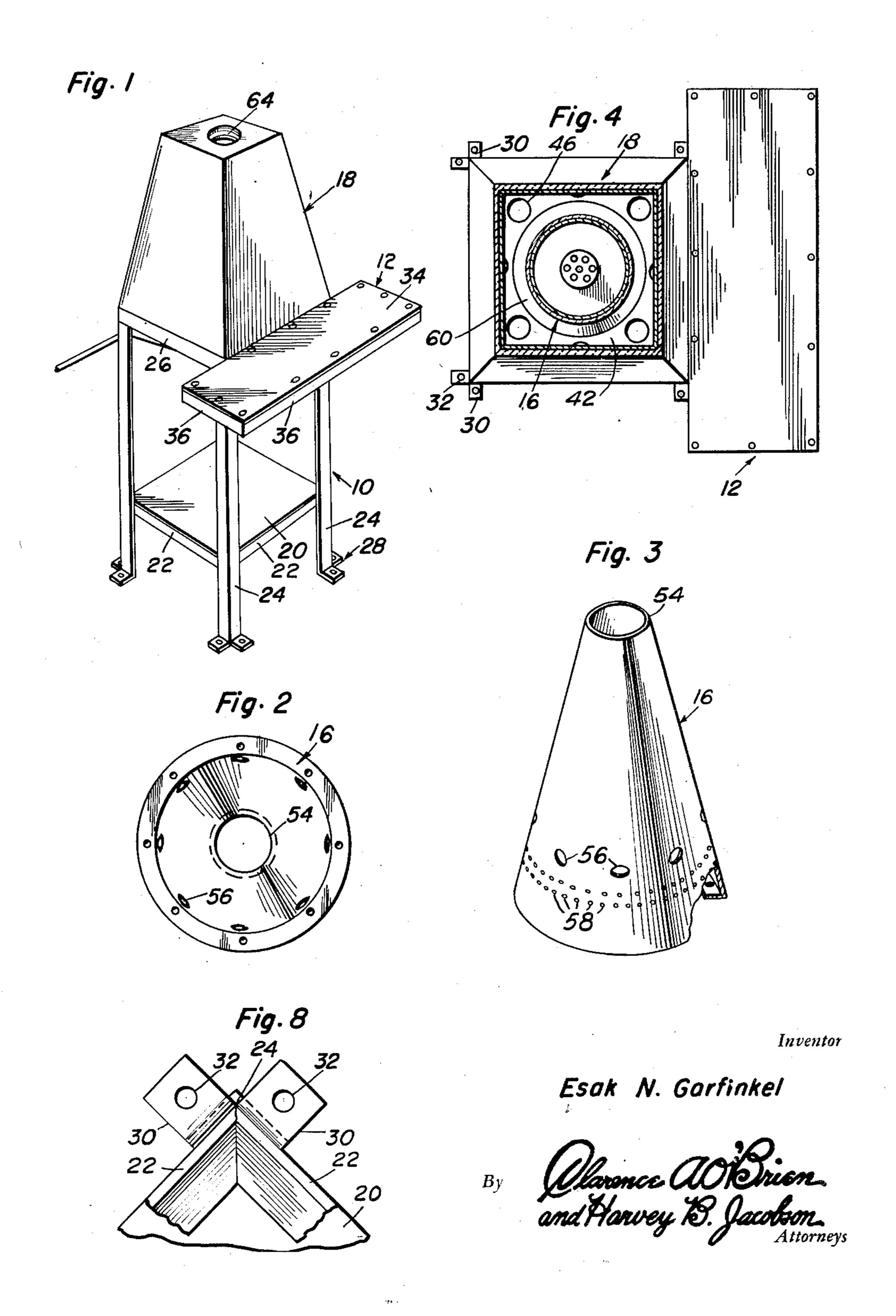
WRINKLE REMOVER FOR SHOES

Filed July 27, 1950

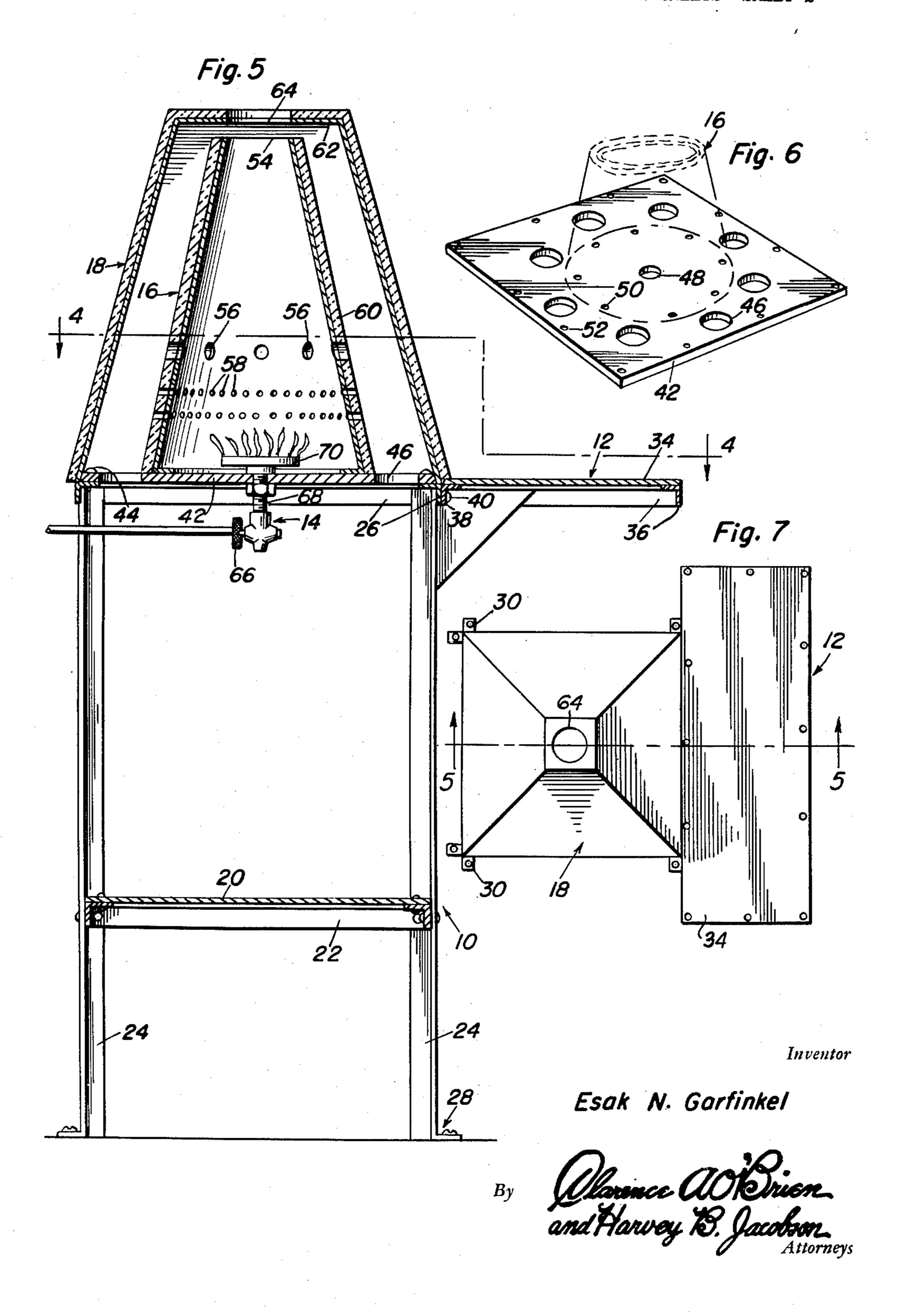
2 SHEETS-SHEET 1



WRINKLE REMOVER FOR SHOES

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2 SHEETS—SHEET 2



UNITED STATES PATENT OFFICE

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WRINKLE REMOVER FOR SHOES

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3 Claims. (Cl. 263-2)

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The present invention relates to an improved apparatus for removing wrinkles from shoes in the upper leather usually occurring during the lasting of the shoes.

An object of the present invention is to provide an apparatus for directing a stream of hot gases against the wrinkled portion of the upper leather of a shoe whereby the wrinkles will be removed.

A further object of the present invention is 10 to provide an arrangement of inner and outer hoods whereby the stream of hot gases against the shoe will be directed into a convection current for maximum efficiency, and wherein the inner and outer hoods are covered with an in- 15 sulating material such as asbestos for the comfort of the operator.

More specifically, the invention has to do with a structurally distinct handily usable structural apparatus which is characterized by a vertical 20 leg supported stand or framework, the latter being of openwork construction and providing a common support for a heating unit plate, inner and outer spaced cooperating hoods carried by said plate and a handy work shelf, said plate 25 having a centrally attached heating unit, said hoods being upwardly tapering and truncated and terminating at their upper ends in restricted communicable opening means providing an effectually usable heat emitting area for manually 30 controlled leather treatment results.

The invention also comprises novel details of construction and novel combinations and arrangements of parts which will more fully appear in the course of the following description. How- 35 ever, the drawings merely show and the following description merely describes an embodiment of the present invention which is given by way of illustration or example only.

In the accompanying drawings:

Figure 1 is a perspective view of the entire structure of the present invention;

Figure 2 is a bottom plan view of the first hood;

Figure 3 is a perspective view of the first hood $_{45}$ with parts broken away;

Figure 4 is a horizontal transverse sectional view taken substantially along the plane of line 4—4 of Figure 5;

Figure 5 is a vertical transverse sectional view 50 taken substantially along the plane of line 5—5 of Figure 7;

Figure 6 is a detail perspective view of the supporting plate employed with the present invention, with the first hood shown in phantom 55 lines;

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Figure 7 is a top plan view of the present invention; and

Figure 8 is a detail view of a corner section of the supporting frame.

Referring more particularly to the drawings, wherein like numerals designate like parts throughout, the numeral 10 designates generally the supporting frame of the present invention, the numeral 12 designates a work supporting platform, the numeral 14 designates generally a heating unit employed with the present invention, the numeral 16 designates generally the first hood, and the numeral 18 designates generally the erally the second hood.

The frame 10 is formed from four angle irons in upstanding position and in spaced relation by means of the bottom plate 20 and bottom spacing angle irons 22, the angle irons 22 being secured to the upstanding angle irons 24, and the bottom plate 20 being secured to the angle irons 22. The upper ends of the upstanding angle irons 24 are secured in spaced relation by means of the angle irons 25. All of the bottom ends of the upstanding angle irons 24 are angulated, as at 23, to provide feet 30. The feet 30 are provided with apertures 32, as seen in Figure 8, whereby the supporting frame 10 may be secured to the floor where desired.

The supporting platform 12 includes a flat plate 34 which is secured to a plurality of angle irons 36, one of which is in turn secured as at 38 to the angle iron 25 at the top of the upstanding members 24. Rivets 40, or weld, if desired, are employed for securing the platform 12 in position. If desired, the platform 12 may be removably connected to the angle iron 26.

Secured to the upper faces of the angle irons 26 is the hood supporting plate 42, shown in Figure 6, screws 44 or the like being employed 40 for holding the plate 42. The plate 42 is provided with a plurality of air supply holes 46, a central gas supply pipe opening 48, and a plurality of small openings 50 and 52. The holes 52 are employed for securing the plate 42 to the angle iron members 26, and the holes 59 are employed for securing the first hood 16 on the supporting plate 42.

The first hood 16 is substantially conical in shape, being truncated, having its upper end at 54. Intermediate the length of the first hood 16 are a plurality of air supply apertures 56, and below the apertures 56 are a plurality of air supply holes 58 for admitting air into the first hood 16 and to the heating unit 14. The exterior of the first hood 16 is covered with an insulating material such as asbestos at 60, the

insulating material being provided with openings to correspond with the openings in the first hood.

The second hood 18 is substantially rectangular in cross-section, being of reduced cross sectional area at its upper end and provided with a top wall 62 having an aperture 64 therein, being in substantial alignment with the opening 54 at the upper end of the first hood 16. The second hood 18 is substantially covered with 10 insulating material such as asbestos for the comfort of the operator removing the wrinkles from the shoes. The second hood 18 may be secured on the supporting plate 42 at its periphery in any desired manner, welds being employed with 15 the present arrangement.

The heating unit 14 may be of conventional form with a petcock 66 and an upwardly extending supply 68 positioned in the opening 48 and having a heating burner 70 threaded on its 20 upper end.

It is believed that from the foregoing description taken in connection with the drawings that the method of employing the apparatus of the present invention will be readily obvious to one 25 skilled in the art. By placing the wrinkled portion of the upper leather of the shoe over the opening 64, the hot gases issuing from the heating unit 70 will be directed against the wrinkled portion, removing the wrinkles therefrom. The 30 hot gases will be deflected downwardly for reentry into the apertures 56, and the fresh air from the air supply holes 46 will be drawn through the holes 58 to aid the combustion and supply the needed additional hot gases to the 35 convection current to maintain the desired temperature.

It will be observed that the supporting stand is such in construction that the burner supporting plate 42 is flat and also square in configuration. The inner hood 16 is a truncated cone with flange means at its bottom appropriately secured to the centrally apertured portion of the plate 42. The outer hood is, in effect, a protective shield or jacket and it is preferably pyramidal and trun- 45 cated in form whereby its basal portion is adapted to properly cooperate with the plate 42, the truncated upper end portion being closed except for the restricted heat discharge opening means 64. The result is that the over-all structure is 50 highly simple and practical and constitutes that in which manufacturers, retailers and users will find their respective needs amply met.

Some changes may be made in the construction and arrangement of my device without departing from the real spirit and scope of my invention.

Having described the invention, what is claimed as new is:

1. An apparatus to assist one in spot treating 60 upper leather for purposes of heating the same and removing wrinkles comprising a vertically elongated openwork leg supported frame, a supporting plate for a heating unit atop said frame, a heating unit centrally supported on said plate, 65 a first hood mounted on and rising vertically

from said plate and substantially enveloping the heating unit, said hood being reduced gradually in cross-section from bottom to top and having a reduced and restricted upper end through which heated air is adapted to issue, a second hood also mounted on said supporting plate and enclosing said first hood and having an opening in a plane above and in alignment with the discharge opening in said first hood, said second hood enclosing the first hood in spaced relation and also being gradually tapered in cross-section from bottom to top, the entire exterior surface of said second hood being covered with insulation material, and control means for said heating unit located beneath said supporting plate and accessible by way of the available spaces in the openwork leg supported frame.

2. The structure specified in claim 1 wherein the lower portion of the first hood is provided with a multiplicity of apertures, that portion of the supporting plate between the respective hoods having relatively large air circulating openings therein, and wherein the exterior surfaces of said inner hood are jacketed with insulation material.

3. An apparatus enabling a user thereof to spot treat wrinkled portions of upper leather and to thus remove undesirable wrinkles therefrom comprising a stationary support frame, a rectangular supporting plate mounted fixedly atop said frame, the upper surface of said plate being flat, heating means mounted on the central top portion of said plate, a truncated conical hood having a flange at its basal end superimposed on and connected to said plate, the truncated end of said hood projecting to a plane above and in axial alignment with said heating means and providing a heat concentrating and focusing discharge opening, the portion of said hood in inproximity to said heating means being apertured, a pyramidal hood having a basal portion attached to marginal portions of said supporting plate and enclosing said first named hood in spaced relation, the upper end of said pyramidal hood being provided with a restricted heat emitting opening in axial alignment with and in a plane above the discharge opening in said first hood, that portion of the supporting plate surrounding the basal portion of said first hood having air inlet holes and said holes being in registry with the space between the cooperating hoods, and insulation means exteriorly covering the side and top surfaces of said pyramidal hood.

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