H. CONANT.

AUTOMATIC SPRINKLER FOR EXTINGUISHING FIRES.

No. 169,422. Patented Nov. 2, 1875.

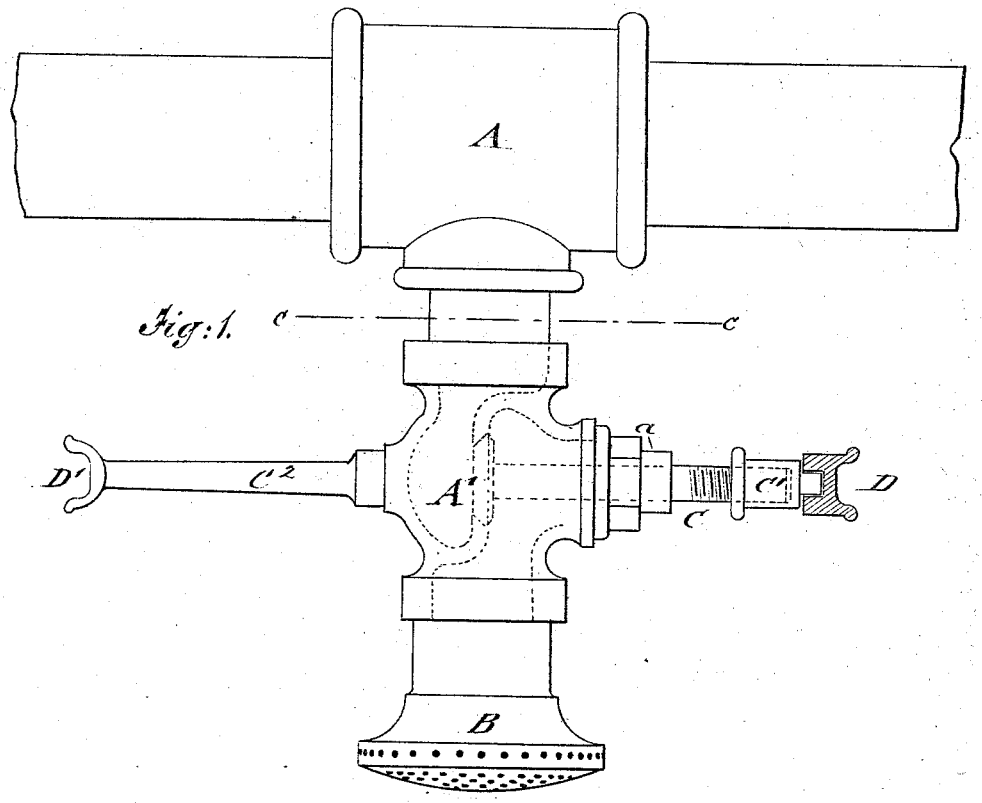
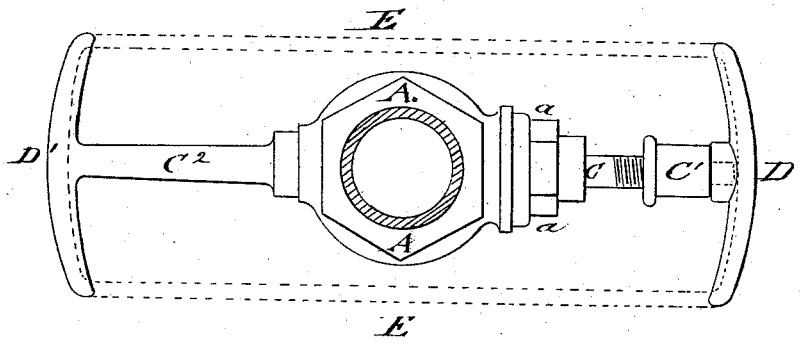


Fig: 1.

Fig: 2.



WITNESSES:

Chas. Neale

A. F. Terry

INVENTOR:

H. Conant

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

HEZEKIAH CONANT, OF PAWTUCKET, RHODE ISLAND.

IMPROVEMENT IN AUTOMATIC SPRINKLERS FOR EXTINGUISHING FIRES.

Specification forming part of Letters Patent No. **169,422**, dated November 2, 1875; application filed August 21, 1875.

To all whom it may concern:

Be it known that I, HEZEKIAH CONANT, of Pawtucket, in the county of Providence and State of Rhode Island, have invented a new and Improved Automatic Sprinkler for Extinguishing Fires, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side elevation of my improved automatic sprinkler for extinguishing fire in factories, &c.; and Fig. 2, a bottom view of the same.

Similar letters of reference indicate corresponding parts.

The object of my invention is to provide for cotton and other factories an improved sprinkler that discharges the water automatically from different parts of the ceiling when the heat reaches a certain point, so that the valve-connection with the supply-pipe is thrown into operation.

The invention will first be described in connection with drawing, and then pointed out in the claim.

The automatic extinguishers hitherto used were sealed by a plug and a composition that melts at a certain degree of temperature, at which the plug is dropped and the water discharged. These fire-extinguishers, however, are not reliable, as they are apt to get out of working order in course of time by the growth of fungi, rust, or other causes, requiring also after a fire and after testing the resealing with the composition, which is not always convenient and on hand.

My invention is designed to furnish an extinguishing device that is positively reliable in operation, may be tested at any moment, and placed into the required position with great facility and ease.

In the drawing, A represents the water-supply pipe at the top or ceiling, which is provided, at suitable points and distances, with downward-extending discharge-pipes A′, according to the dimensions of the rooms. Each pipe A′ is provided with a suitable valve, whose stem C is extended in horizontal direction, and guided in a tightly-sealing side bearing, *a*, of the discharge-pipe. The lower part of the discharge-pipe is arranged with a sprinkler, B, that distributes the water in different directions. The outer end of the horizontally-sliding valve-stem is provided with a slightly curved and grooved T-bearing, D, over which and a similar bearing, D′, in diametrically opposite direction from the former, a skein, E, of cotton of such thickness is wound that the valve is firmly retained on its seat. The bearing or support D′ is applied to a stationary arm, C^2, of discharge-pipe A′, and the cotton or other suitable inflammatory material stretched tightly on the supports by means of a screw-sleeve, C^1, that turns on a thread of the valve-stem, and in a socket-recess of bearing D, so as to act on the same and secure the perfect closing of the valve.

As soon as the flames reach the valve holding cotton skein, so as to burn the same, the valve is forced open by the pressure of the water thereon, and the water is discharged in all directions on the fire.

The sprinkler may be tested at any moment by simply cutting the cotton skein, and instantly be readjusted by winding a new skein around the bearing, and adjusting the stretching screw-nut.

In this manner a reliable, simply-operated, and inexpensive extinguishing device for factories, store-rooms, &c., is furnished, which may be quickly placed in working order, and perfectly relied upon, either for testing or in case of danger, as the parts are not liable to get out of order, and secure a positive action of the same.

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

The combination of discharge-pipe A′, having stationary arm C^2, with the T-bearing D′, and the end-threaded sliding valve-rod having T-bearing D, as well as nut C^1, with the flexible connection E, as and for the purpose specified.

HEZEKIAH CONANT.

Witnesses:
PAUL GOEPEL,
T. B. MOSHER.