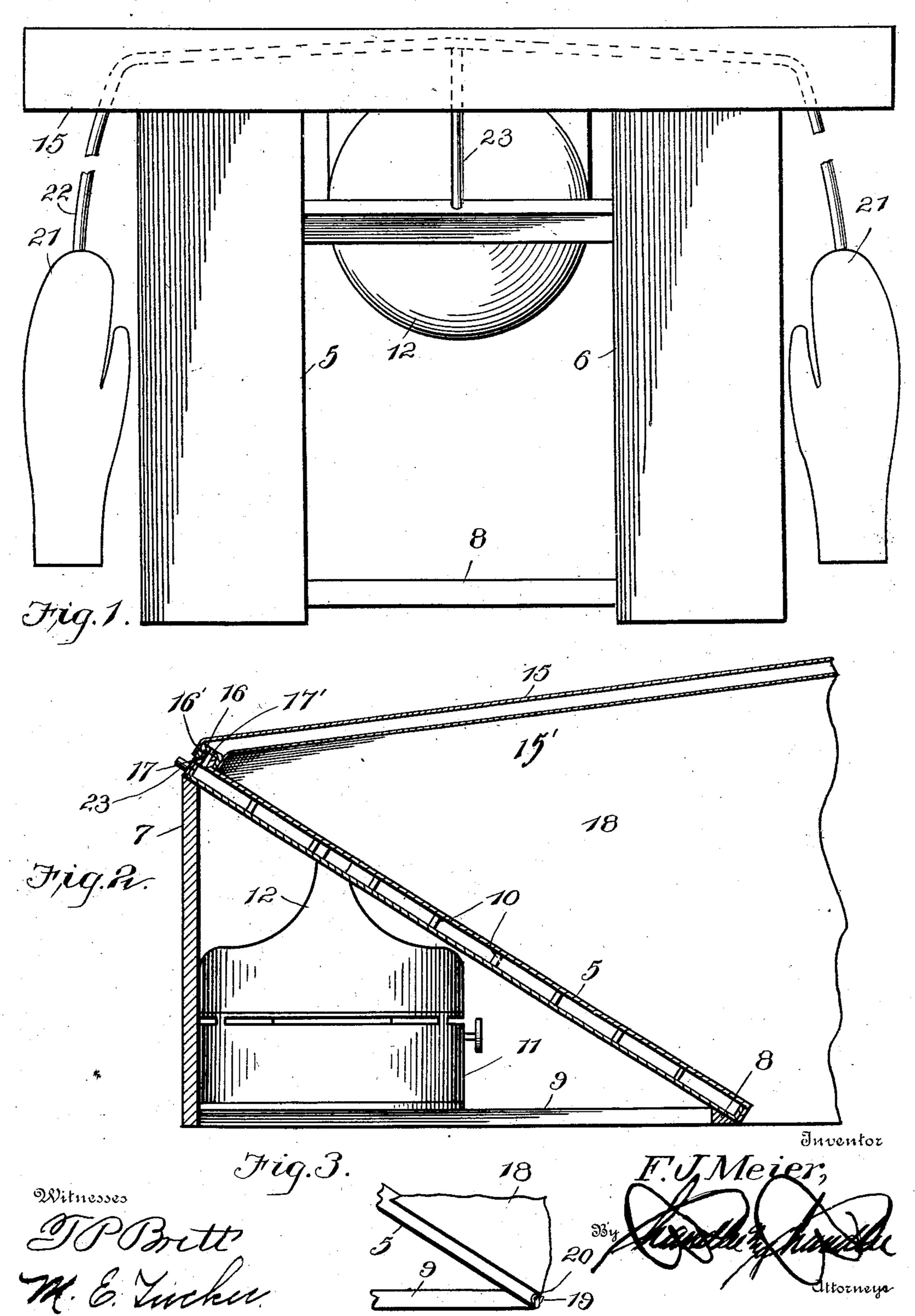
F. J. MEIER.

WARMER.

(Application filed Aug. 1, 1901.)

(No Model.)



United States Patent Office.

FRANK JOE MEIER, OF WEIGAND, NEBRASKA.

WARMER.

SPECIFICATION forming part of Letters Patent No. 705,267, dated July 22, 1902.

Application filed August 1, 1901. Serial No. 70,523. (No model.)

To all whom it may concern:

Beitknown that I, FRANK JOE MEIER, a citizen of the United States, residing at Weigand, in the county of Knox, State of Nebraska, have 5 invented certain new and useful Improvements in Warmers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains

to to make and use the same.

This invention relates to warmers in general; and it has for its object to provide a device of this nature which may be arranged at the bottom of a vehicle and against the dash-15 board, in position to warm the feet of the driver, and which, furthermore, will include means for warming his hands, it being understood, of course, that the device may be used in other specific places with equally as good 20 results.

A further object of the invention is to provide means for confining the heat to a space directly above the warmer, so that the lower

limbs may be also warmed.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a top view of the device with the lap-cover raised. Fig. 2 is a section 30 taken through one side portion of the device. Fig. 3 is a view showing the means for connecting the flaps of the covering to the plates.

Referring now to the drawings, the present warmer consists of a top portion including 35 two pairs of plates 5 and 6, the pairs of plates being spaced laterally from each other and being secured at one end to the upper edge of a support 7, which holds the pairs of plates slantingly, the lower ends of the plates being 40 attached to a sill 8, which is in turn connected with the lower edge of the support 7 by means of longitudinal sills 9 to form a strong framework, which will hold the parts rigidly. The plates of each pair are disposed one above

45 the other and are spaced slightly to permit of circulation of air between them, and they are held in such spaced relation by means of lugs 10, cast or otherwise formed thereon. The side and upper edges of the plates of each

the lower ends closed to prevent flow of air from the lower ends. Between the two pairs of plates is disposed a lamp 11, of that style commonly known as a "lamp-stove," the hood 12 of which is tapered and communicates with 55 a flue 12', which is disposed transversely of the space between the pairs of plates and which communicates at its ends with the inclosures of the pairs of plates. Thus the heat from the lamp will pass through the hood and 60 into the flue, where it will divide and will flow into the inclosures of the pairs of plates.

In order that the heated air that rises from the plates may be retained and utilized for warming the lower limbs of the driver or other 65 person, a lap-covering is provided and consists of two thicknesses 15 and 15' of a suitable fabric, the two thicknesses being sewed together at three edges, while at the front edges they are secured to opposite sides of a 7° strip 16 of wood or other material, in which are recesses 16', through the bases of which are perforations 17', these recesses and perforations leading through the strip and into the interspace between the two layers 15 and 75 15' of the fabric, as shown in Fig. 2. At the upper ends of the hollow plates 5 and 6 and communicating therewith are upwardlydirected tubular projections 17, which are adapted to fit snugly into the recesses 16', 80 as illustrated. Heat from the plates 5 and 6 may thus pass upwardly and into the interspace between the layers of the fabric forming a lap-robe or covering to warm the latter. At the sides of the covering are the 85 flaps 18, which are provided at their points with hooks 19, which are adapted for engagement with eyes 20 at the outer edges of the plates to hold the flaps down. The free edge of the covering is then drawn up and over 90 the knees, and thus catches and holds the heated air. In order that the hands may be also kept warm, mitts 21 are provided, and at their tips are connected flexible tubes 22, which lead to a common tube 23, fixed to the 95 front support and connected with the transverse flue 12', so that heated air may pass from the hood of the lamp into the mitts.

It will be understood that in practice modi-50 pair are connected to form two boxes, with I fications of the specific construction shown 100 may be made and that any suitable materials and proportions may be used for the various parts without departing from the spirit of the invention.

What is claimed is—

1. A device of the class described comprising spaced heating-plates, means for heating the plates, and a flexible lap-covering comprising spaced fabrics and connections between the covering and the plates for conveying heated air from the plates to the covering.

2. A device of the class described comprising hollow heating boxes or plates having means for heating them and provided with tubular projections communicating therewith, of a lap-covering comprising spaced fabrics having a strip secured therebetween at one end of the fabrics, said strip having openings in which the tubular projections are received and perforations registering with the bores of the projections whereby heat may pass from the plates between the layers of fabric.

3. A device of the class described comprising spaced inclined boxes having their lower ends open, a flue connecting the boxes near to their upper ends, a lamp having a hood connected to the flue, flexible tubes connected with the flue and having hand-receiving mitts attached thereto to receive heat therefrom, 30 and a covering device removably connected with the plates of which the boxes are formed.

4. A device of the class described comprising inclined boxes spaced laterally and having a flue connecting them, a lamp having a 35 hood connected with the flue to supply heat therethrough to the boxes, projections at the upper ends of the boxes, and a flexible covering having a recessed plate at its edge for engagement with the projections to hold the 40 covering in position to be stretched over the boxes.

5. A device of the class described comprising spaced heating-plates and having a flue connecting them adjacent to their upper ends, 45 a lamp having a hood communicating with the flue, a pipe leading forwardly from the flue beyond the plates, flexible tubes connected with the pipe, and hand-receiving devices connected to the tubes, a flexible covering 50 being connected to the upper and side edges of the plates.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK JOE MEIER.

Witnesses:

W. R. ELLIS, THALOR MEIER.