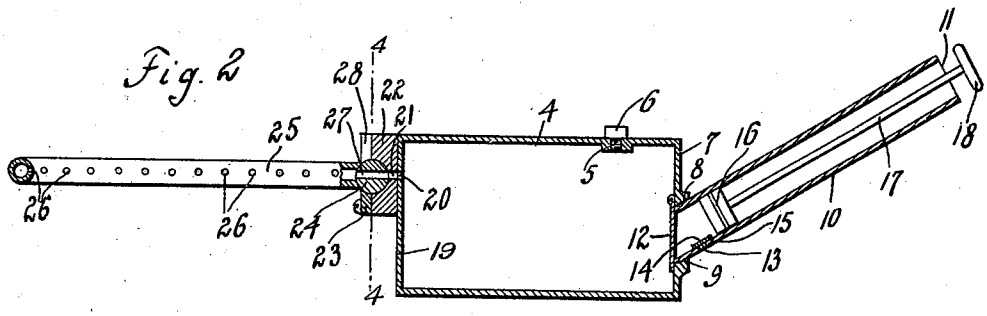
G. POELLOTH.

FIRE KINDLER.

APPLICATION FILED MAR. 2, 1911.

996,277. Patented June 27, 1911.

Fig. 2



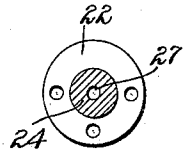


Fig. 4

Fig. 1

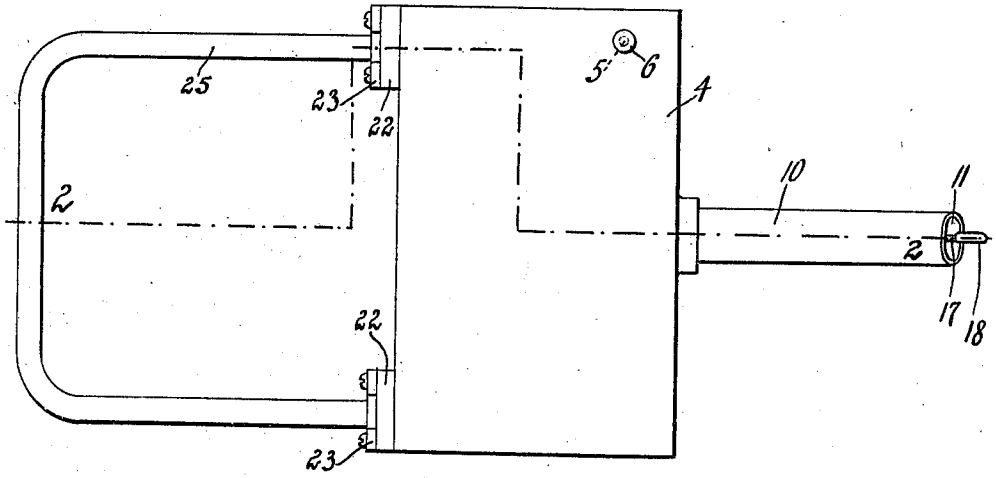
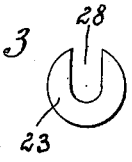


Fig. 3



WITNESSES

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FIRE-KINDLER.

996,277. Specification of Letters Patent. Patented June 27, 1911.

Application filed March 2, 1911. Serial No. 611,789.

To all whom it may concern:

Be it known that I, GEORGE POELLOTH, a subject of the German Emperor, and resident of the city of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Fire-Kindlers, of which the following is a specification.

The present invention relates to improvements in means for kindling fires, and has for one of its objects to provide a device of this character which is capable of manufacture on a commercial scale, or in other words which is not so difficult to produce as to be beyond the reasonable cost of such an article.

Another object of the invention is to produce a fire kindler which is adapted to be operated above or below the grate of a stove or the like to heat the fuel therein in a very short time to the point of ignition.

With these and other objects in view, which will appear as the nature of the invention is better understood, the same consists in the combination, arrangement and construction of parts hereinafter fully described, pointed out in the appended claims and illustrated in the accompanying drawings, it being understood that many changes may be made in the size and proportion of the several parts and minor details of construction without departing from the spirit or sacrificing any of the advantages of the invention.

One of the many possible embodiments of the invention is illustrated in the accompanying drawings, in which:—

Figure 1 is a plan view of the improved kindler; Fig. 2 is a section taken on line 2—2 of Fig. 1; Fig. 3 is a front elevation of a detail of construction; and Fig. 4 is a section taken on line 4—4 of Fig. 2.

In the drawings, the numeral 4 indicates a closed receptacle, which is provided with an opening 5 through which the liquid fuel is poured into said receptacle. This opening is normally closed by means of a plug 6 of any suitable construction. In one of its walls, and more particularly in the rear wall 7 of the receptacle, is formed a screw threaded opening 8, the threads 9 of which mesh with the threads of a tubular handle 10, which is open at its free end 11. To the inner surface of the wall 7 of the receptacle is hinged a disk valve 12, adapted to close the opening 8 in said wall. A perforation 13 is formed in the tubular handle 10 near to its inner end, and adapted to be closed by a disk valve 14, hinged at 15 to the inner surface of said tubular handle. A piston 16 of any suitable construction is reciprocatably arranged in said handle, and attached to a piston rod 17, the outer end of which carries an operating handle 18.

In the front wall 19 of the receptacle 4 are provided two openings 20, 20, registering with openings 21 in the flanges 22, 22 which are attached to the front wall 19. These flanges, together with the disks 23, 23 fastened thereto, form sockets for the spherical ends 24, 24 of a U-shaped tubular member 25, which is provided with perforations 26, 26 in the inner faces of its legs and base. In the spherical ends 24 of the U-shaped member are formed ducts 27, 27, which run in the direction of the longitudinal axes of the legs of the U-shaped member 25, and are adapted to register, when the U-shaped member is in its horizontal position, with the openings 21 and 20 in the flanges 22 and the wall 19 of the receptacle, respectively. The disks 23 have radially arranged vertical recesses 28, allowing thereby the U-shaped tubular member 25 to be brought into a substantially vertical position for a purpose to be specified.

The operation of the device is as follows: The receptacle is filled with a suitable liquid fuel, such as kerosene, and the U-shaped member brought into its nearly vertical position, whereby the ducts 27 therein will not register with the openings 21 and 20 in the flanges 22 and the wall 19 of the receptacle, respectively. When the piston 16 is now reciprocated, air will be drawn into the tubular handle 10 through the opening 13 thereof upon the outward stroke of the piston, which air will, upon the inward stroke of the piston, be transferred into the receptacle 4. In continuing this operation for some time, a pressure, depending upon the quantity of air forced into said receptacle, will be created in the same. Obviously the disk valve 12 will be automatically closed by the pressure in the receptacle, so that such pressure will be maintained therein as long as the tubular member 25 is held in its substantially vertical position. When now the U-shaped tubular member 25 is brought into its horizontal position, the liquid fuel therein will be caused by the air under pressure to pass out through the per-

forations 26 in the said tubular member in fine sprays to be readily ignited by a match or other igniting means. When the kindler is now placed into the ash pit of the stove in close relation to the fuel above it, its flames will heat the fuel in the stove resulting in a glowing hot fire within a few minutes, after which the kindler is removed from the ash pit. It is, of course, obvious that if, during the heating of the fuel, the pressure within the receptacle 4 descends below the normal, the pump can be operated while the tubular member 25 of the kindler is in the ash pit.

It will be noticed that it is not necessary to place the kindler into the ash pit; the same may be arranged above the grate of the stove by simply covering its U-shaped member 25 with the fuel to be heated.

What I claim is:

1. In a fire kindler, the combination with a closed receptacle having two openings in its front wall, of an air pump communicating with said receptacle, a U-shaped perforated pipe having spherical ends provided with ducts running in the direction of the longitudinal axes of the parallel portions of said pipe, and recessed disks attached to said receptacle for holding said U-shaped pipe shiftably thereon and said ducts in alinement with said openings when said pipe is in its horizontal position and out of alinement when in its substantially vertical position.

2. In a fire kindler, the combination with a closed receptacle having two openings in its front wall, of an air pump communicating with said receptacle, a U-shaped perforated pipe having spherical ends provided with ducts running in the direction of the longitudinal axes of the parallel portions of said pipe, and means attached to said receptacle for holding said U-shaped pipe shiftably thereon and said ducts in alinement with said openings when said pipe is in its horizontal position and out of alinement when in its substantially vertical position.

Signed at New York, in the county of New York and State of New York, this 2nd day of February, A. D. 1911.

GEORGE POELLOTH.

Witnesses:
SIGMUND HERZOG,
M. FRIEDLANDER.