

No. 677,084.

Patented June 25, 1901.

J. HUDLER.

INCANDESCENT GAS LIGHT BURNER.

(Application filed Sept. 1, 1900.)

(No Model.)

Fig. 1.

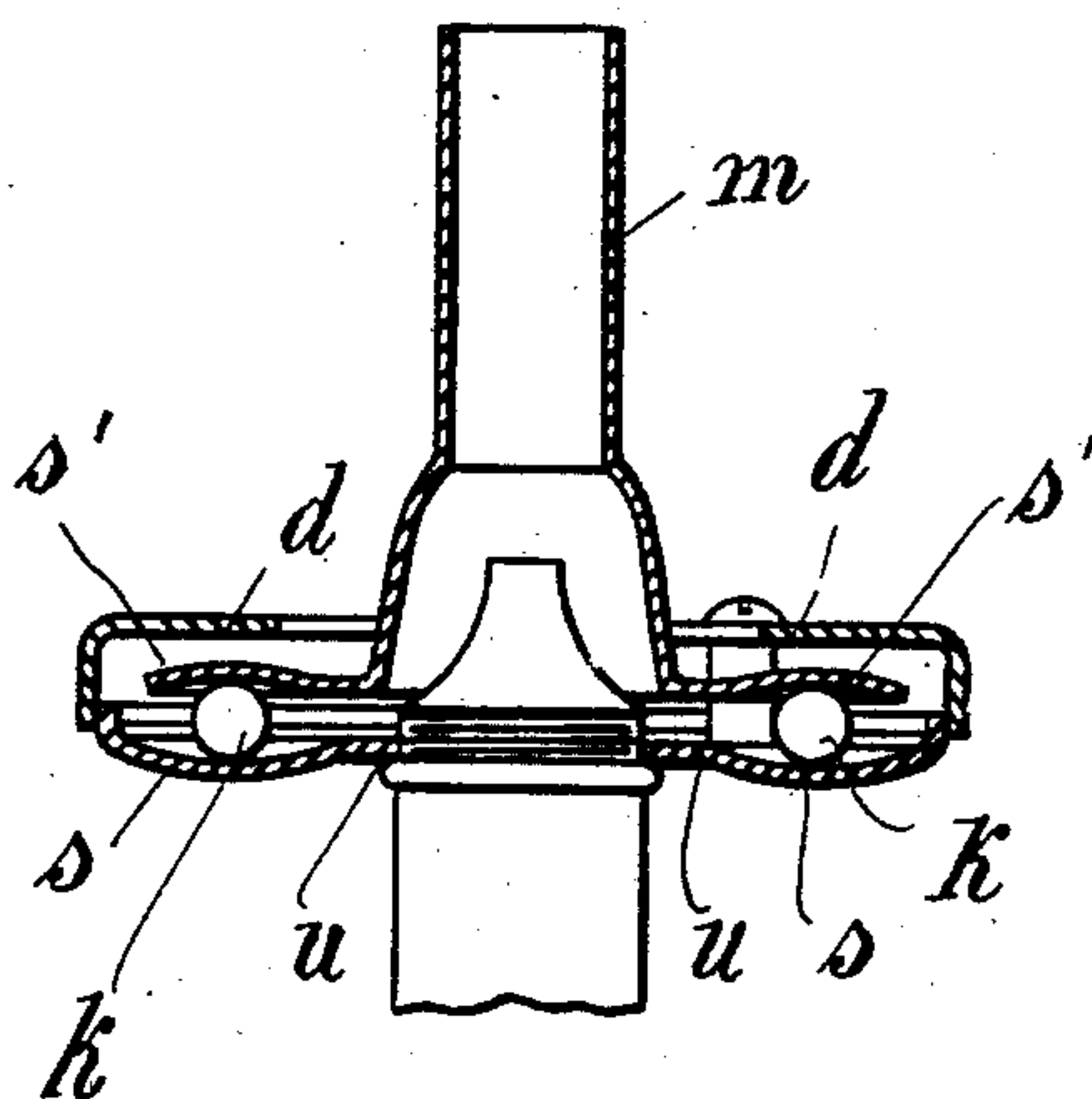
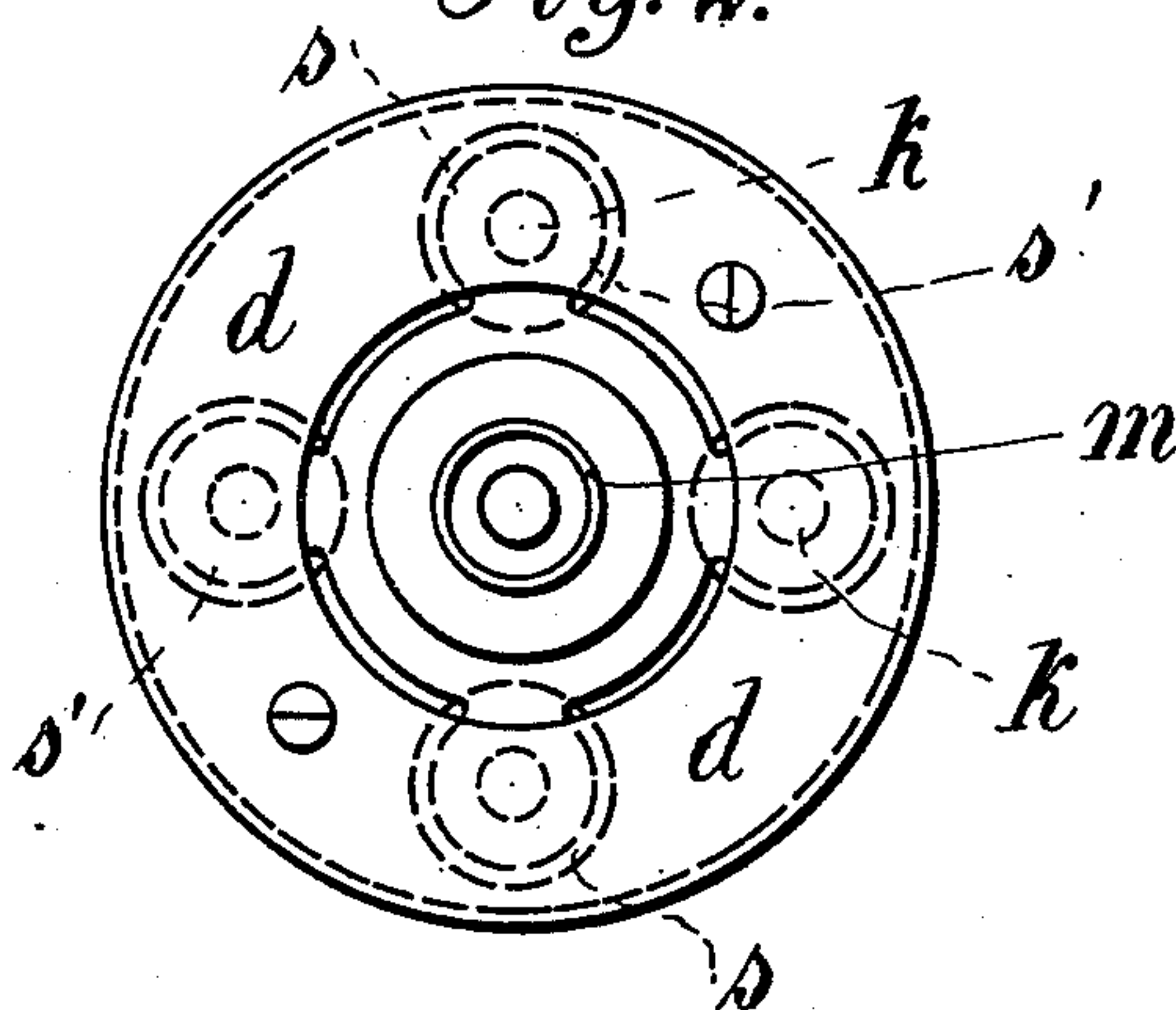


Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOSEPH HUDLER, OF GLAUCHAU, GERMANY.

INCANDESCENT GAS-LIGHT BURNER.

SPECIFICATION forming part of Letters Patent No. 677,084, dated June 25, 1901.

Application filed September 1, 1900. Serial No. 28,816. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH HUDLER, a subject of the King of Bavaria, and a resident of Glauchau, Kingdom of Saxony, Germany, have invented certain new and useful Improvements in Incandescent Gas-Light Burners, of which the following is a full, clear, and exact description.

The present invention consists of a device in connection with incandescent gas-burners for compensating lateral shocks and preventing them from being transmitted to the mantle or hood.

The devices hitherto employed for compensating the shocks which incandescent gas-burners have to withstand consist, mainly, in spring devices, by means of which, however, vertical or substantially vertical shocks only will be compensated. Shocks, however, which take place in a substantially horizontal plane will not be affected by this class of compensating mechanism.

In order to render the present specification easily intelligible, reference is had to the accompanying drawings, in which similar letters of reference denote similar parts throughout both views.

Figure 1 is a vertical section through the parts of an incandescent burner necessary for explaining the present invention, and Fig. 2 is a plan view of Fig. 1.

Upon the gas-nozzle of the burner a plate *u* is mounted, having a series of shallow rounded depressions *s s* therein, in each of which a ball *k k* is placed. The mixing-tube of the burner, which, as is well known, supports the mantle-carrying arm, is flared out at the bottom to form a series of shallow caps *s' s'*, corresponding to the series of depressions in the plate *u*. A cap *d*, having a large circular central opening surrounding the lower part of the mixing-tube *m*, is screwed or otherwise attached to the plate *u* and serves to hold the whole device together.

The device operates in the following manner: Any lateral shocks imparted to the gas-pipe, supporting-pipe, or plate *u* in a horizontal or substantially horizontal direction will transmit motion to the balls *k k*, and thus no shock will be transmitted to the mixing-tube *m* and mantle, since these parts will

only suffer a slight rolling movement on the balls, which will in no way cause damage to the mantle.

Instead of the dips and caps *s* and *s'* an annular shallow groove might be formed in the plates which would serve the same purpose. It will also be obvious that the cap *d* might be attached to the top plate and grip loosely around the bottom plate *u* instead of in the manner shown. As will be readily understood, the shallow groove or dip might be formed in one of the two plates only instead of in both.

I claim as my invention—

1. In an incandescent gas-burner the combination of a horizontal plate having recess therein and mounted on the end of the gas-pipe, a mixing-tube, an upper plate, balls inserted between the two plates and means for incasing the movable parts substantially as described.

2. In an incandescent gas-burner the combination of a horizontal plate mounted on the gas-pipe in proximity to the gas-nozzle and having shallow recesses or dips, and a mixing-tube having flared end with corresponding shallow caps, a series of balls within the said recesses and a cap attached to one of the plates and overgripping the other loosely in the manner and for the purpose substantially as described.

3. In an incandescent gas-burner the combination of a supporting-plate *u* mounted on the gas-pipe below the gas-nozzle, and provided with a series of shallow dips, a mixing-tube having a flared plate at its lower end, said plate having a corresponding series of shallow caps, a series of balls arranged between the caps and dips of the two plates, a cap *d* having a large central orifice loosely inclosing the mixing-tube, said cap being fixed to the supporting-plate in the manner and for the purpose substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

JOSEPH HUDLER.

Witnesses:

F. J. DIETZMAN,
H. THIELE.