

951,088.

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# UNITED STATES PATENT OFFICE.

FERDINAND ZIGANEK, OF CLEVELAND, OHIO, ASSIGNOR, BY MESNE ASSIGNMENTS,  
TO THE REVOLVING STOVE COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF  
OHIO.

TOP FOR COOKING-STOVES.

951,088.

Specification of Letters Patent.

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*To all whom it may concern:*

Be it known that I, FERDINAND ZIGANEK, a citizen of the United States of America, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Tops for Cooking-Stoves; and I 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 pertains to make and use the same.

This invention relates to improvements in tops for cooking stoves.

One object of this invention is to provide a cooking stove having a circular body and a rotary top which is mounted on the upper end of and diametrically larger than the body so as to substantially entirely cover the body.

Another object is to form the rotary stove-top of a centrally located circular plate and an outer annular section which surrounds or extends circumferentially of the said plate and is instrumental in supporting the plate.

Another object is to provide a bottom bearing or support for the said plate centrally of the latter and independently of the annular top-section.

Another object is to adequately support both top-sections or members and to enable the top composed of the said members to rotate easily.

Another object is to rotate the said plate with the annular or outer top-section through the medium of frictional contact between the said members and to facilitate the rotation of the plate with the outer section.

Another object is to provide the rotary stove-top with a rail or rails arranged below the top surface of and extending circumferentially of the stove-top and spaced laterally and outwardly and supported from the stove-top.

Another object is to support the rail or rails from brackets which are secured to the stove-top and to prevent heat from being transmitted from the stove-top to the said brackets and consequently to the said rail or rails.

Another object is to provide a stove-top of the character indicated which is simple and durable in construction and whose component parts are readily assembled.

With these objects in view, and to the end

of realizing any other advantages herein-after appearing, this invention consists in certain features of construction, and combinations and arrangement of parts, herein-after described, pointed out in the claims, and illustrated in the accompanying drawings.

In the said drawings, Figure 1 is a top plan of a stove-top embodying my invention. Fig. 2 is a vertical section taken along the line 2—2, Fig. 1, looking in the direction indicated by the arrow. Fig. 3 is a horizontal section on line 3—3, Fig. 2, looking upwardly. Fig. 4 is a vertical section on line 4—4, Fig. 2, looking outwardly.

Referring to the drawings, A indicates the upper portion of a vertically arranged cylindrical metal casing which forms a circular stove-body and is provided internally and a suitable distance below its upper extremity with a substantially horizontally arranged partition *a*, as shown in Fig. 2. The casing A is also provided internally between its upper extremity and the said partition, but a suitable distance below the said extremity, with a metal ring B which is arranged concentrically relative to the said casing and is secured, preferably removably by suitably applied bolts C and nuts D, to the casing.

The ring B is provided in its upper end with a recess *b* extending circumferentially of the ring and engaged by anti-friction balls *e* which project above and are spaced circumferentially of the ring and afford bearing to the outer annular metal section G of my improved stove-top. The balls *e* extend from within the recess *b* in the said ring into a recess *g* formed in the lower end and extending circumferentially of the stove-top-section G. Preferably adjacent balls *e* are suitably spaced by spacing bars *f* which extend between the said balls. It will be observed therefore that the stove-top-section G is mounted on antifriction balls and supported and removable upwardly from the casing or stove-body B and that the said stove-top-section is larger diametrically than the said casing or stove-body.

The top section B is provided internally and a short distance below its top surface with a laterally and inwardly projecting annular flange 10 whose top surface forms an upwardly facing seat which is frictionally engaged by a circular metal plate H which



forms the inner or central section of my improved stove-top. That is, the plate H is surrounded by the annular top-section G and seated upon and frictionally engages the seat formed by the flange 10 on the top-section G so that the said plate is rotatable with the said top-section G.

The plate H is provided with openings or holes *h* for receiving the cooking utensils or vessels. The holes *h* are spaced equidistantly from and equidistantly circumferentially of the axis of the stove-top, and suitably applied lids I are provided for closing the said holes. To adequately support the plate H the partition *a* is provided at the top and centrally thereof and in line vertically with the axis of the stove-top, with a standard J which rests upon the said partition and is secured, preferably removably by suitably applied bolts K and nuts *k*, to the said partition. The standard J is therefore supported but removable from the stove-body.

Mounted in the upper end of the standard J is an antifriction ball 12, and upon this ball is mounted a spider which has its arms L located next below and affording a bottom bearing or support to the inner stove-top-section H. The arms L are arranged radially of the stove-top and spaced equidistantly circumferentially of the axis of the spider and alternate with the holes *h* so as not to interfere with the placing of utensils or vessels in the said holes. The spider is flush at the top with the top surface or seat on the flange 10 of the top-section G, and the plate H rests upon and frictionally engages the spider-arms so that the spider is through the medium of the frictional engagement between the spider-arms and the said plate rotated with the latter upon rotating the stove-top in the one direction or the other. Of course the top-section G and the spider are arranged concentrically relative to each other and the flange 10 of the said top-section extends circumferentially of the spider. The spider-arms L are preferably integral with the upper portion of the hub 1 of the spider, but the lower portion of the said hub consists preferably of a separate metal piece 13 which is removably secured to the upper portion of the hub by suitably applied screws 14 and rests at its lower end upon the antifriction ball 12. The hub-section 13 is provided at its lower end with a depending annular flange 15 which extends circumferentially of the standard J and protects the said ball.

The space between the spider and the partition *a* forms a heating chamber which extends circumferentially of the lower portion 13 of the hub of the spider and around the standard J and contains suitably applied heating burners Q which are operated in any approved manner, which burners are

spaced equidistantly from and equidistantly circumferentially of the said standard.

The top-section G extends over the upper end of the casing or stove-body A and laterally and outwardly beyond the outer side of the said casing or stove-body, and for convenience in rotating the rotary stove-top the said top-section G is provided with two rails R and R which are arranged and extend circumferentially of opposite sides respectively of and are spaced outwardly and laterally from the said top-section. Each rail R extends through the outer ends of brackets *r* which are spaced circumferentially of and supported from the top-section G. Preferably the latter is provided in its under side and above the upper end of the casing or stove-body A with an annular recess 16 arranged concentrically relative to the stove-top, and the brackets *r* engage the said recess and extend from the recess laterally and outwardly to the rail supported in the said bracket. Each bracket *r* is secured to the top-section G preferably removably by screws *s*.

To prevent the transmission of heat from the stove-top to the rail-bearing brackets *r* and consequently to the rails R a layer *t* of material, such, for instance, as asbestos, which is a good non-conductor of heat, is interposed between each bracket and the opposing surfaces of the top-section G.

By the construction hereinbefore described it will be observed that the antifriction ball 12 is arranged centrally of the upper portion of and supported from the stove-body, that the antifriction balls *e* are spaced equidistantly from and circumferentially of the ball 12 and supported from the stove-body, that the rotary top is supported from or rests on the said balls and is arranged concentrically relative to and free to be removed upwardly from the cylindrical casing A, and that the arrangement of the rails R below the top surface of the stove-top does not interfere with the sliding of a utensil or vessel horizontally from the stove-top.

What I claim is:—

1. The combination, with a stove-body, of a horizontally arranged rotary spider supported from the upper end of the said body, and a rotary top comprising an annular rotary section arranged concentrically relative to and surrounding the spider and supported from the stove-body, said top also comprising a plate mounted on and frictionally engaging the spider and also mounted on and frictionally engaging the aforesaid annular section.

2. The combination, with a stove-body, and a suitably supported rotary spider arranged substantially horizontally at the upper end of and centrally relative to the said body, of a rotary top comprising a rotary section extending circumferentially of and



arranged concentrically relative to the spider and supported from the stove-body and having a seat which is arranged flush with the top surface of and extends circumferentially of the spider, and a plate mounted on the spider and on the said seat.

3. The combination, with a stove-body, of a suitably supported rotary spider arranged substantially horizontally at the upper end of and centrally relative to the stove-body, a suitably supported antifriction ball arranged below and affording bearing to the lower end of the hub of the spider, an annular top-section extending circumferentially of and arranged concentrically relative to the spider, antifriction balls supporting the annular section and supported from the stove-body, and a plate mounted on the spider and rotatable with the said annular section.

4. The combination, with a stove-body, of a horizontally arranged rotary spider located centrally of and supported from the said body at the upper end of the body, and a rotary top comprising an annular rotary section which is supported from the stove-body and arranged concentrically relative to the spider and provided internally with a flange which extends circumferentially of the spider, said top also comprising a plate mounted on and frictionally engaging the spider and also mounted on and frictionally engaging the aforesaid flange.

5. In a cooking stove, an upright cylindrical casing forming a circular stove-body; a substantially horizontal partition arranged a suitable distance below the upper end and internally of the casing; a standard mounted on and arranged centrally of and secured to the partition; an antifriction ball seated in

the upper end of the standard; a spider rotatably mounted on the said ball; an annular rotary top-section arranged concentrically relative to the spider and supported from the casing, and a plate mounted on and rotatable with the said annular top-section.

6. In a cooking stove, an upright cylindrical casing forming a circular stove-body; a substantially horizontal partition arranged a suitable distance below the upper end and internally of the casing; a standard mounted on and arranged centrally of and secured to the partition; an antifriction ball seated in the upper end of the standard; a spider mounted on the said ball and having the lower portion of its hub provided with a downwardly projecting flange surrounding the standard; an annular rotary top-section arranged concentrically relative to and supported from the casing, and a plate mounted on the spider and rotatable with the said annular top-section.

7. In a cooking stove, a stove-body, an antifriction ball arranged centrally of the upper portion and supported from the stove-body, a spider mounted on the said ball, an annular top-section arranged concentrically relative to the spider, antifriction balls supporting the said top-section and supported from the stove-body, and a plate removably mounted on the spider and rotatable with the said annular top-section.

In testimony whereof, I sign the foregoing specification, in the presence of two witnesses.

FERDINAND ZIGANEK.

Witnesses:

C. H. DORER,

F. L. McDONNELL.