

H. SINCLAIR.  
Hot-Air-Register Attachment.

No. 81,695.

Patented Sept. 1, 1868.

Fig. 1

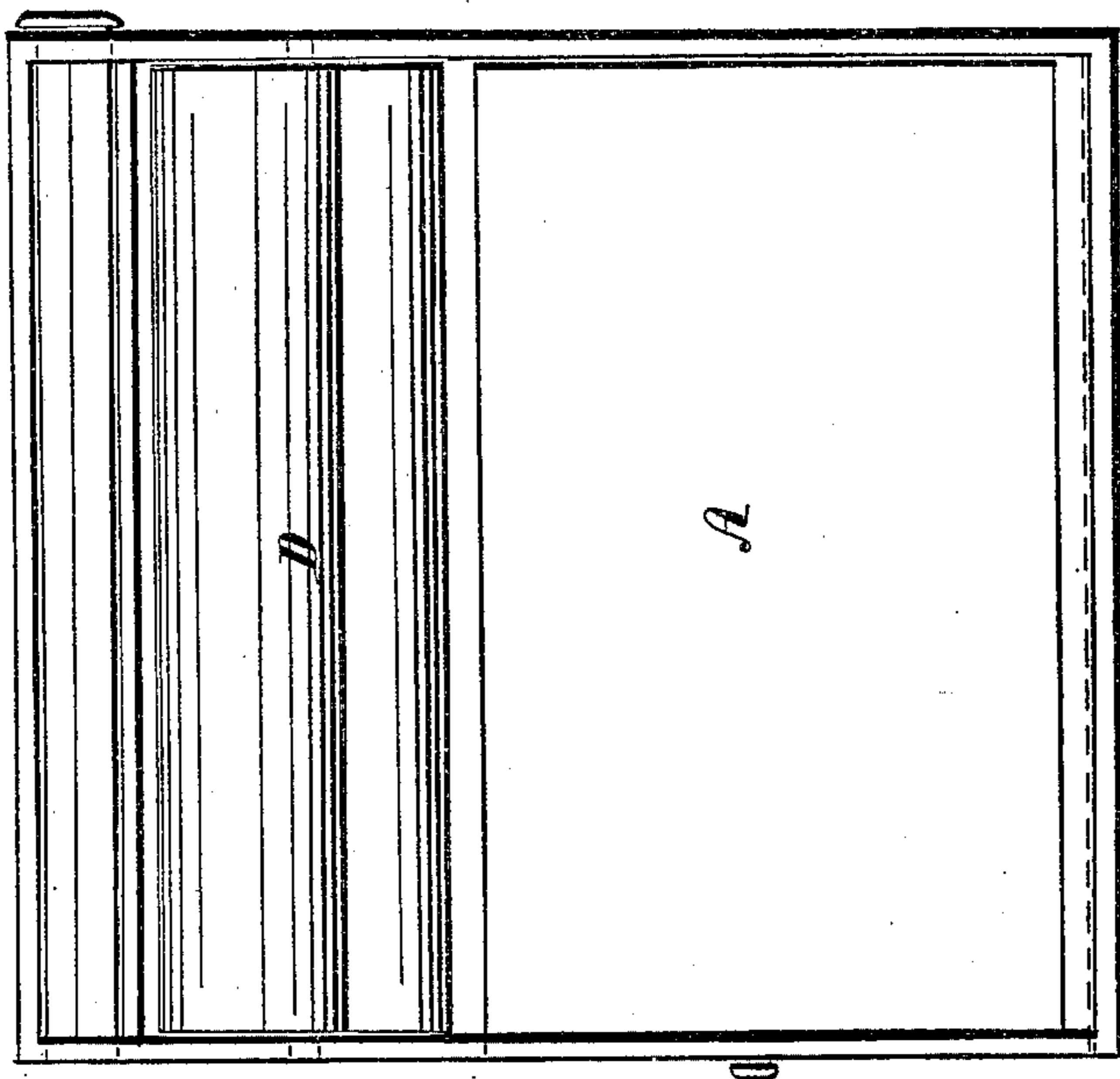
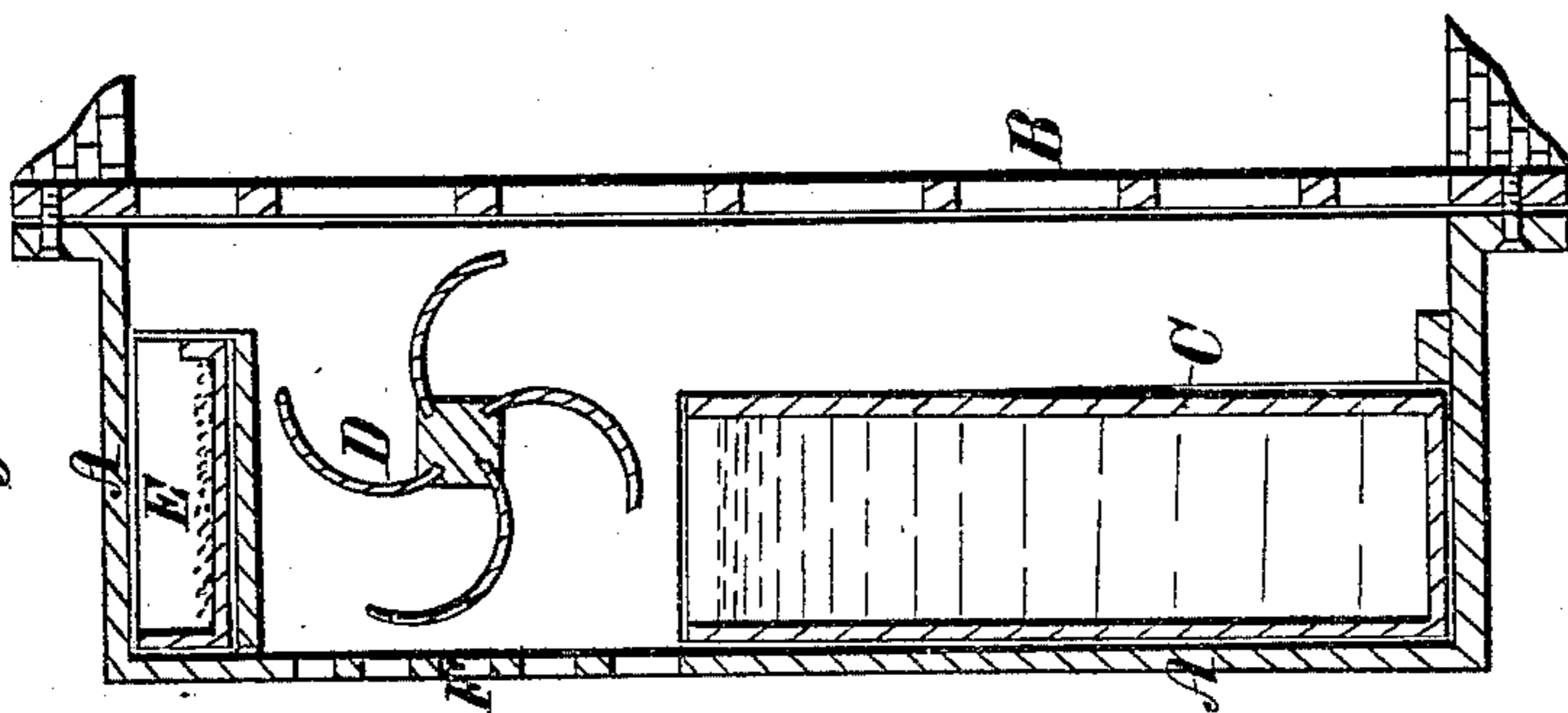


Fig. 2



Witnesses;  
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# United States Patent Office.

HECTOR SINCLAIR, OF NEW YORK, N. Y.

*Letters Patent No. 81,695, dated September 1, 1868.*

## IMPROVEMENT IN HOT-AIR REGISTER ATTACHMENT.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, HECTOR SINCLAIR, of the city, county, and State of New York, have invented a new and improved Hot-Air Register Attachment; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The nature of my invention relates to an improved attachment for hot-air registers, for purifying the hot air from dust, moistening it, and medicating or perfuming it as it passes from the registers of ordinary construction into the room; and it consists in an attachment made of wood, metal, or any other suitable material, conveniently arranged, so as to be secured to the wall in front of the register, containing a reservoir of water, a fan-blower, and a receptacle for the dust, the said fan-blower being set in motion by the current of heated air, and revolved in a direction to discharge the dust into a receptacle and prevent it from passing into the room, and the contact of heated air against the water-reservoir producing a vapor that rises and mixes with said hot air and passes into the room. The water may be medicated or perfumed, if desired, whereby beneficial results may be attained in case of sickness or of infected apartments, as will be more fully described on reference to the accompanying drawings, in which—

Figure 1 represents a front view of my improved hot-air attachment, and

Figure 2 a side view of the same.

Similar letters of reference indicate corresponding parts.

A, in the drawings, represents the casing, which may be attached to the wall in front of the register, B, by screws, or any other suitable means.

B represents the register, as ordinarily arranged within the wall, and through which the heated air is received into the room.

C represents the water-reservoir, which may be arranged to slide into the casing from one side of the same.

D is the fan-blower, having its journal-bearings in each side of the casing, and arranged above the reservoir, so that the column of hot air issuing from the register shall impinge upon the vanes mostly upon the back side of the blower, and cause that side to revolve in an upward direction.

E is a dust-box, above the blower, into which the dust is forced by the action of the blower, by reason of the particles of dust being somewhat heavier than the particles of air, and which remain in the said box by reason of the tendency of the particles of dust to adhere to each other when brought into contact, leaving the air free to separate from them and pass through the openings F, in the face of the casing, into the room. The said dust-box is also arranged to slide into and out of the casing, from one side of the same, by which the operation of removing and emptying out the accumulated dust from time to time is facilitated.

I do not limit myself, however, to the particular construction herein described, as various other plans of constructing the same may be adopted without departing from the spirit of my invention.

Pure water may be used in the reservoirs for ordinary use, but I contemplate medicating the same in case of rooms occupied by sick persons, or in times of contagious diseases prevailing, and for fumigating purposes. And I also contemplate perfuming the reservoirs, and emitting from the same into the room, such healthful or aromatic vapors as may be best suited to the health or taste of the occupant of the room.

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

1. An attachment for hot-air registers, provided with a hollow dust-separating mechanism, substantially as and for the purpose described.

2. The combination, with a hot-air register, of the casing F, fan-blower D, and dust-pan E, substantially as and for the purpose described.

3. The combination, with a hot-air register, of the casing F, reservoir C, and fan-blower D, substantially as and for the purpose described.

4. In combination with a hot-air register, a fan-blower, dust-receptacle, and water-reservoir, substantially as described, for the purpose specified.

The above specification of my invention signed by me, this twenty-fifth day of February, 1868.

HECTOR SINCLAIR.

Witnesses:

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