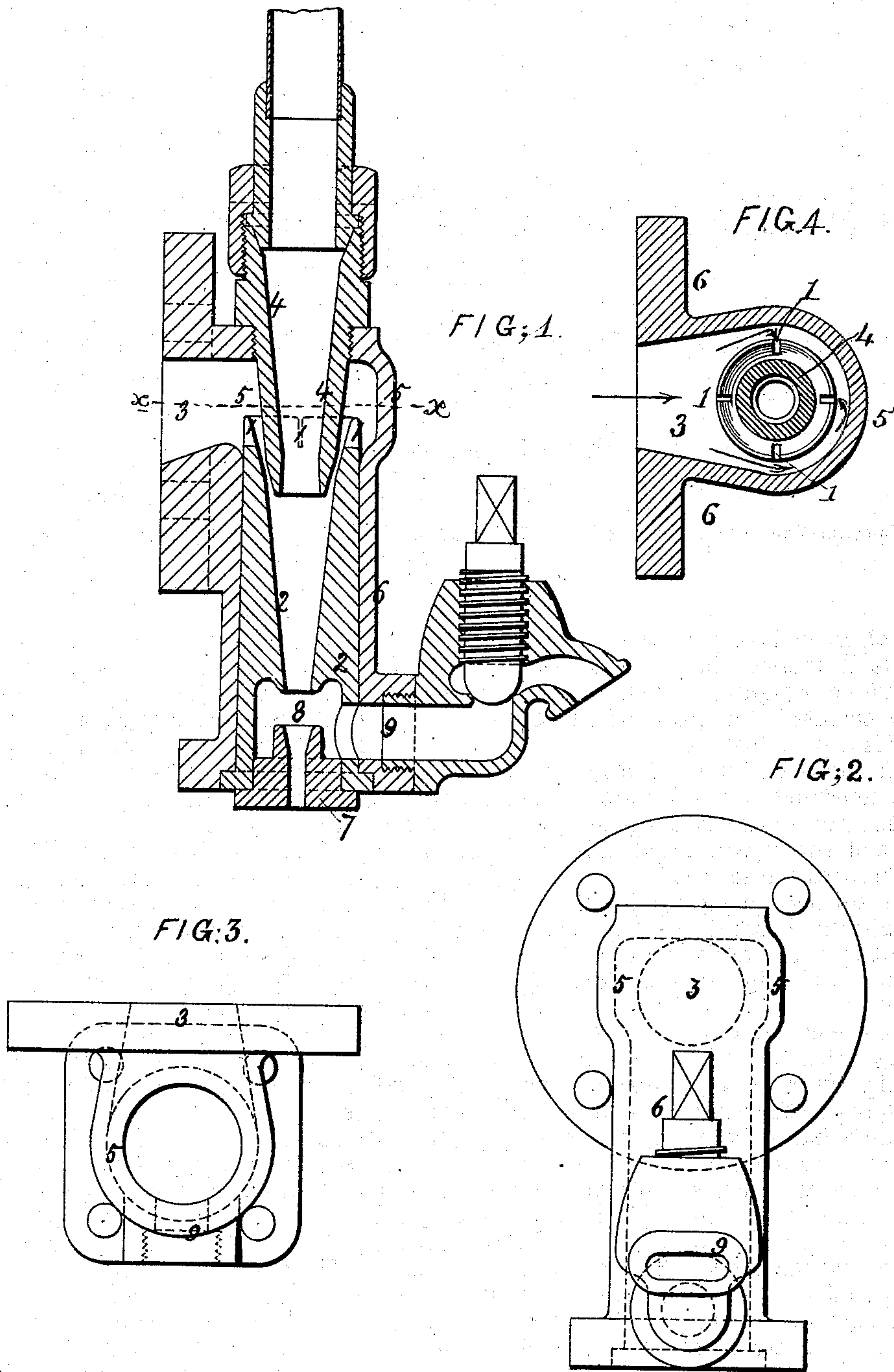


H. ROUGY.
INJECTOR.

No. 182,483.

Patented Sept. 19, 1876.



Witnesses
James C. Skidmore
Henry Smith

Hubert Rougy
by his Attorneys
Howson and son

UNITED STATES PATENT OFFICE.

HUBERT ROUGY, OF BRUSSELS, BELGIUM, ASSIGNOR TO ALFRED ALBERT DIXON, OF SHEFFIELD, ENGLAND.

IMPROVEMENT IN INJECTORS.

Specification forming part of Letters Patent No. **182,483**, dated September 19, 1876; application filed July 31, 1876.

To all whom it may concern:

Be it known that I, HUBERT ROUGY, of Brussels, Belgium, have invented certain Improvements in Injectors, of which the following is a specification:

The object of my invention is to simplify the construction of injectors for steam-boilers, and to prevent the undue heating of the steam-cone of the injector, and this object I attain as hereafter described.

In the accompanying drawing, Figure 1 is a longitudinal section of the injector; Fig. 2, a front view of part of the same; Fig. 3, a plan view; and Fig. 4, a sectional plan on the line *x x*.

In the casing 6 of the injector there is the usual water-inlet 3 and overflow-pipe 9, and to the lower tubular portion of the casing is adapted to the combining cone 2, but so as to be detachable therefrom, the receiving cone 7, being so connected or screwed to the combining-cone as to leave the required space 8 between the two. The upper part of the casing, adjacent to the water-inlet, is enlarged to form a water-chamber, 5, into which projects the upper edge of the cone 2, and into the top of this chamber is screwed the steam-nozzle 4, which projects in the combining-cone 2, as shown in Fig. 1.

In order to prevent the undue heating of the end of the nozzle 4 by the steam I form a series of slots, 11, (four in the present instance,) in the projecting edge of the combining-cone, so that the cold water, having access to the end of the steam-nozzle, keeps it cool, while the proper operation of the injector is not interfered with.

The above described construction, it will be seen, is simple, and permits the different parts to be readily removed and replaced.

I claim as my invention—

1. The combination of the steam-nozzle of an injector with the water-chamber 5 and the combining-cone 2, having slots 11 in its projecting edge, as and for the purpose described.
2. The combination of the casing 6 with the detachable combining-cone and steam-nozzle, as described.

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

HUBERT ROUGY.

Witnesses:

JOHN NORTON,
36 Place de l'Industrie, Brussels.
ALFRED A. DIXON,
37 Rue Montague, Brussels.