

S. M. REDFIELD.

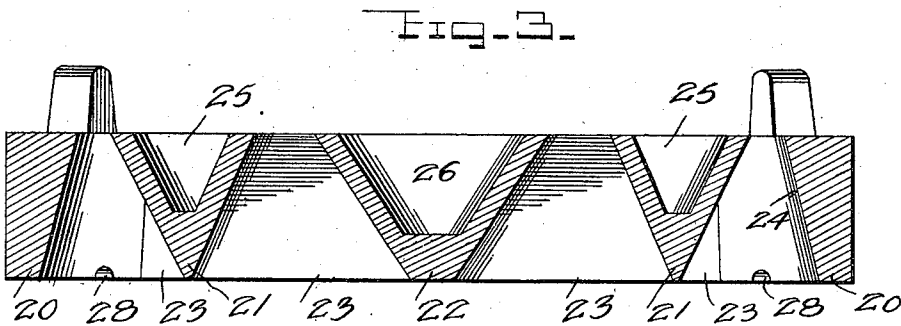
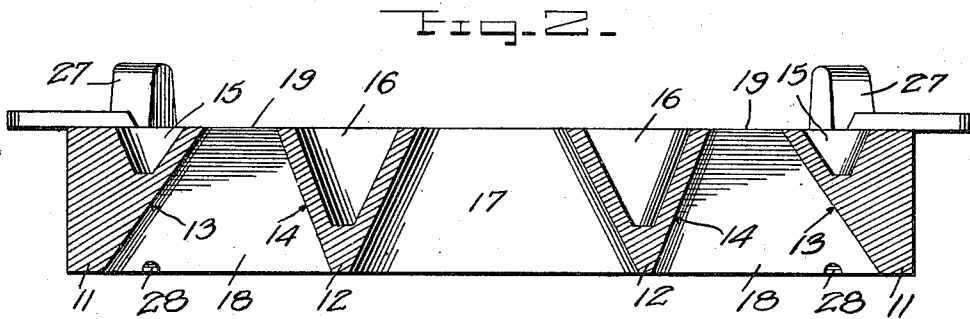
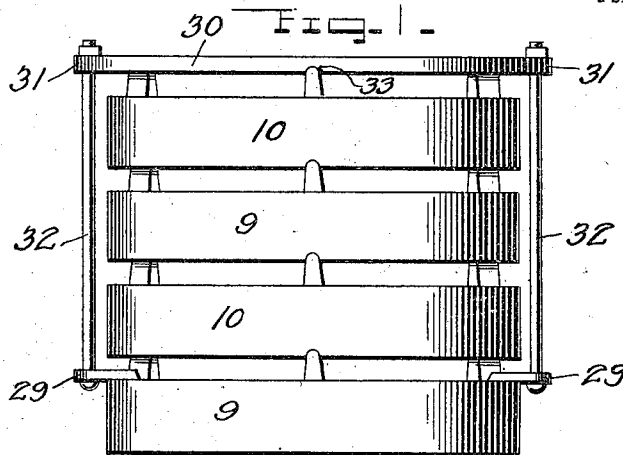
HEAT RADIATOR.

APPLICATION FILED FEB. 11, 1910.

965,226.

Patented July 26, 1910.

2 SHEETS—SHEET 1.



Witnesses

W. H. Rockwell

R. C. Braddock

Inventor

Stephen M. Redfield

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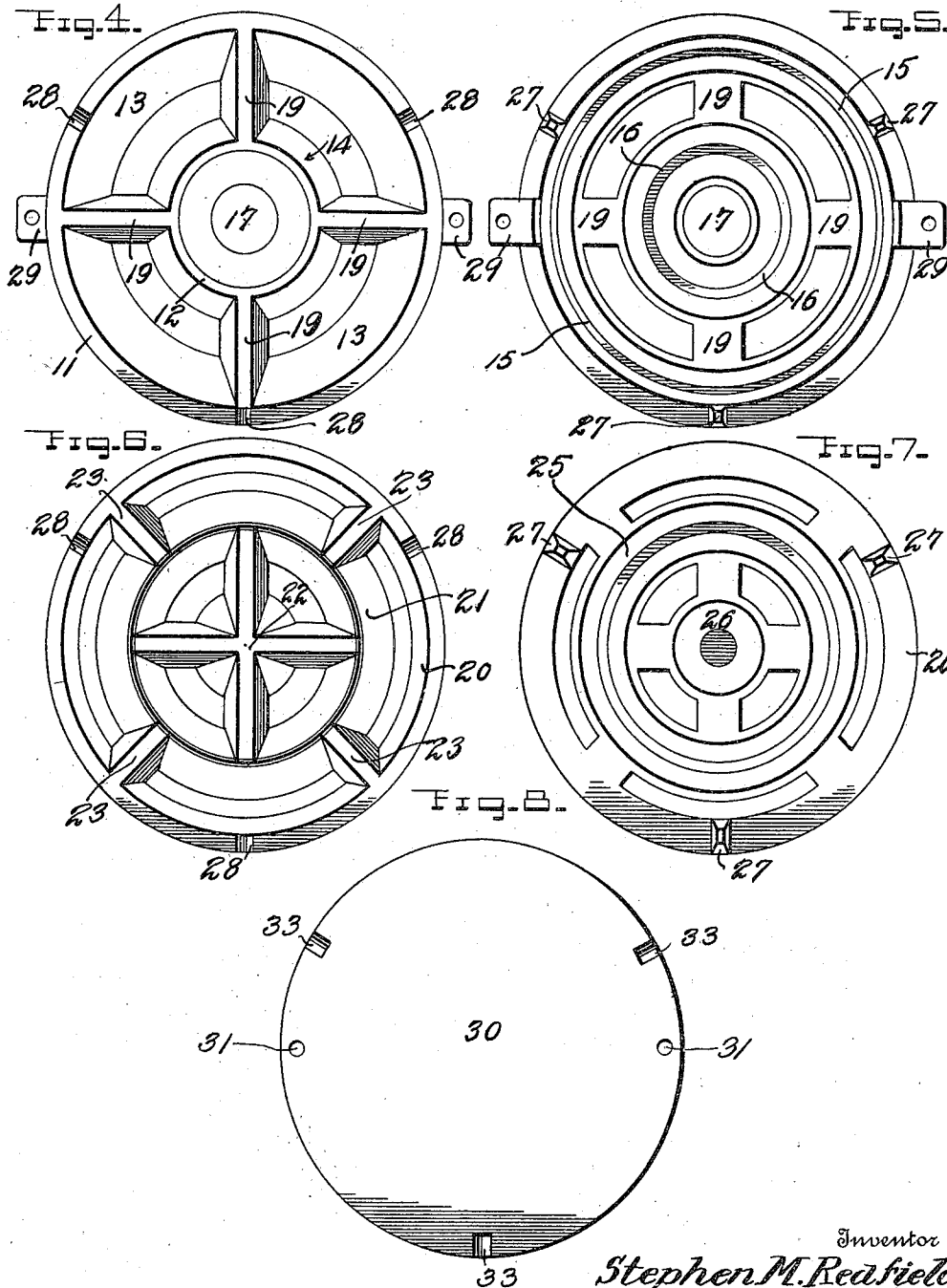
S. P. K. K. K.
his Attorney

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3 SHEETS—SHEET 2.



Witnesses

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UNITED STATES PATENT OFFICE.

STEPHEN M. REDFIELD, OF MARYVILLE, MISSOURI.

HEAT-RADIATOR.

965,226.

Specification of Letters Patent.

Patented July 26, 1910.

Application filed February 11, 1910. Serial No. 543,362.

To all whom it may concern:

Be it known that I, STEPHEN M. REDFIELD, a citizen of the United States, residing at Maryville, in the county of Nodaway and State of Missouri, have invented certain new and useful Improvements in Heat-Radiators, of which the following is a specification.

The present invention relates to means for radiating heat, and is designed to be employed in connection with any source of heat, such as a lamp, gas and oil stoves or the like.

The primary object is to provide an exceedingly simple structure, made up of sections that can be cheaply produced, these sections being so constructed that any number desired can be employed, and when in assembled relation, constituting effective means for radiating heat on all sides.

A simple embodiment of the invention is disclosed in the accompanying drawings, wherein:—

Figure 1 is a side elevation of the structure, showing a plurality of the sections. Figs. 2 and 3 are vertical sectional views through two alternate sections. Fig. 4 is a bottom plan view of the form illustrated in Fig. 2. Fig. 5 is a top plan view of the same. Fig. 6 is a bottom plan view of the form illustrated in Fig. 3. Fig. 7 is a top plan view thereof. Fig. 8 is a bottom plan view of the cap plate.

Like references designate corresponding parts in the several figures of the drawings.

In the structure disclosed, superposed sections of two different forms are employed, and are designated respectively 9 and 10. The sections may be of any desired shape, but are preferably circular. Each section 9 consists of an outer ring 11 and an inner concentric ring 12, the outer ring having an inwardly flared side wall 13, and the inner ring being downwardly tapered, producing oppositely inclined walls 14. The rings 11 and 12 may be hollowed out or recessed as shown at 15 and 16. As a result, it will be observed that an upwardly tapered central opening 17 is provided and upwardly tapered spaces 18 are formed between the two rings. These rings are connected by integral radially disposed webs 19 that are downwardly tapered, as will be clear by reference to Fig. 4. Each section 10 also consists of an outer ring 20, an inner ring 21, and a central conical portion 22. These

various elements are connected by downwardly tapered webs 23. The inner face of the outer ring is downwardly and outwardly inclined, as shown at 24, and the inner ring is downwardly tapered. Said inner ring may be channeled in its upper side, as shown at 25, and the conical central section 22 may also be hollow, as shown at 26.

Each of the rings 9 and 10 is provided on one side with a plurality of integral upstanding spacing lugs 27, and in the other side with corresponding sockets 28 that receive the ends of the lugs of the adjacent section, as shown in Fig. 1. When the sections are thus positioned, it will be observed that the inner ring 21 of each section 20 will be disposed over the space between the inner and outer rings of the section 9 below it, and that the central element 22, in like manner will be disposed over the central opening 17. The sections are thus alternated, and consequently upwardly moving drafts of heated air must zigzag through the same in order that the heat from such air will be absorbed by the sections and radiated into the room. The lowermost section 9 has outstanding ears 29, and a cap plate 30 is placed over the uppermost section, said cap plate being sufficiently larger than the diameter of the sections so as to receive therethrough the clamping bolts 32, which also pass through the said ears 29, serving to secure all the sections together, and maintain the structure in assembled condition. The cap plate may be imperforate, as shown, and has in its under side sockets 33 to receive the lugs of the uppermost section. It constitutes a convenient support for articles to be cooked or heated.

From the foregoing, it is thought that the construction, operation and advantages of the herein described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion and minor detail of construction, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

I claim:

1. In a heat radiator, superposed radiator sections provided with lugs that space the same apart, said sections having openings therethrough, the openings of one section being out of line with those of the other and said openings being upwardly tapered,

a cap plate covering the sections, the lowermost section having outstanding lugs, and tie bolts passing through said lugs and through the cap plate to clamp all the sections together.

2. In a heat radiator, superposed heat radiating sections, said sections comprising outer and inner rings, and webs connecting the rings, the rings of alternate sections being disposed over the space between the rings of the sections interposed between them.

3. In a heat radiator, superposed heat radiating sections, said sections comprising outer and inner tapered rings, and tapered webs connecting the rings, the rings of alternate sections being disposed over the space between the rings of the sections interposed between them.

4. In a heat radiator, superposed heat radiating sections, comprising outer and inner rings, and webs connecting the rings, the rings of alternate sections being disposed over the space between the rings of the sec-

tions interposed between them, each section having on one side spacing lugs and having in the other side, sockets to receive the lugs of the adjacent section, and means for clamping together the various sections.

5. In a heat radiator, superposed heat radiating sections, each comprising concentric rings that are downwardly tapered, and radial webs connecting the rings, the rings of one section being disposed over the space between the rings of the adjacent section, each section furthermore having spacing lugs on one side, and sockets in the other side to receive the lugs of the adjacent section, a cap plate that engages over the uppermost section, said cap plate and the lowermost section being provided with outstanding ears, and tie rods connecting the ears.

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

STEPHEN M. REDFIELD.

Witnesses:

IRA K. ALDERMAN,
LENTON M. STRADER.