H. P. KNOBLOCK.

TOASTER. APPLICATION FILED APR. 16, 1909. 943,555. Patented Dec. 14, 1909. 2 SHEETS—SHEET 1. Fig. 2.

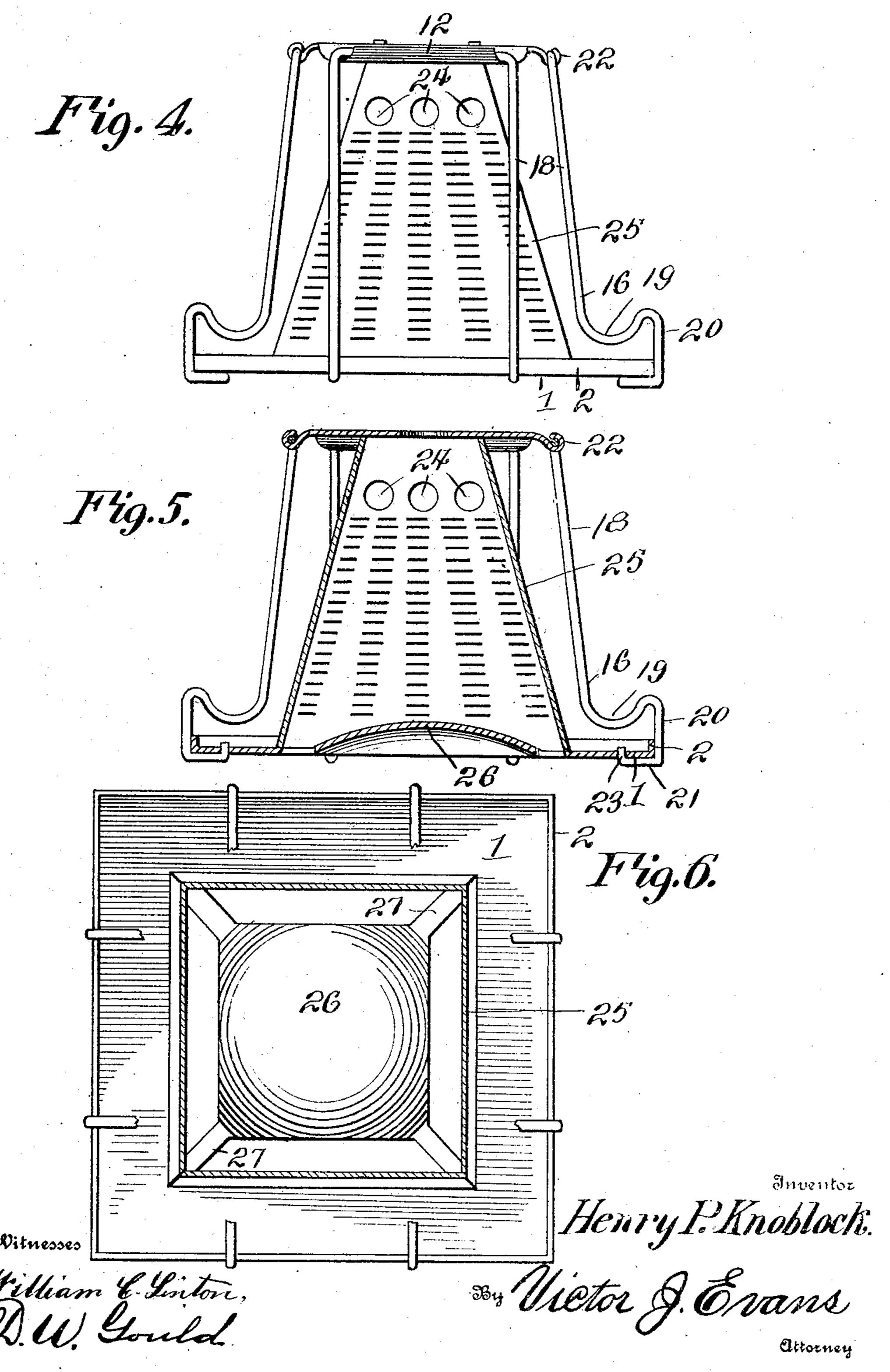
H. P. KNOBLOCK.
TOASTER.

APPLICATION FILED APR. 16, 1909.

943,555.

Patented Dec. 14, 1909.

2 SHEETS-SHEET 2.



UNITED STATES PATENT OFFICE.

HENRY P. KNOBLOCK, OF PITTSBURG, PENNSYLVANIA.

TOASTER.

943,555.

Specification of Letters Patent.

Patented Dec. 14, 1909.

Application filed April 16, 1909. Serial No. 490,256.

To all whom it may concern:

Be it known that I, Henry P. Knoblock, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented new and useful Improvements in Toasters, of which the following is a specification.

The invention relates generally to an improvement in toasters, and is more particularly directed to a construction in the use of which a plurality of pieces of material may be simultaneously subjected to the action of the heat, the radiation of such heat being controlled to insure its uniform distribution to the full exposed surface of such material.

The main object of the present invention is the provision of a toaster provided with a series of material supports, which supports are removably connected to the toaster to permit the use of the latter for purposes other than toasting.

A further object is the provision of a baffle plate for distributing the heated gases, which plate is of solid construction and secured in a novel manner in the toaster.

The toaster as an entirety, with the exception of the material supports, is constructed of sheet metal and the parts are so arranged as to be readily assembled without the usual soldering or riveting, thereby facilitating the construction and reducing its cost to a minimum without impairing its efficiency.

The invention will be described in the following specification, reference being had particularly to the accompanying drawings, in which:—

Figure 1 is a plan of a toaster constructed in accordance with my invention. Fig. 2
40 is a horizontal section of the same. Fig. 3 is an elevation, partly broken out, of the same. Fig. 4 is an elevation of a slightly modified form of toaster. Fig. 5 is a vertical central section of the same. Fig. 6 is a horizontal section of the same.

Referring particularly to the accompanying drawings, my improved toaster, in the form shown in Figs. 1, 2, and 3 comprises a base 1, preferably rectangular in plan. The base is constructed of sheet metal with its edges bent to provide upwardly projecting flanges 2, whereby the base is of pan-like formation particularly arranged to receive and support any refuse or the like which may fall from the material being toasted or

A radiator 4, which in this form of the toaster is of conical formation, is arranged centrally of the base and comprises a strip of sheet metal bent into proper form with its meeting edges appropriately secured ec to maintain the form. The lower edge of the radiator is provided with a series of tongues 6 which are designed to pass through openings in the base and to be bent into contact with the lower surface of the 65 base to secure the radiator in position. The base within the plane of the lower edge of the radiator is formed with an opening 7 through which the heated gases reach the radiator, the normal diameter of-this open- 70 ing being slightly less than the diameter of the lower end of the radiator, to provide an annular flange of the base extending within the radiator. This flange in the completed article is turned up into contact with the in- 75 ner surface of the radiator, as at 8, thereby further supporting the radiator in position. A head plate 9 is supported at the upper end of the radiator, said head plate corresponding in outline to the outline of the base but 80 being of less length and breadth than the same. The upper edge of the radiator is provided with tongues 10 designed to be passed through openings in the head plate and to be bent into contact with the upper 85 surface of said plate to secure the head plate in position. The head plate is formed with a series of openings 11, and the edges thereof are each formed to provide a centrally arranged projection 12, for a purpose which 90 will presently appear. The radiator throughout practically its entire surface is formed with a series of slitted openings 13, arranged in concentric rows and in spaced relation circumferentially of the radiator, these 95 openings being preferably formed by punching through from the inner surface of the radiator. The openings gradually decrease in length from the openings of the lower-most row to the openings of the uppermost 100 row. Within the radiator, in the form illustrated in Figs. 1, 2, and 3, is secured what I term a baffle plate 14, comprising an imperforate circular section of sheet metal upwardly curved from its peripheral edge to 105 provide a member of approximately inverted dish-shape. The peripheral edge of the baffle plate is provided with a series of radiating tongues 15, which, when seeming the baffle plate in place, are designed to we

passed through certain openings 13 of any selected series, the ends of the tongues being turned down beyond the radiator. The plate is inserted in such relation to the ra-5 diator as to provide a space between the peripheral edge thereof and the inner surface of the radiator, the particular means for securing the baffle plate in place providing for the ready assemblage of the parts at 10 this point and their convenient disconnection when desired. A material support 16. is provided for each side of the toaster, said supports being of duplicate construction and each preferably formed of a single 15 length of material, as wire. The support is bent intermediate its ends to provide a cross bar 17 and projected from the ends of the cross bar to provide parallel uprights 18, being bent at the terminals of the uprights 20 to form curved rests 19. From the ends of the rests the material of the supports is projected downwardly, as at 20, and then laterally to form hooks 21. Each support is secured in place by removably seating the 25 cross bar 17 thereof in an open roll or loop 22 formed by suitably bending the extension 12 of the head plate, and in passing the vertical portions of the hooks 21 through openings 23 formed in the base plate immedi-30 ately adjacent the flange 2 thereof. The parts of the support are of such relative lengths and positions that when in place the uprights 18 extend downwardly in approximate parallel relation to and in spaced rela-35 tion with the surface of the radiator, the rests 19 being disposed above and immediately over the base plates. The vertical portions 20 of the uprights lie wholly beyond the edge flange 2 of the base, so that the 40 hook passes around said flange and enters the opening 23 from beneath. As the supports are of spring material it is obvious that they may be readily disconnected from the toaster proper when desired, and further 45 that the flange 2 bearing against the upright portions 20 of the supports serves to materially increase the rigidity of the support in use, as will be clearly apparent from an inspection of Fig. 3 of the drawings. If 50 found desirable to more perfectly support combustion the upper portion of the radiator may be formed with a series of openings 24, as more clearly shown in Fig. 3.

In Figs. 4, 5, and 6 I have shown a 55 slightly modified form of toaster, in which, however, the description hereinabove relative to the base, material supports, and the head plate, will apply as such parts are identical with those described with the other 60 form. In this form, however, the radiator 25 is of rectangular shape in cross section with the walls converging from the base of the toaster to the head plate. With this form, in the event the material supports 16 of are removed various articles, such as smooth-

ing irons or the like, may be rested directly against one of the plain walls of the radiator for heating. In this form also the baffle plate differs from the previously described baffle plate, in that the former is integral 70 with the base 1. To this end the central portion of the base is cut out to leave a centrally disposed rectangular section 26 connected with the base plate by diagonally alined tongues 27. By means of a suitable die in 75 the formation of the base plate of the toaster the section 26, which is the baffle plate, is offset from the plane of the base plate and preferably given an upwardly rounded or inverted dish-shape. The material of the 80 tongues yielding under the action of the die so as to dispose the baffle plate proper at the required height within the radiator. In connection with the integral baffle plate it is to be understood that the section 26 or 85 baffie plate proper corresponds in shape to the sectional configuration of the radiator and that while I have shown the integral plate as in use with the toaster having a radiator of rectangular shape in section, it 90 is to be understood that such form of plate may be as readily used with the toaster in which the radiator is of circular form in section, though in this event the section 26 would be of circular shape in plan. I con- 95 template the use of either form of baffle plate with any sectional shape of radiator, and also the formation of the radiator in any sectional outline.

The use of the toaster will be obvious 100 from the above description taken in connection with the drawings, the bread or other material being arranged on the supports in position approximately parallel to the wall of the radiator, and receiving di- 105 rect and radiated heat distributed by the baffle plate to insure an even and perfect

toasting of the exposed surface. It is to be particularly noted that the various parts of the toaster are assembled 110 without riveting or soldering, and that when individually constructed as described may be readily assembled without the use of particular tools in an expeditious manner. Provision is thus made for a thoroughly 115 efficient article in which the cost of production is reduced to the minimum and the construction materially simplified.

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

1. A toaster comprising a base, a radiator secured to the base, a head plate secured to the upper end of the radiator, and material supports removably connected to the head plate and to the base, each of said supports 125 comprising a single length of material bent to form a cross bar adapted to removably engage the head plate, projected from the cross bar to form material rests, and projected from said rests to form hooks to be 186

passed around the edge of the base plate and engage openings formed in said base

plate from beneath.

2. A toaster comprising a base having an 5 upstanding edge flange, a radiator secured on the base, a head plate secured to the upper end of the radiator, and material supports removably connected to the head plate and to the base, each of said supports in-10 cluding a vertically extending portion terminating in a hook, said hook being adapted

to be passed around the edge of the base to engage openings formed in said base plate from beneath, the vertical portions of the supports bearing directly against the outer 15 surface of the base flange.

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

HENRY P. KNOBLOCK.

Witnesses:

DAVID W. GOULD, JOHN L. FLETCHER.