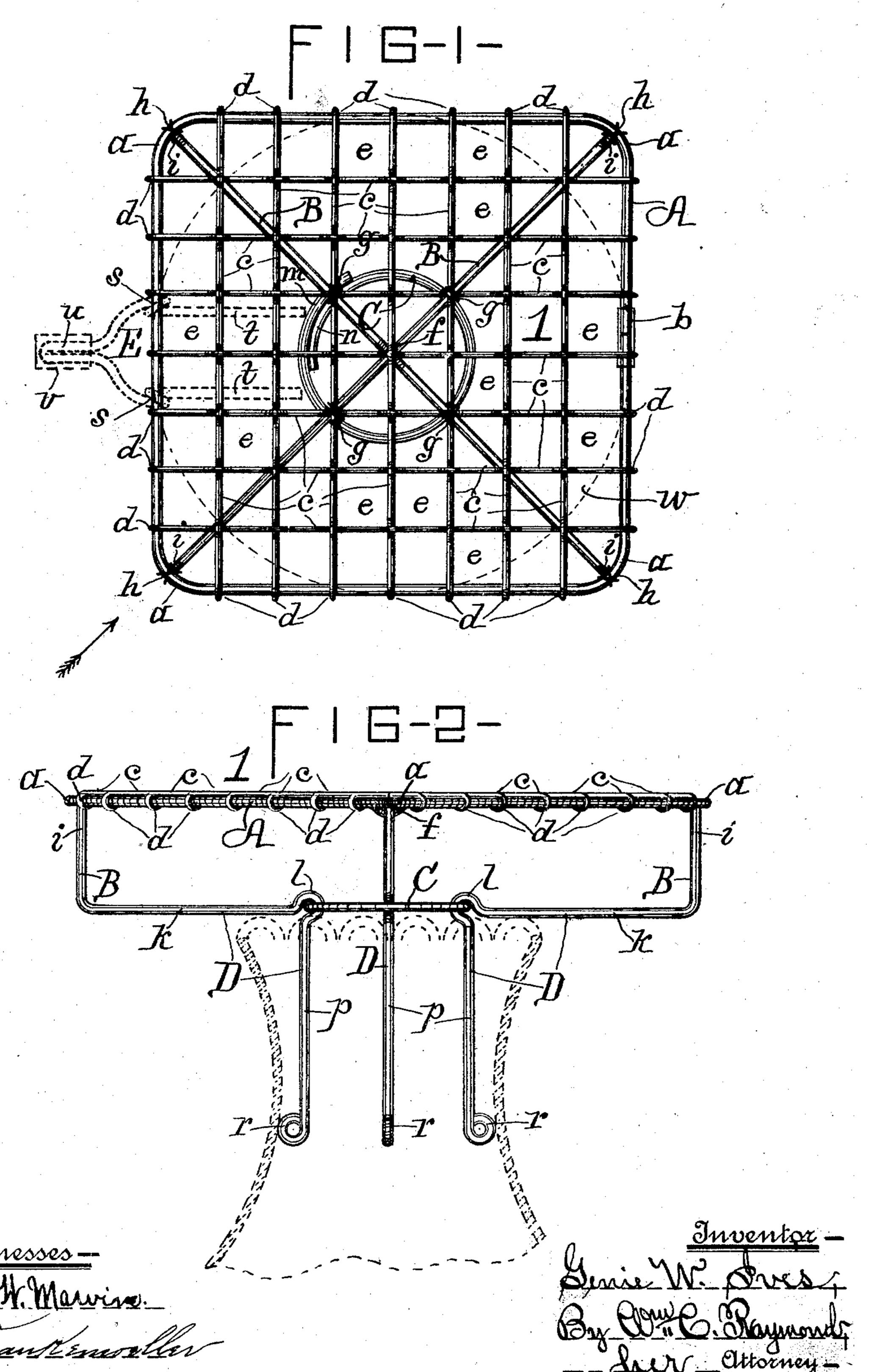
G. W. IVES.

HEATING ATTACHMENT FOR LAMP CHIMNEYS.

No. 502,364.

Patented Aug. 1, 1893.



## United States Patent Office.

GENIE W. IVES, OF SYRACUSE, NEW YORK.

## HEATING ATTACHMENT FOR LAMP-CHIMNEYS.

SPECIFICATION forming part of Letters Patent No. 502,364, dated August 1, 1893.

Application filed April 15, 1893. Serial No. 470,564. (No model.)

To all whom it may concern:

Be it known that I, GENIE W. IVES, a citizen of the United States, residing at Syracuse, in the county of Onondaga and State of New York, have invented certain new and useful Improvements in Heating Attachments for Lamp-Chimneys; 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 make and use the same, reference being had to the accompanying drawings, in which—

Figure 1 is a top plan of my improved heating attachment, and Fig. 2 a vertical elevation thereof as appearing looking toward it corner-wise.

Like letters and figures of reference indicate similar parts throughout the views of the drawings.

My invention specifically relates to that class of detachable devices, denominated as heating attachments for lamp-chimneys or lamps, wherein lamps utilizing kerosene or analogous combustible fluids are employed as an illuminating medium per se, and wherein the devices of the species mentioned are designed to be so attached above or over the upper mouth portion of an ordinany lamp-chimney as to serve as a support or receptacle for vessels containing liquids or food, that it is desired should be warmed or heated by the heat arising from out the chimney.

The purpose of my invention is the production of a device of the character stated constructed wholly of lengths of wire, so interwoven, bent, connected and disposed combined as to form a comparatively light durable and inexpensive attachment; and incorporate in its detail formation such features thereto as will necessarily improve the efficiency and adaptability thereof.

My invention consists in the novel features of construction, combination and arrangement of parts as hereinafter described, and specifically stated in the claims hereunto annexed.

My device is constructed as follows: A denotes a rectangular shaped wire frame, having rounded corners a, which frame, disposed on a horizontal plane is formed of a length of medium sized wire bent to shape, its contiguous or meeting ends being firmly united by means of a metallic sleeve b retaining said passes disposed horizontally a contractible and expansible wire ring C, of spring-metal the curved end portions m, n, thereof being of such length as to insure the overlapping of the extremities to some considerable degree. From their rounding or eye-shaped portions l the respective ends of the wire

ends immovably in place, or by other common means of fastening. From the diametrically opposite sides of the rectangular frame A 55 aforesaid there extend tautly across the opening existing within the frame, lengths of smaller wire c, disposed parallel at satisfactory distances apart, which wire lengths are secured at their extremities to the horizon- 50 tally straight portions of the frame by bending said ends in hook-shape around the respective oppositely located parts of the frame, as denoted by the letter d, the parallel wires c extending in one direction, being crossed at 65 right angles by the wires c located transversely thereto, and forming in connection with the boundary frame the open-work bed or seat 1 of my heating attachment; the openings e existent between the wire meshes in- 70 suring ready accessibility of heat through same to the utensil that may be deposited on the supporting bed, besides entailing exceeding lightness to the apertured bed.

B, B, are two lengths of wire of a thickness 75 corresponding to the wire of the frame A, located abuttingly beneath the wires c of the perforated bed or seat, each individual wire B at its middle portion extending horizontally from one rounded corner of the frame to the 80 diagonally opposite corner and crossing one another centrally the bed 1, as at f, which radial bracing-wires B, B, are connected with the overhead wires c by wire loops g located contiguous the center of the bed and also by 85 wire loops h binding the radial wires B, B, to the frame A at its rounded corner portions. The wire lengths B, B, at or contiguous the corners of the frame are bent and continue vertically downward a medium and corre- 90 sponding distance as at i, and thence by a return bend extend radially and convergently inward on a horizontal plane, as at k, approaching centrally to within short and equidistant points one to the other, at which points 95 they are bent semi-circularly creating eyes or shouldered bearings l through which loosely passes disposed horizontally a contractible and expansible wire ring C, of spring-metal the curved end portions m, n, thereof being 100 of such length as to insure the overlapping of the extremities to some considerable degree. From their rounding or eye-shaped

lengths B, B, extend perpendicularly downward a satisfactory distance as at p, terminating on a like horizontal plane in ringshaped heads r created by the curving of the 5 ends, said ring-shaped heads preferably projecting laterally outward from the straight extremities p of the wire lengths B B, as illustrated. The ends (four all told) of the wire lengths aforementioned practically form by 10 reason of their horizontal parts K, and perpendicular portions p, angular supporting and retaining arms D that not only uphold (by means of their upper parts concurring) the upward body or seat portion 1 a suitable 15 height above the top of the lamp-chimney whereon my device is mounted, but likewise absolutely prevent any liability of displacement laterally of same.

At E, [Fig. 1], I indicate in dotted work a 20 pivotal or swinging handle-portion or perhaps more correctly speaking a lifter-portion, comprising a length of suitable wire bent into a virtual U-shape longitudinally, which is located, when being operated, on a plane be-25 neath the open-work seat or body 1 of my construction, and pivotally secured to the wire frame A centrally one of its sides, by formed loops ss respectively formed transversely lineal in the divergent parallel limb 30 portions tof the lifter E, at that portion thereof where they outwardly commence to curve convergently and create a head portion u by a contacting return bend or lapping together. Upon said head portion there is slipped 35 tightly over a grasping handle v of asbestus or other substance that is a good non-conductor of heat. The elongated limbs t, t, extend inward such distance as to insure greater weight to said portion of the lifter E interiorly 40 of its pivotal connection than is embodied outwardly therefrom, and thereby by reason of said inner portion overbalancing the outer must normally assume an inclined or substantially perpendicular position. However, as 45 very evident, if so preferred the lifter E may be normally retained in a horizontal position,

I illustrate the lifter portion E of my device by dotted work for the reason that as a supporting medium for a utensil over a lamp chimney said portion is non-essential, although it is (when utilized) of exceeding utility combined as described, for the more satisfactory handling of the device in its full completeness to insure ready removal of my device while in a heated state from its position upon the hot chimney of a burning lamp.

its limbs abutting against the wires  $\bar{c}$  of the

overlying seat, by merely so twisting or com-

pressingly securing the lifter to the frame A

In mounting my improved wire-constructed heating-attachment over the open top of a lamp chimney of an illuminating lamp, it is lifted up a proper distance to clear the chim65 ney-top and being disposed centrally over said chimney, carried downwardly permitting the wire ends p to projectingly lie within the

interior of the upper portion of the chimney, either in contact with the contiguous inner surface by their heads r, or out of contact, 70 according as preferred; while coincidently the radial horizontal standing portions K of the wire lengths B, B, rest firmly upon the top edge of the chimney, whereby the device is thoroughly upheld for service and lateral dis- 75 placement thereof an impossibility; which afore-described erection of my appliance in operative position is well exemplified in the second figure of the drawings wherein it is shown crosswise in elevation and a fragmen- 80 tary portion of a lamp-chimney (i. e. the top) illustrated by dotted work. As is evident, the lengthiness of the centrally convergent portions K of the angular arms D insures of their resting upon the top edge of a lamp-chimney 85 irrespective of what, within customary bounds, the diameter of the chimney-top is. Noticeably the apertured seat or body 1 of my device is located at such a height over the chimney as to admit of free and perfect combus- 90 tion of the lamp no matter how fully the seat is occupied by a cup, pailor other utensil containing liquids or solids.

The expansible and contractible (in diameter) wire-ring C is to enable of carrying closer of together or farther apart, in a minimum degree, of the vertical extremities p, whereby proper adjustment thereof to chimneys of greater or less size circumferentially is readily attained, the slight displacement from an absolute horizontal plane of the parts K of the angular arm portions D necessarily entailed through the contracting or expanding of said ring C, not, as is evident, having any effect on the adaptability of the said parts K so resting on the edge of the chimney-top as to fully meet all essential requirements.

In the utilization of the lifter portion E of my attachment, the grasping-handle v is seized by the hand and, lifting horizontally upward thereby, the limbs of the lifter bearing against the overhead adjacent portions of the wires c of the openwork seat, the device in entirety is easily and safely removed from its location on the lamp-chimney, and all liability of 115 burning one's hand avoided by reason of the lifter portion.

My purpose in having the ring-shaped heads r of the sections p of the angular arms D, stand laterally outward is, that in the event 120 of the portions p closely pressing the interior surface of the chimney they can come into contact therewith only by their heads r, and the contacting surface thereof being but slight, no danger is incurred from liability of the 125 cracking of a heated chimney should the wire ends p be of much lower temperature.

When preferred, any other form of satisfactory heads may obviously be utilized.

Although by choice I form the seat portion 130 of rectangular shape with slightly rounded corners, still it may be of circular form peripherally as indicated by dotted circle w, or any other satisfactory contour.

The advantages of having said seat rectangular in outline are, that better bracing support and transverse immovability of the cross

wires are attained, as is evident.

My novel construction of a heating attachment for lamp chimneys virtually formed wholly of lengths of suitable wire bent engagingly to proper shape, insures a light, durable, practical and exceedingly inexpensive to device that will satisfactorily fulfill all requirements for the purposes it is designed for.

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is—

1. As a new article of manufacture, a heating-attachment for lamp-chimneys comprising an apertured seat, radial supporting ribs thereto, angular supporting arms projecting downwardly therefrom, and a ring with non-20 connected overlapping extremities, loosely l

connected to the angular supporting arms, all constructed of connected wire lengths suitably bent to shape, substantially as described.

2. As a new article of manufacture, a heating attachment for lamp-chimneys comprising 25 an open-work seat, radial braces thereto, angular supporting arms extending downward therefrom and approaching each other, a ring with loosely overlapped ends retaining said arms in proper relative positions, and a lifter 30 to one side of the seat, all formed of wire lengths engagingly bent to shape, substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses, this 6th day of 35

February, 1893.

GENIE W. IVES. [L. s.]

Witnesses:

WM. C. RAYMOND, CHAS. W. MARVIN.

It is hereby certified that in Letters Patent No. 502,364, granted August 1, 189 upon the application of Genie W. Ives, of Syracuse, New York, for an improvement "Heating Attachments for Lamp-Chimneys," an error appears in the printed specific tion requiring the following correction, viz.: In line 28, page 1, the word "ordinan; should read ordinary; and that the said Letters Patent should be read with this corre tion therein that the same may conform to the record of the case in the Patent Office.

Signed, countersigned, and sealed this 29th day of August, A. D. 1893.

[SEAL]

JNO. M. REYNOLDS, Assistant Secretary of the Interior.

Countersigned:

JOHN S. SEYMOUR.

Commissioner of Patents.

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