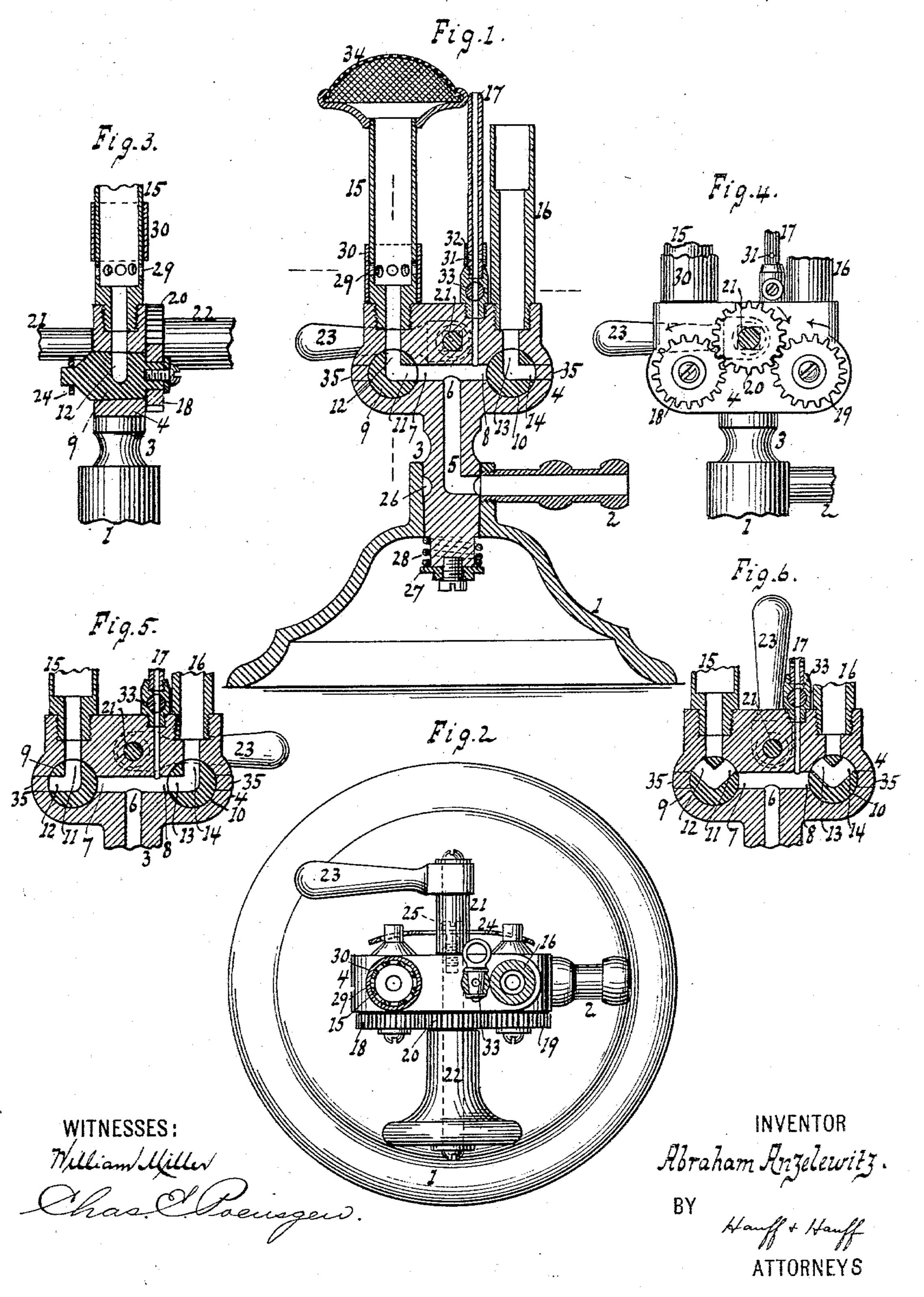
(No Model.)

## A. ANZELEWITZ. GAS BURNER.

No. 597,600.

Patented Jan. 18, 1898.



## United States Patent Office.

ABRAHAM ANZELEWITZ, OF NEW YORK, N. Y.

## GAS-BURNER.

SPECIFICATION forming part of Letters Patent No. 597,600, dated January 18, 1898.

Application filed July 22, 1897. Serial No. 645,570. (No model.)

To all whom it may concern:

Be it known that I, ABRAHAM ANZELEWITZ, a subject of the Emperor of Russia, residing at New York, in the county and State of New 5 York, have invented new and useful Improvements in Gas-Burners, of which the following

is a specification.

This invention relates to so-called "jewelers' gas-lamps" or, as they might be called, ro "triplex burners" used by jewelers and others, the object of the invention being to secure such a burner which is durable, reliable, and practically manipulated; and the invention resides in the novel features of con-15 struction set forth in the following specification and claim and illustrated in the annexed drawings, in which—

Figure 1 is a sectional elevation of the burner. Fig. 2 is a plan view of Fig. 1, partly 20 sectioned. Fig. 3 is a sectional view of the heating-burner. Fig. 4 shows gears for actuating the cocks. Figs. 5 and 6 show parts in different positions from that shown in Fig. 1.

A foot 1 connects by spout 2 or other suit-25 able connection with a fuel-supply or gas pipe, a rubber hose, as known, being generally used to couple the spout to the pipe. This foot is perforated or has seated therein the stem 3 of a head or support 4. The stem 30 and head have passages or gas-channels 5, 6, 7, and 8, and the head forms seats for cocks

or plugs 9 and 10.

The cock 9 is shown with a channel 11 12, of which the inlet is at 11 and the outlet at 35 12. The cock 10 has the inlet at 13 and the outlet at 14. The cock 9 when open allows gas or combustible to feed to or supply the heating-burner 15, suitable for such operations as, for example, soldering or blowpipe work. 40 The cock 10 when open allows feeding of the light or illuminating burner 16. A torch 17, suitably fed, as from channel 8, if kept permanently lighted, can serve as an igniter or automatic lighter for either burner 15 or 16, 45 according as gas flows from one or the other of such burners. The cocks 9 and 10, being made separate or independent of one another, can each be readily fitted into place or separately removed and replaced, as for cleaning 50 or repair, when required. By having the cocks alternating, as seen by Figs. 1 and 5, so that one is closed or closes while the other is open or opens, only one of the burners can be fed at one time. If, for instance, the burner 15 is fed, the cock 10 of burner 16 is 55 closed, and conversely.

The cocks are shown with gears 18 and 19, connected or engaged by gear 20 on shaft 21, placed between the gears 18 19 or their cocks and having handles 22 and 23. When turned, 60 the shaft 21 actuates the cocks 9 and 10 to make the latter alternate as desired. The cocks when both placed to have their channels or inlets 11 and 13 out of communication with the passages 7 and 8, Fig. 6, will shut 65 off the flow from both burners.

A practical arrangement is to have the parts so adjusted or set that when the finger or handle 23 is in central position, say pointing vertically either upward or downward, 70 both cocks 9 and 10 are closed, while a swing or quarter-turn of handle 23 toward cock 9 will open the latter, or a swing of such handle to point toward cock 10 will open such other cock.

The cocks being ground or fitted to their seats with a proper taper, the spring 24 can be made to engage or press such cocks properly to their seats or take up wear or prevent leakage. The spring 24 is shown secured to head 80 4 by a screw or fastening 25. The actuatingshaft 21 being extended through the head 4 and having the handles 22 and 23 on opposite sides of such head, one or another of said handles will be readily accessible or with- 85 in reach of the operator while the burner is in use.

At times it may be required to turn the head 4 to bring one burner or another into a certain position. To have the foot 1 turn with 90 the head might cause the rubber hose feeding to spout 2 to kink or perhaps trail over the work-table, causing confusion or loss among the articles thereon. For avoiding inconvenience the head 4 is shown as having 95 its stem 3 rotatively set in the foot 1. The stem is shown channeled, as at 26, Fig. 1, so that gas from the passage through the foot or spout 2 can pass through channel 26 into the stem-passage 5, no matter to what position roo the stem may be rotated. The foot is perforated for the insertion of the stem, and the latter at its lower or free end is provided with a nut or flange 27. A spring compressed beproperly seated. Supposing, for example, the device should be lifted by grasping the head 4, the weight of the suspended foot 1 5 tending to separate the latter and the stem 3 might cause leakage at the joint between the foot and stem; but the spring 28 properly applied can be made to prevent such leak or separation.

The heat-burner 15 to secure proper heating is shown with a Bunsen appliance or in form of a Bunsen burner, having lateral or air inlets at 29, the inflow or supply of air through which can be regulated by valve or 15 sleeve 30 as the latter is adjusted up or down on the burner.

The torch 17 is shown as being fed from passage S, and said torch is adapted for giving a small or pointed jet or flame, and when pro-20 vided with air-openings 31 and sleeve or valve 32, with cock 33, such torch can be made to give a regulatable pointed Bunsen flame, useful under certain circumstances—as, for example, cementing stones in place or heating 25 small spots or objects.

The heating-burner has a cap or gauze 34, which being detachably connected or screwed in place can be removed when required.

The cocks 9 and 10 both have their inlet 30 and outlet a quarter-turn apart, or a distance of ninety degrees from inlet 11 to outlet 12 or from inlet 13 to outlet 14. Only a slight turn of the cocks from the closing position (shown in Fig. 6) is thus required to open one cock 35 or another, as seen in Figs. 1 and 5, and the gears are readily applied or adjusted for actuating or setting the cocks.

If seen fit, the gears 18 and 19 could be meshed directly to one another and gear 20 40 dispensed with. In such case a handle applied to one or another of the cocks would

tween the nut 27 and the foot I holds the stem | serve for setting or opening and closing the same.

> These lamps being generally made alike, any one part—as, for example, a cock or other 45 element—from one lamp can be transferred to another without adjustment or fitting being required.

> The gears 18 and 19 are shown as wheels: but such form of gears can of course be va- 50 ried-as, for example, these gears 18 and 19 might be made to answer when in segmental or sector form. The stem 3 instead of being applied to a foot 1 might be applied directly to a gas-pipe if seen fit. The head 4 can be 55 suitably formed of sections channeled and secured together or of one piece, having the channels bored therethrough, suitable plugs or closures, as 35, being applied when necessary to close a boring or channel part. The 60 illuminating-burner 16 can have a suitable tip, as known.

What I claim as new, and desire to secure by Letters Patent, is-

A heating-burner and a light-burner, com- 65 bined with a supporting head and stem for the burners, said head being provided with passages, independent alternating cocks or plugs for the passages, an actuating-shaft for the cocks extended through and provided 70 with a handle on each side of the head, and a foot on which the stem is rotatively mounted, said foot and stem being provided with communicating passages substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ABRAHAM ANZELEWITZ.

Witnesses:

WM. C. HAUFF, CHAS. E. POENSGEN.