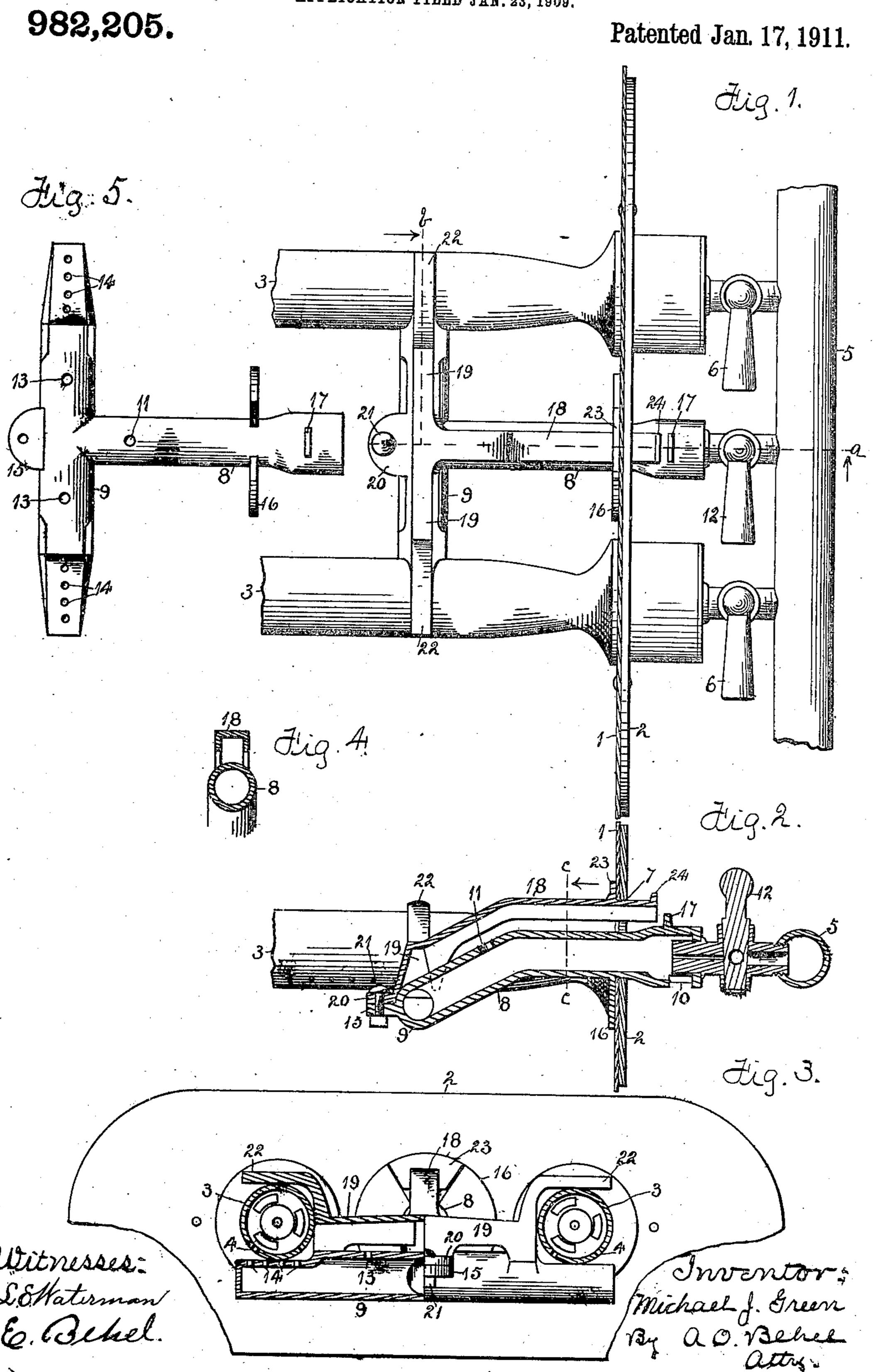
M. J. GREEN.

GAS BANGE.

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## UNITED STATES PATENT OFFICE.

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## GAS-RANGE.

982,205.

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To all whom it may concern:

Be it known that I, MICHAEL J. GREEN, a citizen of the United States, residing at Rockford, in the county of Winnebago and 5 State of Illinois, have invented certain new and useful Improvements in Gas-Ranges, of which the following is a specification.

The object of this invention is to provide means for igniting the burners of a gas

10 range employed to heat the oven.

In the accompanying drawings, Figure 1 is a plan view of the oven burners and my improved igniter in connection therewith, the wall of the oven being in section. Fig. 15 2 is a section on dotted line a Fig. 1. Fig. 3 is a section on dotted line b Fig. 1. Fig. 4 is a section on dotted line c c Fig. 2. Fig. 5 is a plan view of the burner portion of the

igniter. My improvements are applicable to the burners for supplying heat to the ovens of gas ranges, and I have not deemed it necessary to show a complete range, but only one wall thereof with which my improvements

25 have a connection.

To the wall 1 of the range is secured a plate 2 provided with two openings through which the two burners 3 project, each of the burners is provided with gas outlets 4 on 30 its underface. These burners have a connection with a gas supply pipe 5 through the cocks 6 which regulate the supply of gas to the burners.

The plate 2 is formed with an opening 7 35 midway between the burners 3. An igniter burner comprises the intake tube 8 and the cross-tube 9. The intake tube has an air inlet 10, and gas outlet 11. A cock 12 connected with the intake tube 8, and the gas 40 supply pipe 5 regulates the quantity of gas

supplied to the intake tube.

The cross-tube has two gas outlet openings 13 in its center portion, and a series of gas outlet openings 14 near each end in its 45 upperface. From the center of the crosstube extends a perforated lip 15.

A segmental collar 16 is formed integral with the intake tube 8 near its open end, and between this collar and the open end of the 50 intake tube extends a vertically arranged bar 17.

A hood or gas director is formed with the main portion 18 overlying the intake tube 8, and the wings 19 overlying the cross-55 tube 9. A perforated lip 20 extending from

the wings 19 is connected to the lip 15 by the bolt 21, thereby connecting the hood to the igniter burner. The end of each of the wings 19 is formed with an upwardly curved portion 22. The free end of the main 60 portion 18 of the hood projects through the opening 7 in the plate 2, and is formed with a curved flange section 23 to make a complete collar when placed in cut away portion of the segmental collar 16 as shown 65 at Fig. 3. A lip 24 rises from the main portion of the hood.

The cross-tube 9 has its ends located against the underface of the oven burners 3, and the curved sections 22 of the wings 70 19 rest on the upperface of the burners as

shown at Fig. 3.

In use, gas is admitted through the intake tube 8 by turning the cock 12, which will escape through the openings 13 into the 75 wings of the hood, and through the opening 11 into the main portion of the hood which will escape at the free end of the main portion of the hood where it is ignited, and after being ignited, the blaze will follow 80 back beneath the hood until the openings 14 are reached, when the gas escaping through these openings will be ignited.

The cocks 6 to the oven burners 3 are then opened which will admit gas to the burners 85 which will escape through the openings 4, when it will be ignited from the flame burning at the openings 14, in the igniter burner. The cock 12 supplying gas to the igniter burner is then turned off.

If at any time it is deemed necessary to know if the burners for the oven are burning, by opening the cock 12 thereby admitting gas to the igniter burner, the gas will be ignited, and will show a blaze at the free 95 end of the main portion 18 of the hood adjacent to the bar 17. This bar 17 serves to direct the flame upwardly and therefore constitutes a flame deflector.

I claim as my invention.

1. The combination with a stove casing, of a main burner located therein, an igniter burner located adjacent to the main burner and having perforations, means for supplying gas to the burners, and a hood extending 105 through the casing and being located over the igniter burner, said hood projecting outwardly beyond the outer face of the casing and the perforations of the burner terminating short of the outer end of the hood.

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2. The combination with a stove casing, of a main burner located therein, an igniter burner located adjacent the main burner, a gas supply pipe located outside the casing and connected to the igniter burner, a controlling valve in the pipe, a hood extending through the casing and being located over the igniter burner, and a flame deflector interposed between the outer end of the hood and the controlling valve.

3. The combination with a main burner, of an igniter burner associated therewith and having a segmental collar, and a flame directing hood located over the burner and having a flange section that engages the seg-

ments of the burner collar.

4. The combination with a main burner, of an igniter burner pipe extending on one side of the main burner and perforated, and a flame directing hood located in spaced relation over the igniter burner and extending on the opposite side of the main burner.

5. The combination with a main burner, of a perforated igniter burner located against the under side of the main burner, and a flame directing hood located over the igniter burner in spaced relation thereto and engaged with the upper side of the main burner.

6. In a gas stove, the combination with spaced main burners, of a perforated igniter burner tube located between the main burners and having perforated branches extending thereto, and a flame directing hood lo-

cated over the igniter burner in spaced rela- 35 tion thereto and having branches extending to the main burners.

7. In a gas stove, the combination with spaced main burners, of a perforated igniter burner tube extending between the same and 40 having transverse perforated branches, the ends of which are disposed beneath the main burners, a hood located over the igniter burner in spaced relation thereto and having branches that extend over the main burn-45 ers, and means for securing the hood to the igniter burner and thereby holding said hood and igniter burner upon the main burners.

8. The combination with a casing, of a pair of spaced main burners located therein, an 50 igniter burner including an intake pipe having lateral branches extending beneath the main burners, a flame directing hood extending over the intake pipe and having branches extending over the branches of the 55 igniter burner and over the main burners, and means connecting the inner ends of the hood and igniter burner, said hood extending outwardly beyond the main casing, and an upstanding flame deflector located on the 60 intake pipe beyond the outer end of the hood.

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

nesses.

MICHAEL J. GREEN.

Witnesses:

A. O. Behel, E. D. E. N. Behel.