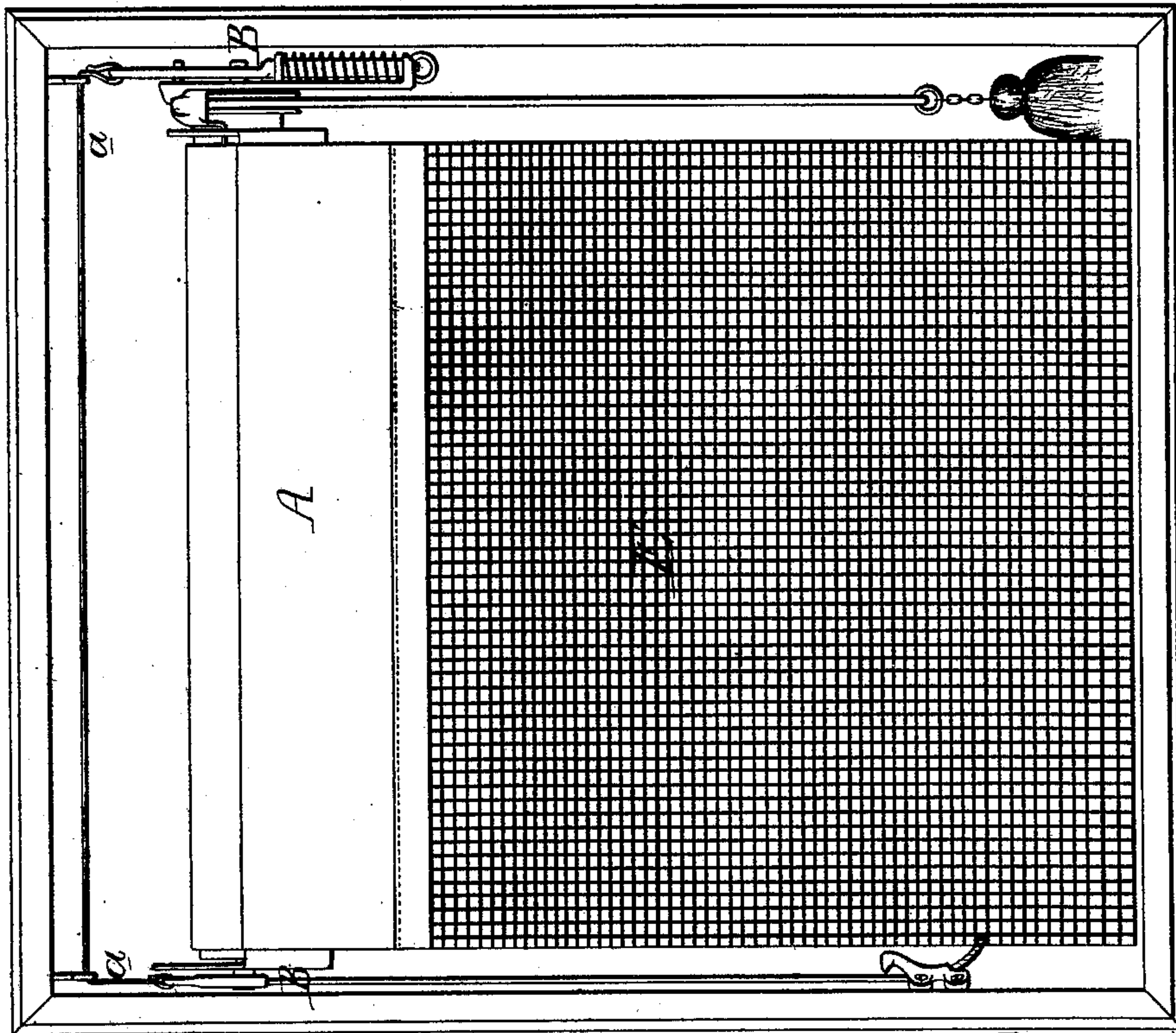
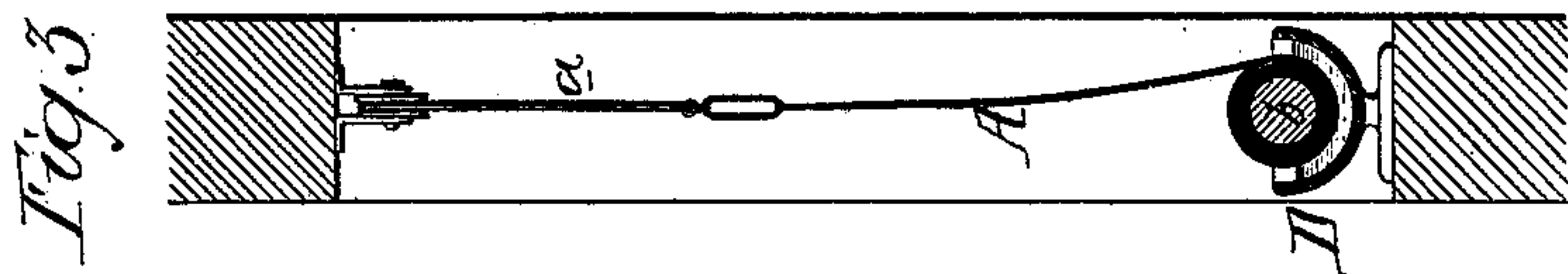
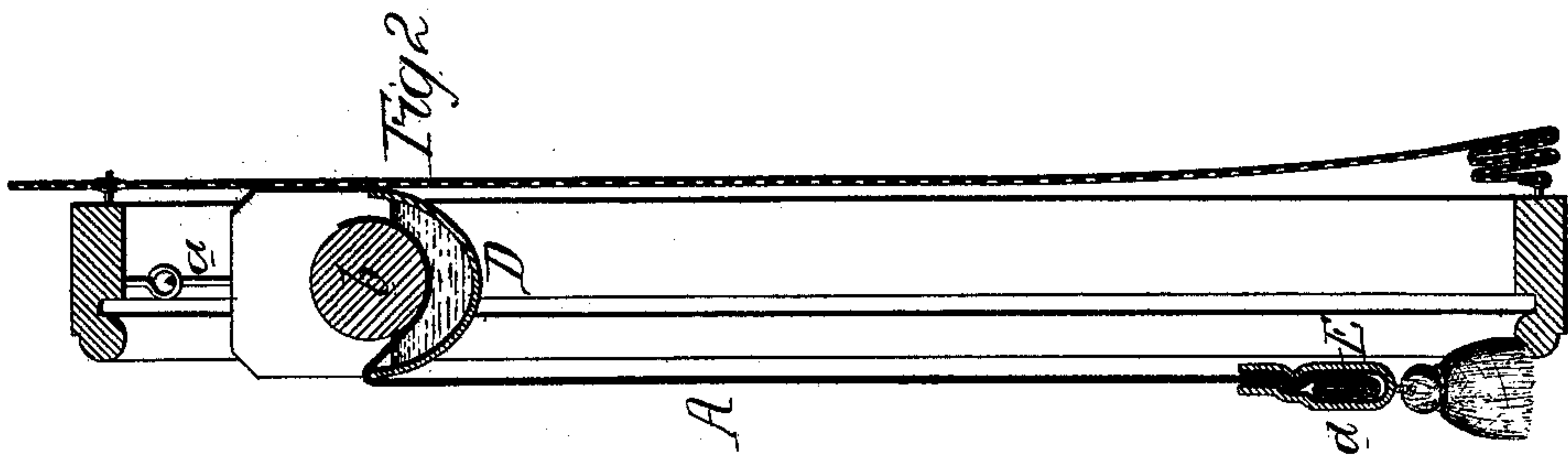


B. W. JAMES.
COOLING OR DISINFECTING THE AIR OF ROOMS.
 No. 195,374. Patented Sept. 18, 1877.



Witnesses

Hermann Högessner
Harry Smith

Fig 1

Inventor
Bushrod W. James
by his Attorneys
Howson and son

UNITED STATES PATENT OFFICE.

BUSHROD W. JAMES, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN COOLING OR DISINFECTING THE AIR OF ROOMS.

Specification forming part of Letters Patent No. **195,374**, dated September 18, 1877; application filed May 1, 1877.

To all whom it may concern:

Be it known that I, BUSHROD W. JAMES, of Philadelphia, Pennsylvania, have invented an Improvement in Cooling or Disinfecting the Air of Rooms, of which the following is a specification:

The object of my invention is to rapidly and thoroughly effect the cooling or disinfecting of the air within an apartment—an object which I attain in the following manner:

It is well known that water, alcohol, ammonia, ether, and other liquids have a tendency during evaporation to cool or purify air, and advantage has been taken of this fact in cooling and disinfecting rooms, &c., by placing therein dishes or receptacles containing a supply of the substance to be evaporated. The objection to this plan, however, is that the effective surface for evaporation is necessarily too limited to insure the rapid and thorough cooling or purification of the air in the room.

I overcome the difficulty in the manner described hereinafter, reference being had to the accompanying drawings, in which—

Figure 1 is a front view of my improvement; Fig. 2, a vertical section; and Fig. 3, a view of a modification.

In Figs. 1 and 2, A represents a curtain, and B B the hangers of the same, the latter being, in the present instance, suspended by cords *a* from a frame attached to or forming part of a window or bed or other structure, so that they can be raised and lowered, and being provided with a spring arrangement, which retains the curtain-roller *b* in any position to which it may be turned. Secured to these bearings, and extending across from one to the other, is a trough, D, which contains the cooling or disinfecting liquid, and in the latter the roller *b* is partially immersed, so that the complete saturation of the curtain can be effected by first raising it to its fullest extent and then lowering it. Secured to the bottom of the curtain A is an extension, E, of netting, which may be used when the saturation of the curtain A does not cause evaporation as

rapidly as is desired, this extension forming, in effect, part of the curtain proper, and being saturated in the same manner.

When not in use, the netted portion E may be folded and covered by a bag or case, *d*, or removed altogether.

It will be evident that the above-described arrangement of parts need not be strictly adhered to in carrying out my invention in connection with window-shades, as the trough D may be independent of the curtain-fixtures, and the latter may be made in any of the usual ways, and may be either fixed or movable.

In Fig. 3 I have shown the trough attached to the window-sill, and the curtain-roller within the same, the elevation of the curtain being effected by cords passing over pulleys at the top of the frame. It may, however, be made to form an addition to the ordinary curtain by attaching it to the lower end of the same by hooks or otherwise.

My invention may also be used with advantage in cases where certain remedies have to be administered to the patient by constant inhalation—such, for instance, as the vapor of a solution of bromine in cases of membranous croup—as the invention affords facilities for thoroughly saturating the air of the apartment with the vapor of the medicinal agent to be employed.

I claim as my invention—

A cooling or disinfecting apparatus consisting of a frame and a trough, D, carried by the frame, in combination with a roller suspended partly within the said trough, and a curtain passing under or around said roller, and adapted to be raised and lowered, all substantially as described.

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

BUSHROD W. JAMES.

Witnesses:

HERMANN MOESSNER,
HARRY SMITH.