

RESERVE COPY

PATENT SPECIFICATION

410.885

Application Date: Dec. 10, 1932. No. 35,095/32.

Complete Left: Dec. 8, 1933.

Complete Accepted: May 31, 1934.

PROVISIONAL SPECIFICATION.

Improvements relating to Oil Vapour Stoves.



We, PARKINSON, & COWAN (GAS METERS) LIMITED, a Company duly incorporated under the Laws of Great Britain, of Bell Barn Road, in the City of Birmingham, ISAAC NEWTON WHITE-SMITH and HARRY JAMES MEADS, British Subjects, both of the Company's address, do hereby declare the nature of this invention to be as follows:—

10 This invention has for its object to provide improved oil vapour stoves adapted for use in the open air and suited to the requirements of, more particularly, motorists, picnickers, hikers, campers 15 and the like.

The invention comprises the combination of a hollow base from which oil can be caused to pass upwards to the burner, a cylindrical or similar shell or container 20 adapted to serve as a windshield and as a support for a kettle or other utensil, the shell being in detachable connection with the base, and a detachable cover piece adapted to be applied to the upper end 25 of the shell.

Also the invention comprises a combination as aforesaid in which supports are provided on the base, and in which the part referred to as the shell is adapted 30 to be mounted upon the supports when required for use, the shell being detached from the supports and engaged with the base or a part associated with the base when it is required to pack the stove.

35 In one convenient manner of carrying the invention into effect in the manufacture of a small size stove adapted more particularly for the use of hikers, we employ a hollow sheet metal base upon 40 the upper side of which is mounted the usual vaporizing burner. Oil is contained in the base and is forced therefrom to the burner by means of compressed air in the usual manner. In association with this 45 part is employed a sheet metal cylindrical shell or container having perforated sides, the upper end of the shell being adapted in any convenient manner to support a small kettle or other utensil.

50 At its lower end the shell is adapted for detachable connection with the base, or with a tray or cover piece on which the base is secured, the connection in either

[Price 1/-]

case being effected by means of a bayonet joint fastening or other convenient means. 55 To the upper end of the shell is fitted a removable lid.

When the article is not required for use the lid is placed in position and the whole then forms a self-contained piece 60 of apparatus which can be readily packed in a kit-bag or other receptacle. To bring the article into use, the lid is removed from the shell and the latter is detached 65 from the base. After the burner has been started the shell is re-engaged with the base so that it serves both as a windshield for protecting the flame and as a utensil support. Such an article is of simple, 70 strong and serviceable construction and well adapted for easy carriage and for use in the open air by hikers and others.

In a larger form of apparatus adapted more particularly for the requirements of 75 motorists or a party of picnickers, a relatively shallow sheet metal shell or container is employed, and the burner on the base is made detachable. Also a plurality of supports are arranged to project from 80 the upper side of the base, sockets in the interior of the shell being adapted to engage the upper ends of the supports. The shell is also adapted to engage either 85 the base or a flanged tray or cover piece secured beneath the base. At the upper end of the container is arranged a grid or ring which serves as a utensil support. This grid can be enclosed by means of a 90 removable lid.

When the apparatus is in use the shell 95 is detached from the base and after the burner has been started is mounted on the upper ends of the supports where it serves as a windshield for the flame and as a utensil support. When it is required 100 to pack the article the shell is detached from the supports on the base and the burner is removed. The shell is then engaged with the base, all loose parts are placed within the container, and finally 105 the lid is placed in position. The apparatus now occupies a relatively small compass and can be conveniently carried or stowed away.

The invention is not limited to the examples above described as subordinate

Price 4s 6d.

Price 3s. 6d.

details can be varied to suit different requirements.

Dated this 9th day of December, 1932.
MARKS & CLERK.

COMPLETE SPECIFICATION.

Improvements relating to Oil Vapour Stoves.

- We, PARKINSON, & COWAN (GAS METERS) LIMITED, a Company duly incorporated under the Laws of Great Britain, of Bell Barn Road, in the City of Birmingham, ISAAC NEWTON WHITE-SMITH and HARRY JAMES MEADS, British Subjects, both of the Company's address, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—
- This invention has for its object to provide improved oil vapour stoves of the kind adapted for use in the open air and suited to the requirements of, more particularly, motorists, picnickers, hikers, campers and the like.
- A portable cooking stove has previously been proposed in which a wickless oil stove is arranged in and on the bottom of a sheet metal box or enclosure which has perforated sides for the admission of air, and which serves at its upper end to support a kettle or other utensil.
- The present invention comprises the combination of a hollow vessel from which oil can be caused to pass upwards to the burner, a cylindrical or similar shell or container engaging the vessel or a part associated with the vessel and serving as a windshield and as a support for a kettle or other utensil, and a detachable cover piece adapted to be applied to the upper end of the shell.
- Also the invention comprises a combination as aforesaid in which supports are provided on the vessel or the part associated therewith, and in which the shell is adapted to be mounted upon the supports when required for use, the shell being detached from the supports and engaged with the vessel or the part associated with the vessel when it is required to pack the stove.
- In the three accompanying sheets of explanatory drawings:
- Figures 1 and 2 are respectively part sectional side elevation and plan (with the cover removed) of a small portable stove constructed in accordance with this invention.
- Figure 3 is a side elevation showing in condition for use a larger form of portable oil stove constructed in accordance with this invention, and Figure 4 is a side elevation of the stove showing the parts packed together for transport.
- Figure 5 is a plan of the stove with the parts as shown in Figure 3.
- Figure 6 illustrates a catch for holding together the parts of the stove shown in Figures 3 and 4, and Figure 7 is a side elevation of the pump operating finger piece.
- In the construction in accordance with this invention and as shown in Figures 1 and 2, of a small size stove adapted more particularly for the use of hikers, we employ a hollow sheet metal vessel *a* upon the upper side of which is mounted the usual vaporizing burner *b*. Oil is contained in the vessel and is forced therefrom to the burner by means of compressed air in the usual manner. The air pressure may be obtained by means of a pump combined with the base, or by a separate pump such as a bicycle pump. In association with the part *a* is employed a sheet metal cylindrical shell or container *c* having perforated sides, the upper end of the shell being adapted in any convenient manner as for example by a zig-zag wire member *d* to support a small kettle or other utensil. At its lower end the shell is adapted for detachable connection with the vessel, or with a tray or cover piece on which the vessel is secured, the connection in either case being effected by means of a bayonet joint fastening *e* or other convenient means. To the upper end of the shell is fitted a removable lid *f*.
- When the article is not required for use the lid is placed in position and the whole then forms a self-contained piece of apparatus which can be readily packed in a kit-bag or other receptacle. To bring the article into use, the lid is removed from the shell and the latter is detached from the vessel. After the burner has been started the shell is re-engaged with the vessel so that it serves both as a windshield for protecting the flame and as a utensil support. Such an article is of simple, strong and serviceable construction and well adapted for easy carriage and for use in the open air by hikers and others. To minimise risk of overheating of the oil in the vessel by heat derived from the burner, we preferably arrange an annular partition *g* in the shell and

beneath this may be arranged on the stem *h* carrying the burner a tray *i* which serves to hold spirit for starting the burner. The part *j* is a valve for controlling the oil supply to the burner, the valve being actuated by a key inserted through a hole in the side of the shell.

In the larger form of apparatus shown in Figures 3—7 and adapted more particularly for the requirements of motorists or a party of picnickers, a relatively shallow sheet metal shell or container *c* is employed, and the burner *b* on the vessel *a* is made detachable. Also a plurality of supports *k* are arranged around and to project from the upper side of the vessel, sockets *l* in the interior of the shell being adapted to engage the upper ends of the supports. The shell is also adapted either to engage the vessel *a* as aforesaid, or to enter a flanged tray or cover piece *m* secured beneath the base. At the upper end of the container is arranged a grid *n* which serves as a utensil support. This grid can be enclosed by means of a removable lid *f*.

When the apparatus is to be used the shell is detached from the vessel or the flanged tray and is mounted on the upper ends of the supports *k* as shown in Figure 3 where it serves as a windshield for the flame and as a utensil support. When it is required to pack the article the shell is detached from the supports and the burner is removed. The shell is then engaged with the vessel or the tray *m*, all loose parts are placed within the container, and finally the lid *f* is placed in position, this being secured by resilient clips *o* which are pivoted on the vessel or tray. The apparatus now occupies a relatively small compass and can be conveniently carried or stowed away. In this example the vessel is provided with the usual air pump, and to obviate undue projection of the finger piece this is made in the form of a ring *p* which is pivoted on the outer end of the pump rod.

The invention is not limited to the examples above described as subordinate details can be varied to suit different requirements.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

1. An oil vapour stove of the kind specified, and comprising the combination of a hollow vessel from which oil can be caused to pass upwards to the burner, a cylindrical or similar shell or container engaging the vessel or a part associated with the vessel and serving as a windshield and as a support for a kettle or other utensil, and a detachable cover piece adapted to be applied to the upper end of the shell, substantially as described.

2. An oil vapour stove as claimed in Claim 1, in which supports are provided on the vessel or the part associated therewith, and in which the shell is adapted to be mounted upon the supports when required for use, the shell being detached from the supports and engaged with the vessel or the part associated with the vessel when it is required to pack the stove, substantially as described.

3. An oil vapour stove as claimed in Claim 1 and comprising the combination of a hollow vessel adapted to contain oil and having a vapour burner mounted on it, a perforated shell in detachable connection with the vessel, a stand for a cooking or other utensil arranged at the upper end of the shell, and a removable lid, substantially as described.

4. An oil vapour stove as claimed in Claim 1 and comprising the combination of a vessel adapted to contain oil and having a vapour burner mounted on it, a tray arranged beneath the vessel, a perforated shell, a stand for a cooking or other utensil arranged at the upper end of the shell, a removable lid, and supports on the tray having their upper ends adapted to carry the shell, the lower part of the latter being adapted to be carried on the supports or to be engaged with the tray, substantially as described.

5. An oil stove as claimed in Claims 1 and 2 and having clips adapted to hold the parts together when the lid is placed on the shell and the latter is engaged with either the vessel or the part associated therewith, substantially as described.

6. An oil stove as claimed in Claim 1 and comprising the combination of parts substantially as described and as illustrated in Figures 1 and 2 or in Figures 3—5 of the accompanying drawings.

Dated this 4th day of December, 1933.
MARKS & CLERK.

[This Drawing is a reproduction of the Original on a reduced scale.]

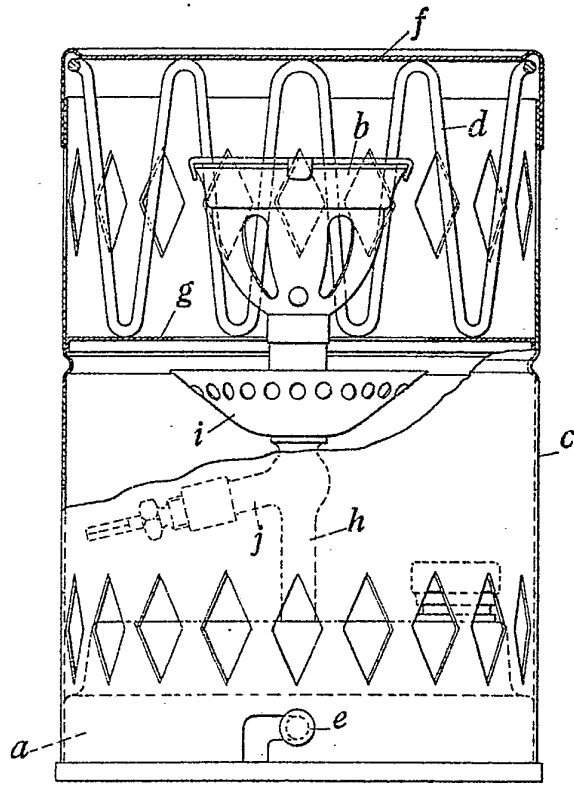


Fig. 1

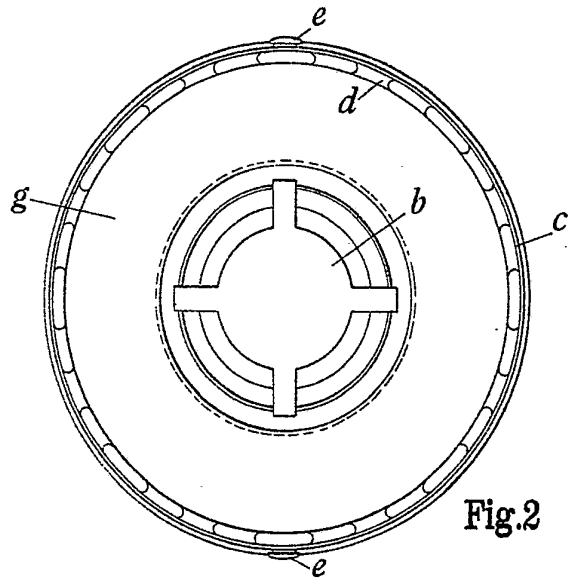
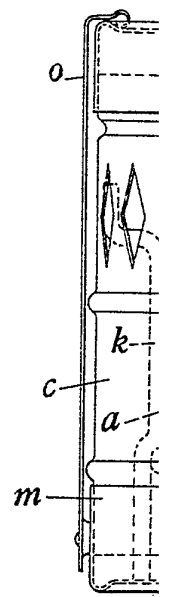
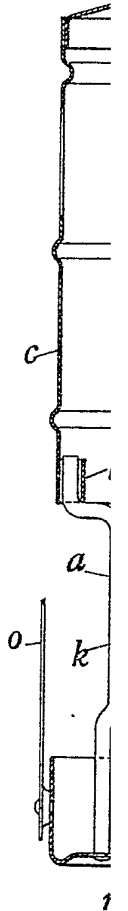


Fig. 2



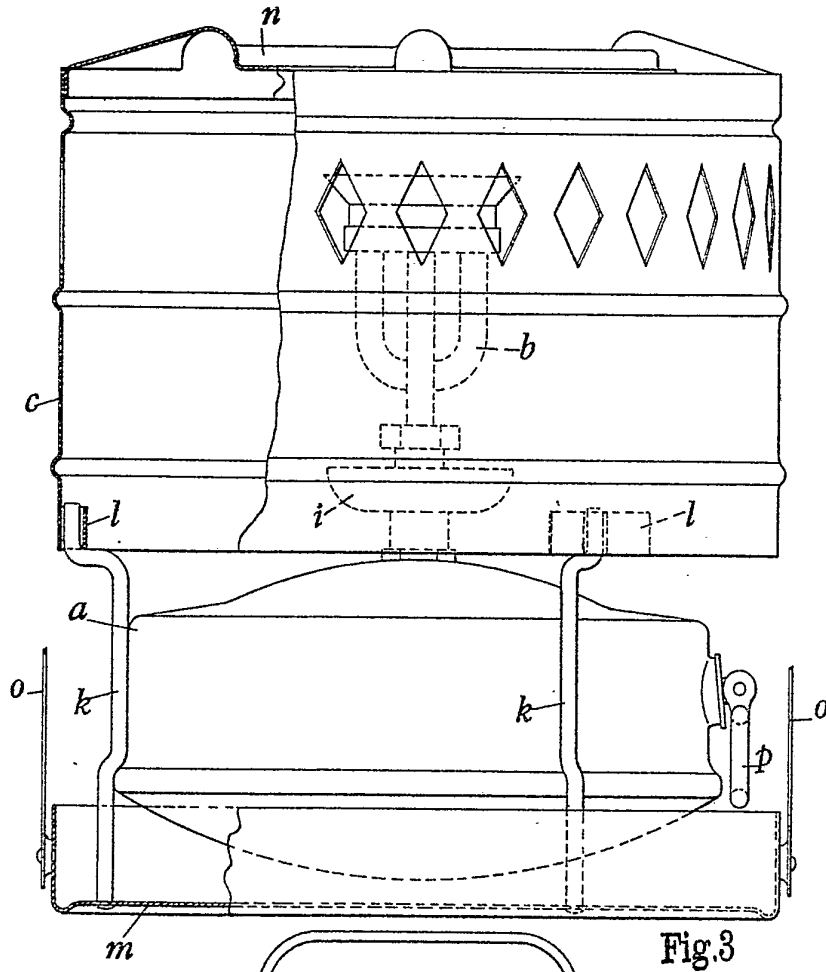


Fig. 3

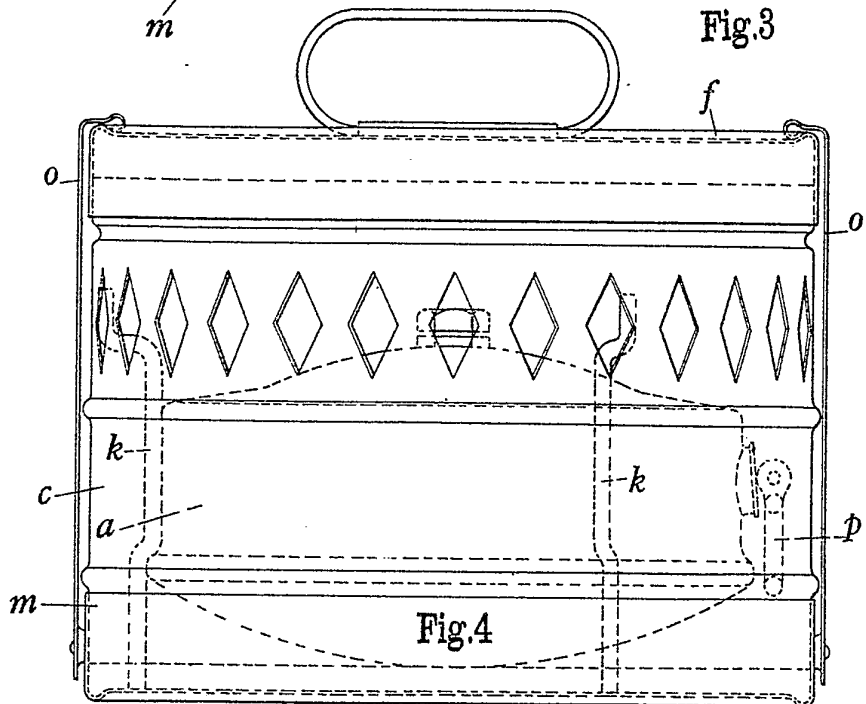


Fig. 4

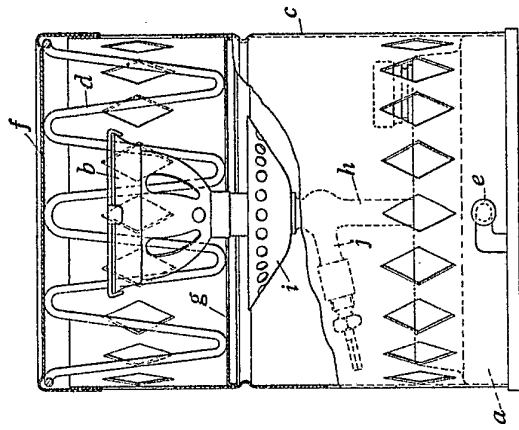


Fig. 1

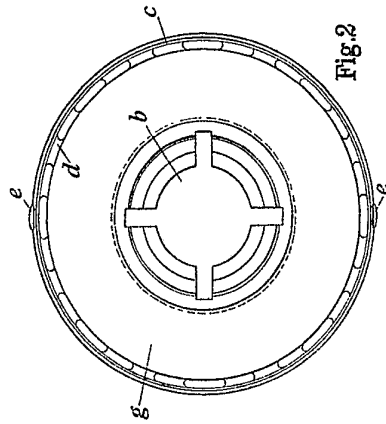


Fig. 2

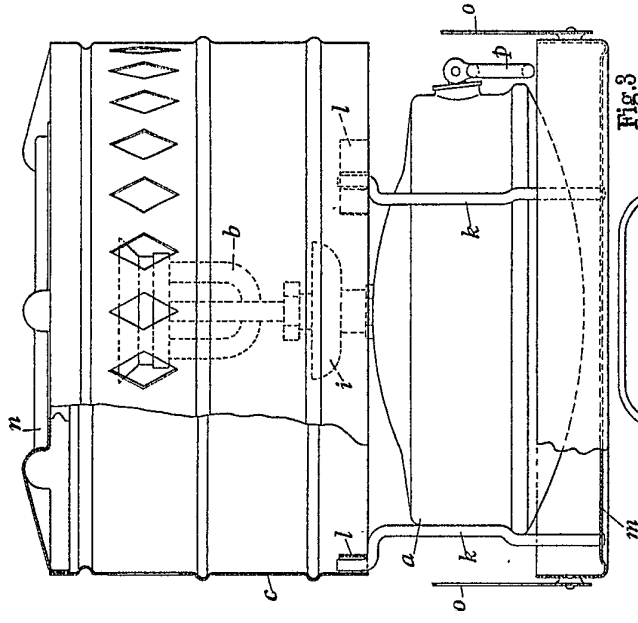


Fig. 3

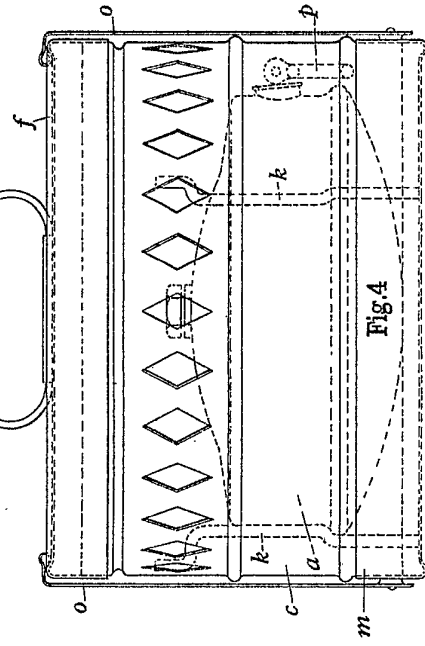


Fig. 4

[This Drawing is a reproduction of the Original on a reduced scale.]

[This Drawing is a reproduction of the Original on a reduced scale.]

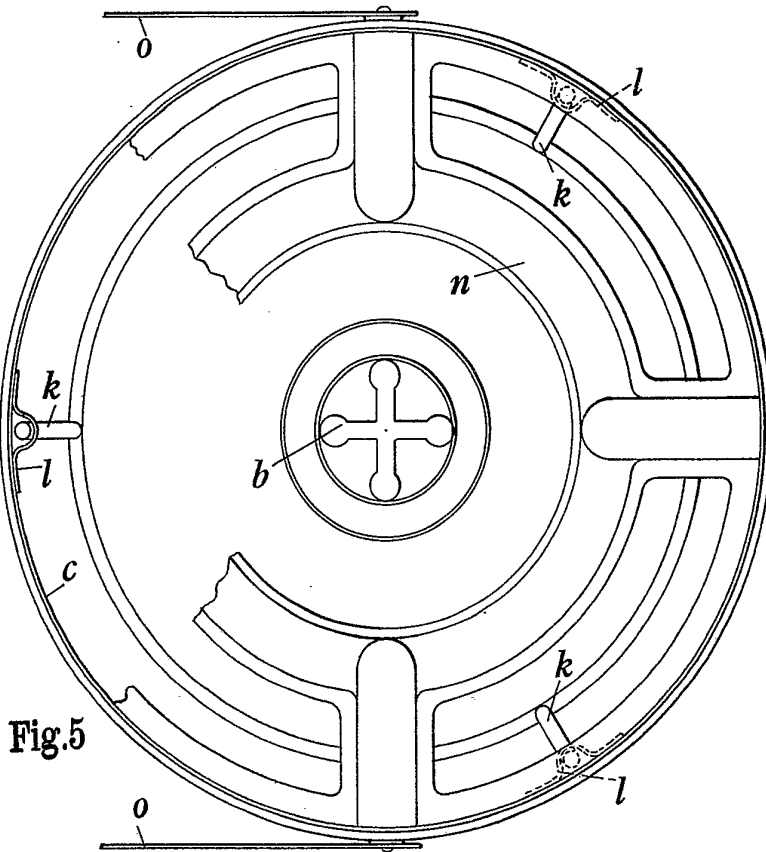


Fig. 5

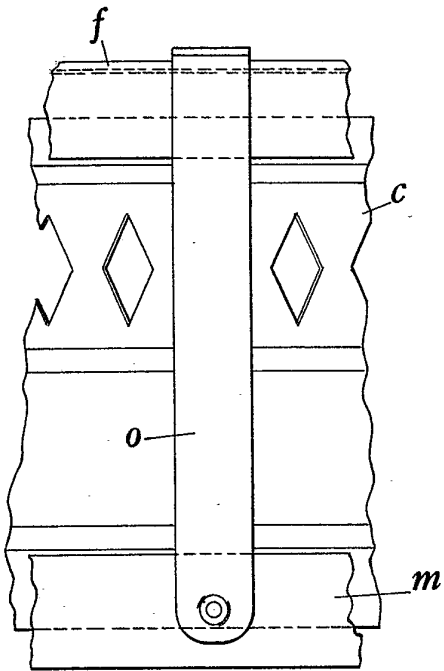


Fig. 6

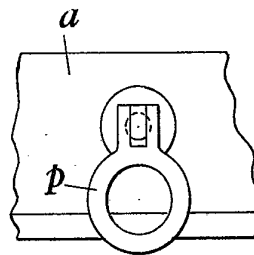


Fig. 7