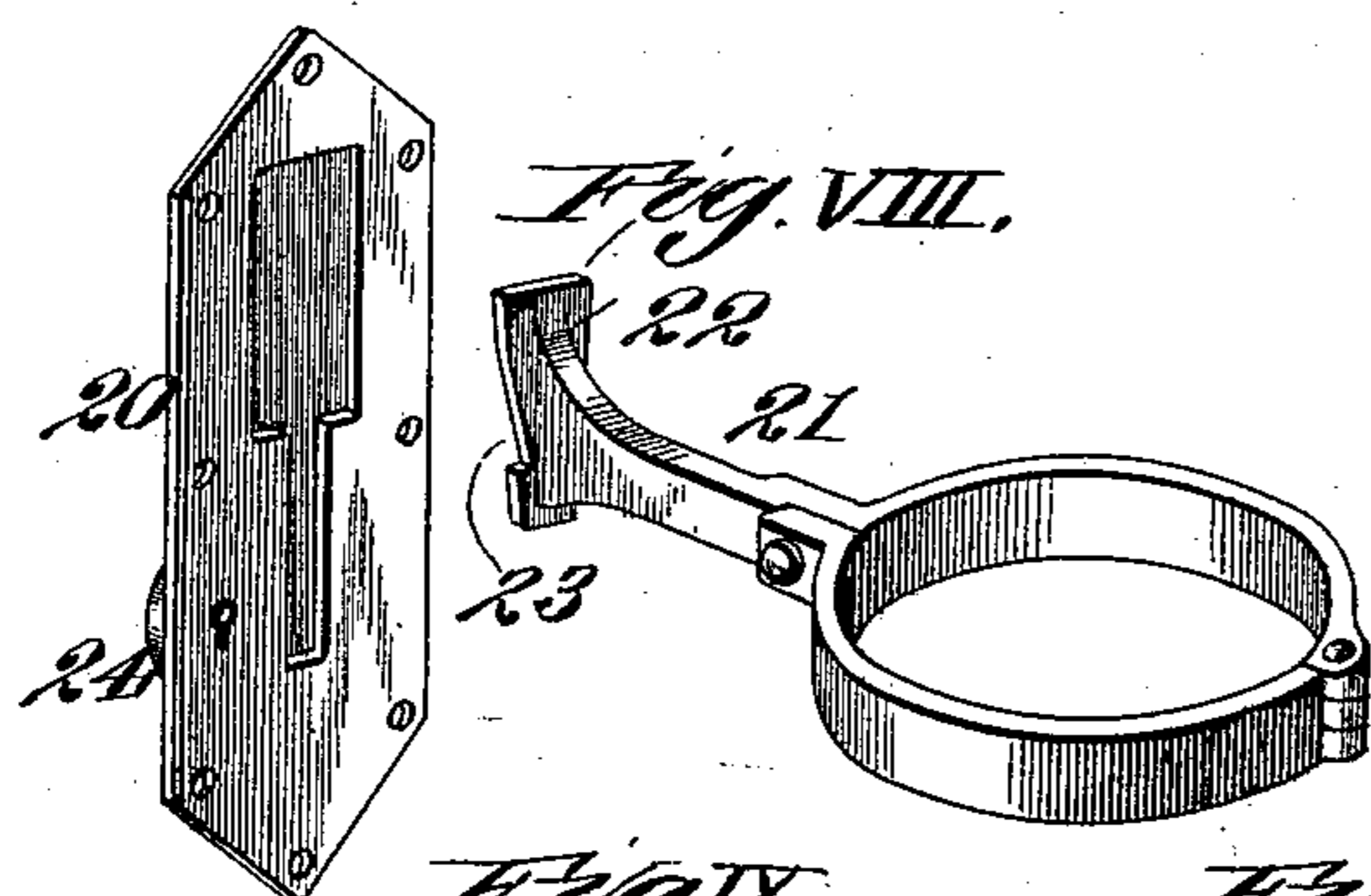
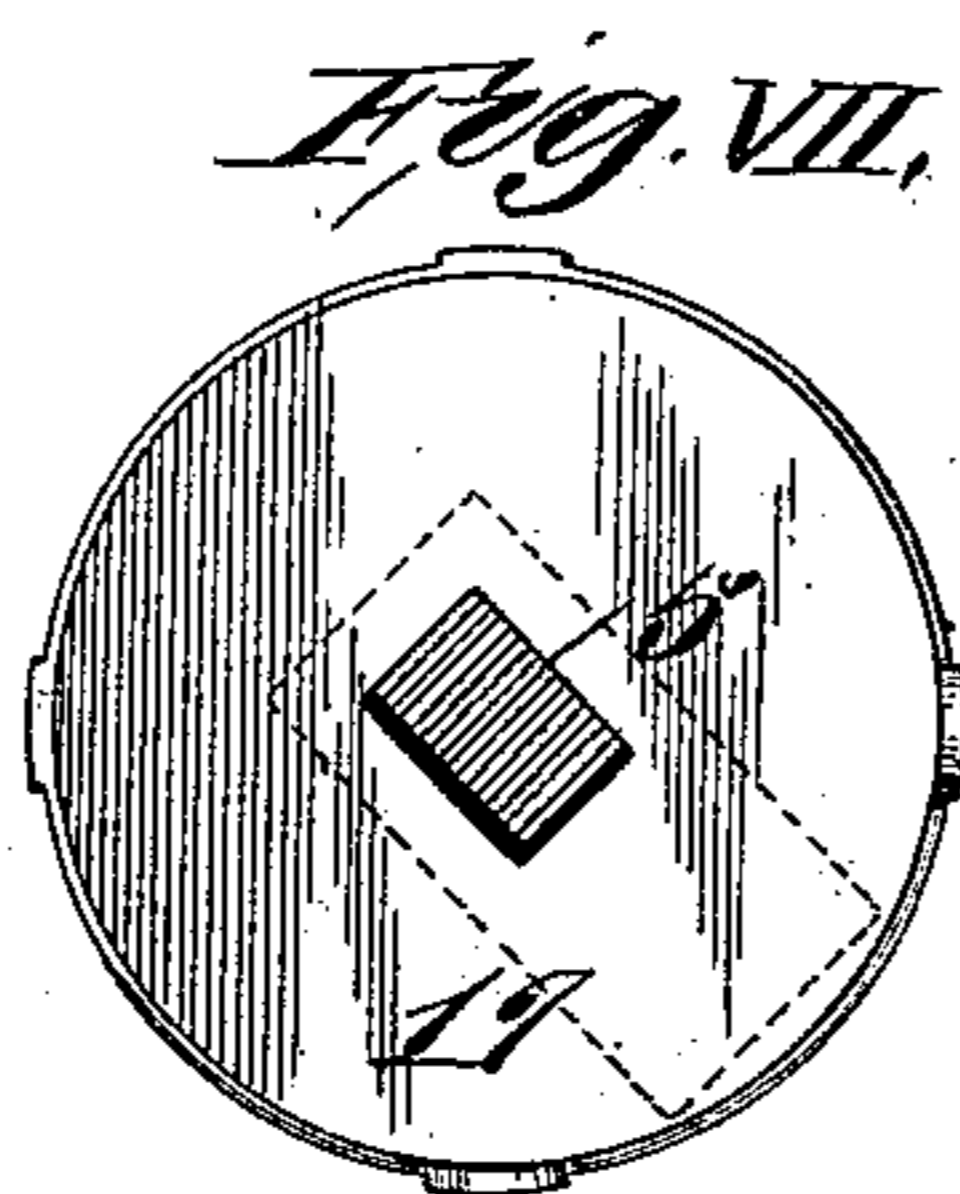
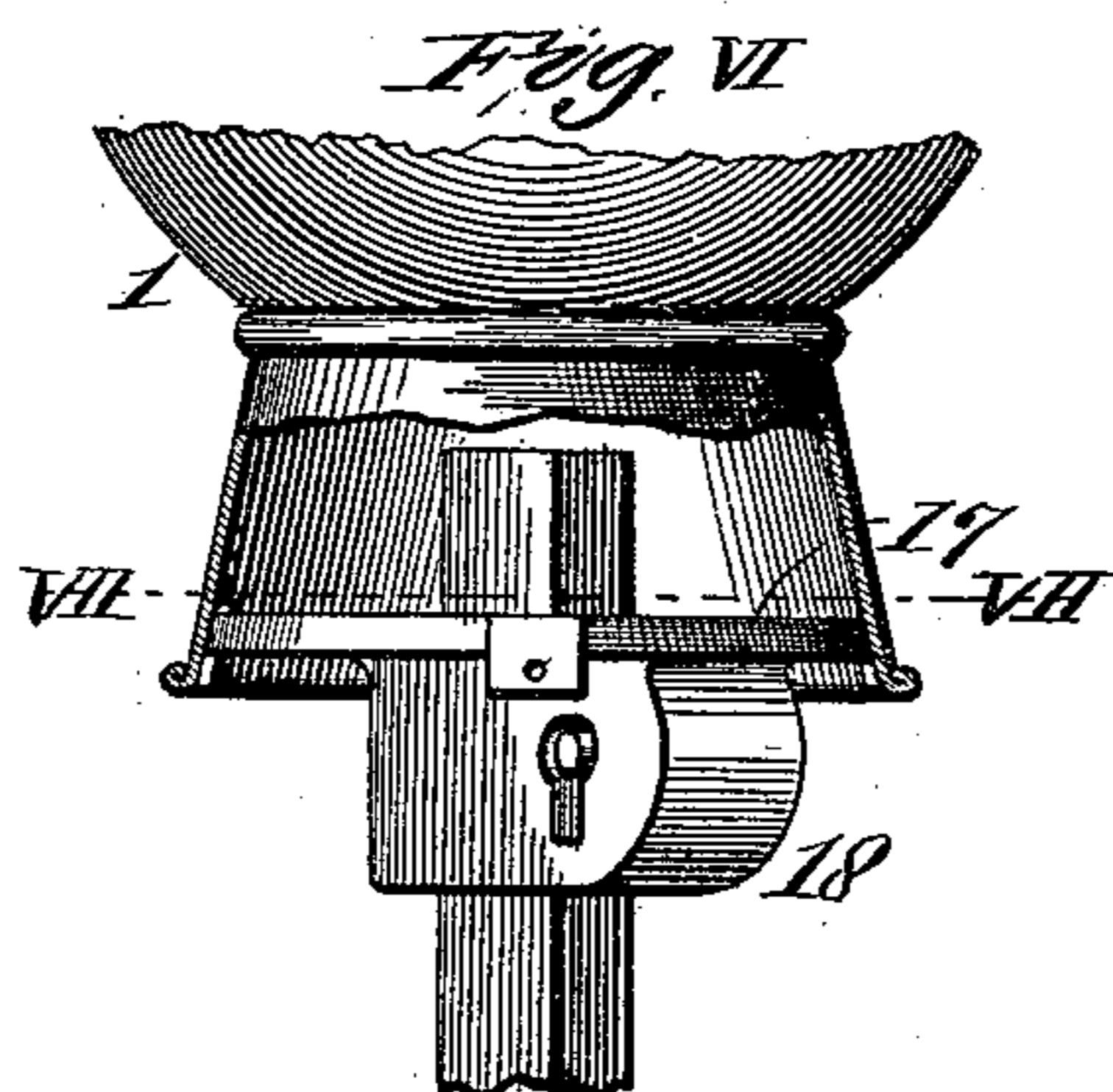
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Witnesses,
E. H. Knight
W. Finley

Alex H. Handlan
Inventor

By his Attorneys *Knight & Co*

UNITED STATES PATENT OFFICE.

ALEXANDER H. HANDLAN, OF ST. LOUIS, MISSOURI.

SIGNAL-LAMP.

SPECIFICATION forming part of Letters Patent No. 557,382, dated March 31, 1896.

Application filed August 24, 1895. Serial No. 560,366. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER H. HANDLAN, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Signal-Lamps, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention, broadly stated, has for its object to provide a signal-lamp or the support to which the lamp is attached or secured with a lock, whereby the lamp may be secured in place and can only be removed by the aid of the key.

My invention consists in features of novelty hereinafter fully described, and pointed out in the claim.

Figure I is a side elevation showing my invention applied to a switch-lamp. Figs. II and III are enlarged detail views, part in section and part in elevation. Fig. IV is a vertical section taken on line IV IV, Fig. V. Fig. V is a horizontal section taken on line V V, Fig. I, part broken away. Fig. VI illustrates my invention applied to a different form of lamp-support than that shown in Fig. I. Fig. VII is a section taken on line VII VII, Fig. VI. Fig. VIII is a perspective view showing my invention applied to a lamp-bracket such as are in use for holding the signal-lamps on the rear ends of railway-cars. Fig. IX is a detail elevation of the same; and Fig. X is a section taken on line X X, Fig. IX.

Referring to the drawings, 1 represents a signal-lamp having side tubes 2 receiving rods 3 that extend upwardly from a cross-head 4 supported on a switch-staff 5. In the tubes 2 are located spiral springs 6, their lower ends resting upon the upper ends of the rods 3, so that the lamp is spring-supported. I make no claim as inventor to the parts thus far referred to in themselves.

On one side of the lamp is a lock 7. I have shown it to consist simply of a spring-plate 8 riveted at one end 9 to the lamp and having a doubly-bent free end 10 that is adapted to engage in a notch 11 formed in one of the rods 3. The lock has a keyhole 12 so disposed with relation to the bend 10 in the plate 8 that when the key is inserted and turned in the proper direction it will engage the bent end of the

plate, and by moving the free end of the plate away from the rod 3 will permit the lamp to be removed from the rods. The natural tendency of the spring-plate 8 is to engage the notch 11, as shown in Fig. II, so that when the lamp is slipped into place the lock automatically engages with the rods 3.

It will be observed that the lock does not interfere with the slight downward movement of the lamp permitted by the springs 6, so that the lock does not destroy the cushion-support of the lamp.

The cross-head 4 may have a safety connection of any kind with the staff 5, but I have shown it also provided with a lock consisting of a bent spring-plate 13 engaging a notch 14 in the staff 5. The cross-head is provided with a housing 15 containing the lock 13, and this housing has a keyhole 16, as shown in Fig. I. To disconnect the cross-head from the staff, the key is inserted and comes against the bent end of the spring-plate 13, as shown by dotted lines, Fig. IV, and causes the free end of the spring-plate to be disconnected from the notch 14.

In Figs. VI and VII I have shown a disk 17 to which the lamp is rigidly secured, and which is provided with a lock 18 corresponding to the lock of the cross-head 4 in Fig. I, this lock engaging the switch-staff in the same manner as the lock does in Fig. IV, the difference between the construction shown in Figs. I and IV and that shown in Figs. VI and VII being that, instead of a cross-head and vertical rods being employed to receive the lamp, a disk 17, to which the lamp is immovably connected, is employed.

In Figs. VIII to X, inclusive, I have shown the invention applied to a car-body signal-lamp bracket, 20 representing the bracket attached to the car-body and 21 representing the lamp-socket. The part 22 of the lamp-bracket that engages the plate 20 (as usual) has a notch 23, that is engaged by a lock 24 on the plate 22, the lock in this instance consisting, preferably, of a spring-plate having a bent end, with which the key engages as in the other instances.

By thus providing a signal-lamp, or the support of the signal-lamp, with a lock that forms an integral part of the article there is always present a means for securing the lamp

to its place of use, preventing the removal of the lamp by unauthorized persons not being possessed of a key, and in cases of switch-lamps it is of especial value as preventing
5 train wreckers and robbers from changing the position of the lamp on the switch-stand and causing the danger-signal to be given to stop the train, or to side-track the train with a main-line signal.

10 I claim as my invention—

A lamp-lock comprising a support having

a notch, a housing having a keyhole and a spring-plate secured to the housing and having a doubly-bent free end seating in the notch of the support and projecting therefrom 15 so as to lie in the path of the key; substantially as described.

ALEXANDER H. HANDLAN.

In presence of—

GEO. H. KNIGHT,

E. S. KNIGHT.