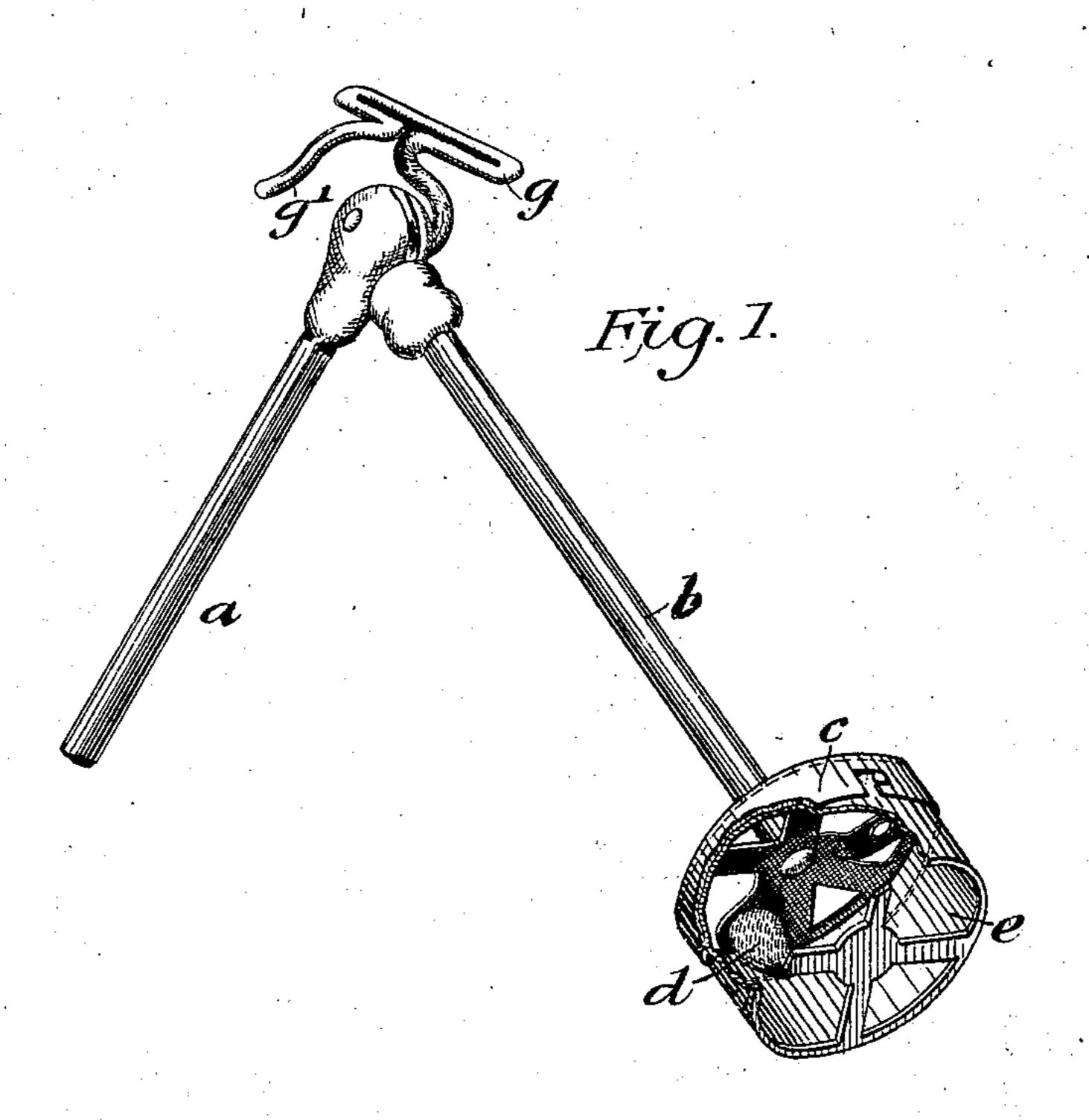
No. 692,589.

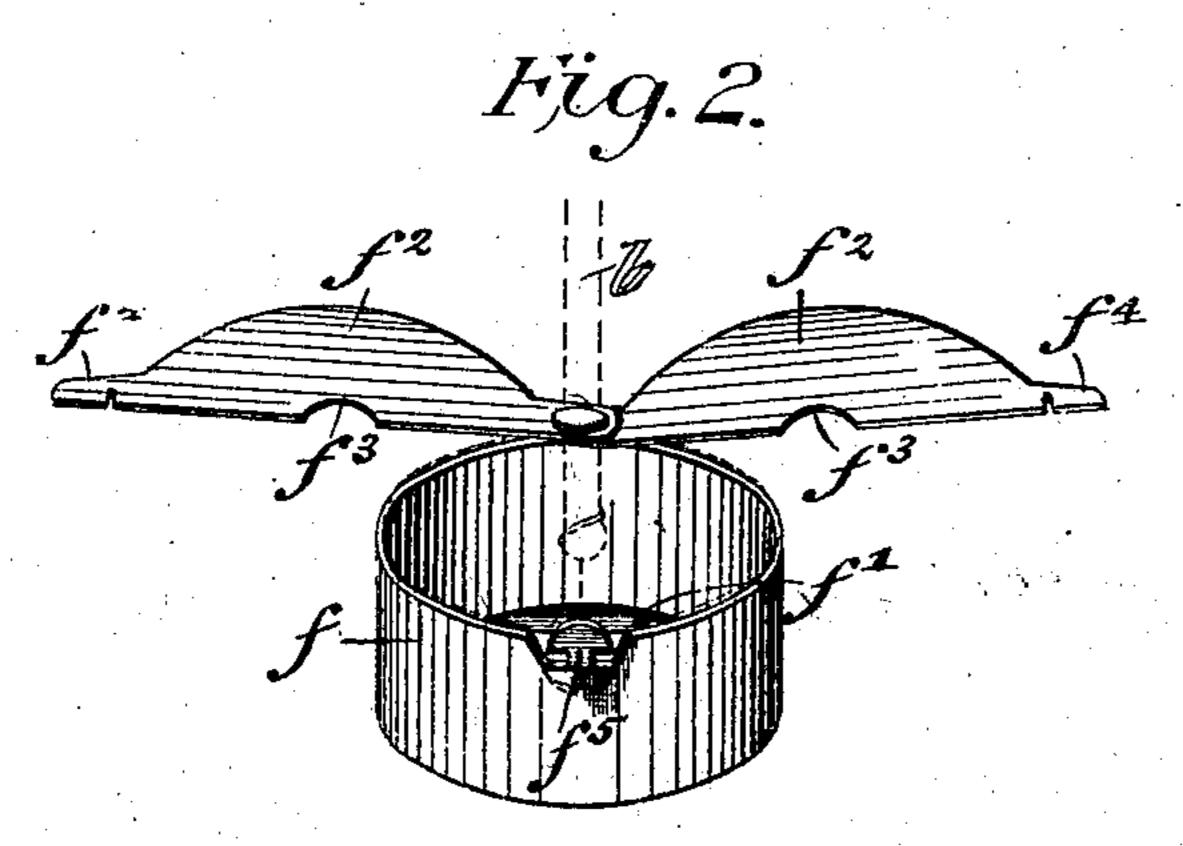
Patented Feb. 4, 1902.

## A. BACHNER. GAS LIGHTING DEVICE.

(No Model.)

(Application filed Apr. 21, 1899.)





Walter Wallheim. Joseph H. Niles.

Adolf Bachner,
BY Journal Malle
ATTORNEYS

## United States Patent Office.

ADOLF BACHNER, OF BERLIN, GERMANY.

## GAS-LIGHTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 692,589, dated February 4, 1902.

Application filed April 21, 1899. Serial No. 713,964. (No model.)

To all whom it may concern:

Be it known that I, ADOLF BACHNER, a citizen of the Empire of Germany, residing in Berlin, Germany, have invented certain new and useful Improvements in Gas-Lighting Devices, of which the following is a specification.

This invention relates to improvements in lighting devices of that class in which ignition is effected by means of the impact of a 10 jet of combustible gas upon a body of catalytic igniting material; and the object of the invention is to provide means for easily and conveniently lighting the gas by means of a body of such material and means for protect-15 ing the igniting-body from injury and from deterioration when not in use; and the invention consists of an igniting apparatus comprising a rod, an arm pivoted thereto, a protecting-cage at the end of said arm, a 20 catalytic igniting-body in said cage, and a removable cap for inclosing said cage and igniting-body for preventing deterioration of the latter, said cap consisting of a body portion adapted to surround the body of the cage, a 25 projecting lug on said body portion, a closed bottom, and a top composed of two plates pivoted to one side of the body portion and provided with recesses for accommodating the arm, and lugs at the outer ends of said plates 30 adapted to engage the projecting lug of the body portion; and the invention consists, further, of an igniting apparatus comprising a rod, a key at the end of said rod, an arm pivoted to said rod adjacent said key, and a stop 35 extending from said key into the path of said arm and forming a rest for the same.

In the accompanying drawings, Figure 1 represents a perspective view of my improved gas-lighting device with the cap removed, and 40 Fig. 2 is a perspective view of the cap.

Similar letters of reference indicate corre-

sponding parts.

Referring to the drawings, a indicates a rod of any suitable length, to the upper end of 4; which is pivoted an arm b. At its outer end said arm carries a cage for containing the igniting-body. Said cage is composed of a flanged plate c, which is attached to the arm b and to which the catalytic igniting-body d is secured in any suitable manner. To the flanged plate c is secured by means of a bayo-

net-joint, as shown, or by any other means a detachable guard portion e. The flanged plate c and guard portion e are provided with openings and form together the cage within 55 which is carried the igniting-body, so that the same is protected against injury by contact with the gas-jet when lighting the gas.

For protecting the igniting-body d against deterioration a removable cap is provided. 60 This cap consists of a side wall f of such size as to surround the guard-cage at the sides, a bottom f', and a top composed of two plates  $f^2$ , each pivoted at one end to the side wall or body portion f and of such size and shape 65 as to swing together and close the body portion with a practically hermetical degree of tightness, or, in other words, so that no air-currents can circulate about the igniting-body. Each hinged plate is provided at its edge ad- 70 jacent the opposite plate with a recess  $f^3$  for accommodating the arm b when the plates are closed together. The plates are provided at their outer ends with recessed lugs  $f^4$ , which when the plates are swung into closed 75 position engage a recessed lug  $f^5$ , projecting from the side wall f, thereby retaining the plates in close contact with the body and securing a tight closure of the cap about the igniting-body and its guard-cage.

A key g for turning the cock of the gasburner is secured to the rod a and provided with a stop g', extending outwardly into the path of the arm b, so that when the latter is swung into upward position it rests against 85 and is supported by the stop g'.

When the gas-lighting device is to be used, the cap is removed from the guard-cage, the key g applied to the gas-cock, and the gas turned on. The arm b during this operation 90 is in lowered position, as shown in Fig. 2, so as to be out of the way and permit applying the key g to the gas-cock. After the gas is turned on the arm b is raised into position against the stop g'. By now holding the apparatus so that the gas issuing from the tip of the gas-burner impinges upon the igniting-body d the gas is lighted. The cap is then replaced over the cage, so as to prevent deterioration of the igniting-body when the apparatus is not in use.

Having thus described my invention, I

claim as new and desire to secure by Letters Patent—

1. An igniting apparatus, consisting of a rod, an arm pivoted thereto, a protecting5 cage at the end of said arm, a catalytic igniting-body in said cage, and a removable cap
for inclosing said cage and igniting-body for
preventing deterioration of the latter, said
cap consisting of a body portion adapted to
surround the body of the cage, a projecting
lug on said body portion, a closed bottom,
and a top composed of two plates pivoted to
one side of the body portion and provided
with recesses for accommodating the arm, and
15 lugs at the outer ends of said plates adapted

to engage the projecting lug of the body por-

tion, substantially as set forth.

2. An igniting apparatus, consisting of a rod, a key at the end of said rod, an arm pivoted to said rod adjacent said key, and a stop 20 extending from said key into the path of said arm and forming a rest for the same, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in pres- 25

ence of two subscribing witnesses.

ADOLF BACHNER.

Witnesses:

WOLDEMAR HAUPT, HENRY HASPER.