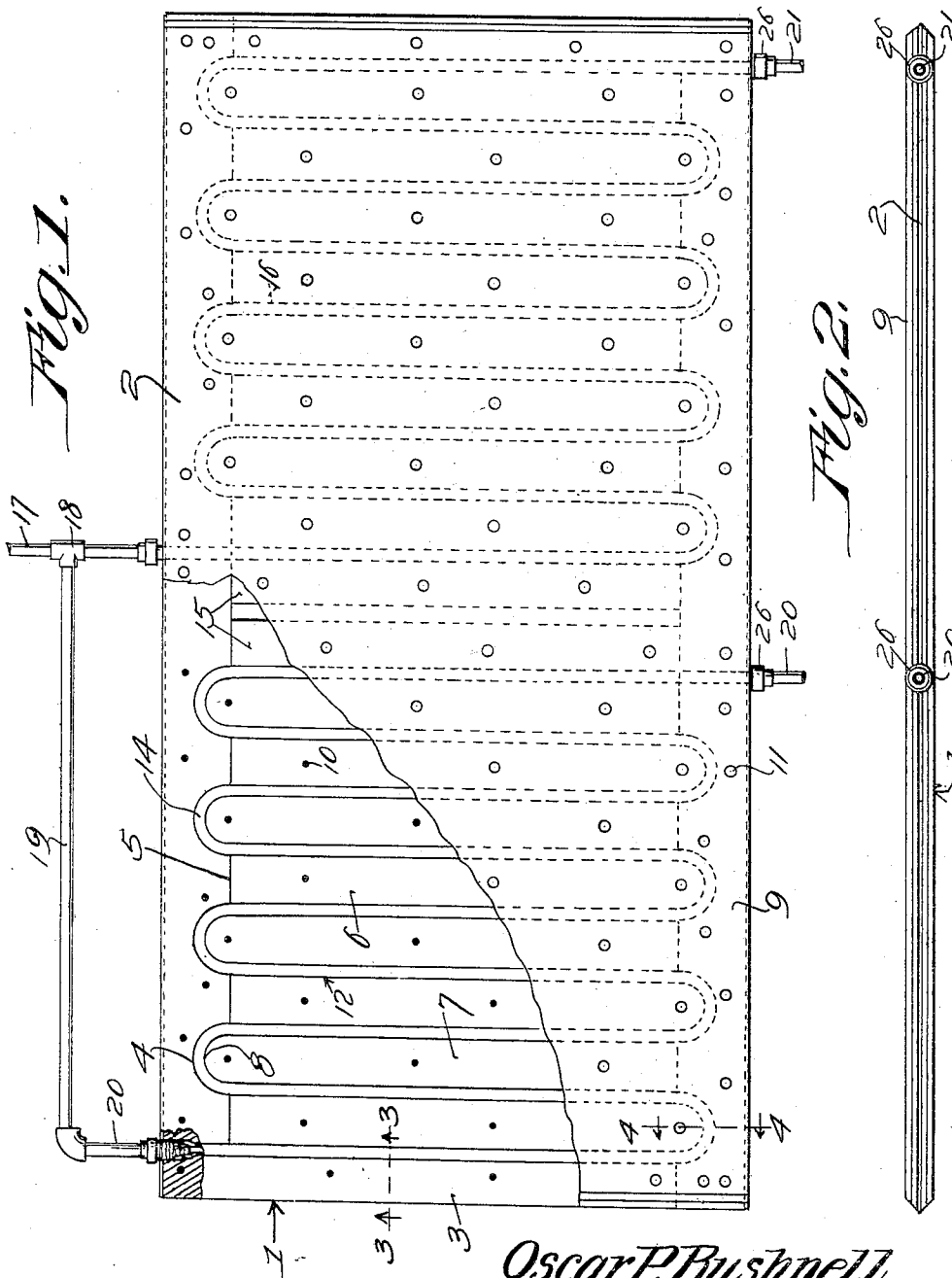


O. P. BUSHNELL.
STEAM PLATE.
APPLICATION FILED MAY 13, 1916.

1,245,674.

Patented Nov. 6, 1917.
2 SHEETS—SHEET 1.



Witnesses

J. P. Daniels
R. L. Parker

Oscar P. Bushnell,

Inventor

by

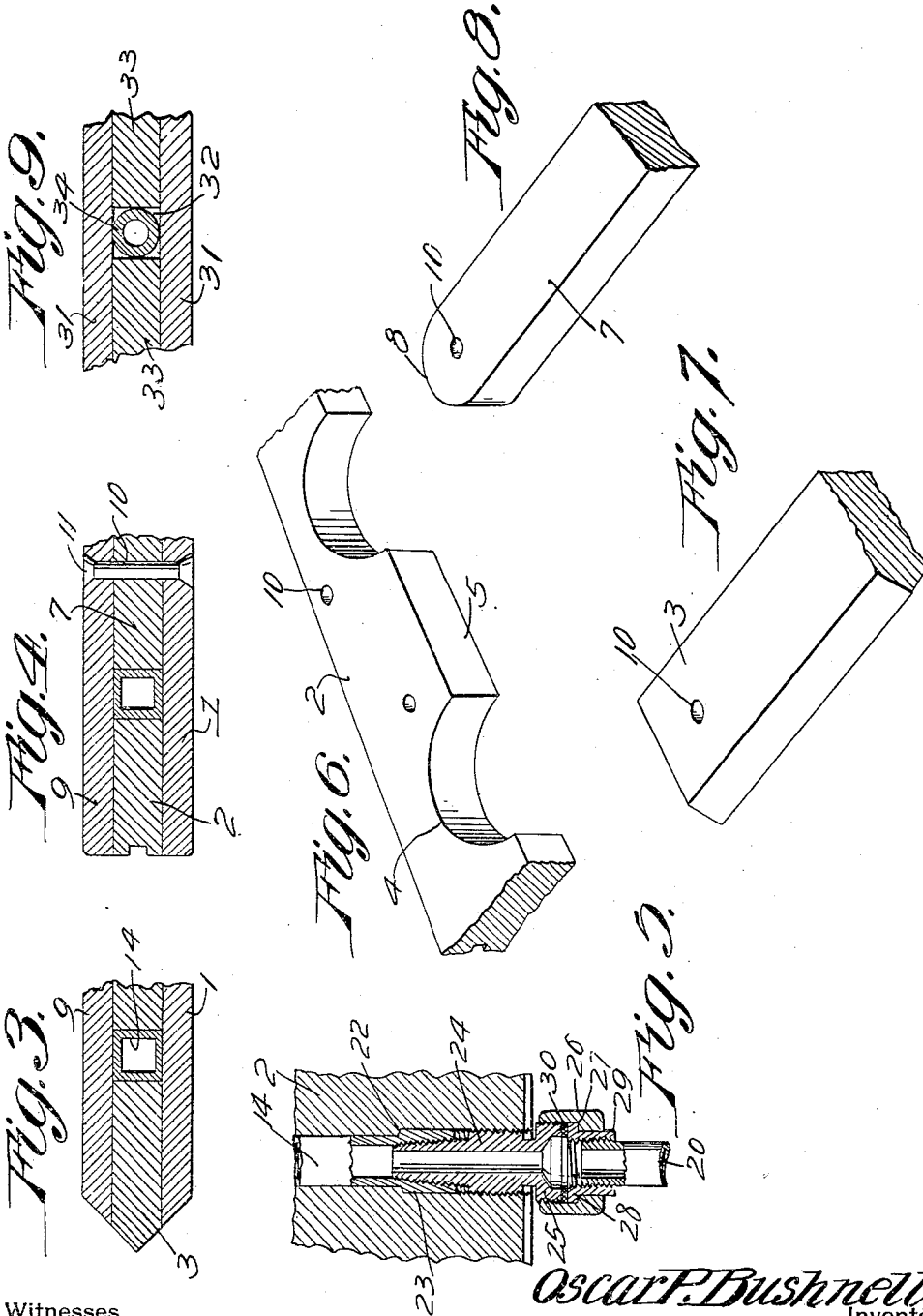
C. A. Snow & Co.

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J. R. Tomlin
R. L. Parker

Oscar P. Bushnell
Inventor

by *C. A. Snow & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

OSCAR P. BUSHNELL, OF BELLEVILLE, NEW JERSEY.

STEAM-PLATE.

1,245,674.

Specification of Letters Patent.

Patented Nov. 6, 1917.

Application filed May 13, 1916. Serial No. 97,349.

To all whom it may concern:

Be it known that I, OSCAR P. BUSHNELL, a citizen of the United States, residing at Belleville, in the county of Essex and State of New Jersey, have invented a new and useful Steam-Plate, of which the following is a specification.

The device forming the subject matter of this application is a steam plate of the sort used in restaurants, presses and elsewhere.

One object of the present invention is to provide a steam plate which may be built up at trifling expense.

Another object of the invention is to provide a steam plate which will not leak under fluid pressure.

It is within the province of the disclosure to improve generally and to enhance the utility of that type to which the present invention appertains.

With the above and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawings:—

Figure 1 shows in top plan, a steam plate constructed in accordance with the present invention, parts being broken away;

Fig. 2 is an elevation of the structure shown in Fig. 1;

Fig. 3 is a section taken on the line 3—3 of Fig. 1;

Fig. 4 is a section taken on the line 4—4 of Fig. 1;

Fig. 5 is a fragmental horizontal section showing one of the connecting means;

Fig. 6 is a fragmental perspective showing a part of one of the side strips;

Fig. 7 is a fragmental perspective showing a portion of one of the end strips;

Fig. 8 is a fragmental perspective showing a part of one of the fillers; and

Fig. 9 is a view similar to Fig. 4, but showing the pipe before being expanded.

The steam table forming the subject matter of this application preferably is made of metal throughout and includes a bottom plate 1 on which is superposed a frame made of side strips 2 and end strips 3. The side strips 2 are provided in their inner

edges with curved recesses 4 defining lugs 5. Superposed on the bottom plate 1 and abutting at their ends against the lugs 5 are primary spacers 6. Alternating with the primary spacers 6 and mounted on the bottom plate 1 are secondary spacers 7 having rounded ends 8 projecting into the recesses 4 in the inner edges of the side strips 2. Disposed upon the frame comprising the side strips 2 and the end strips 3, and upon the spacers 6 and 7 is a top plate 9. The parts hereinbefore described are provided with holes 10 adapted to receive rivets 11 or like connecting means whereby the plates 9 and 1, the side strips 2, the end strips 3 and the spacers 6 and 7 may be united to form a solid and substantial structure. The spacers 7 and 6 are separated, and the ends of the secondary spacers 7 are separated from the walls of the notches or recesses 4 in the side strips 2 to form a sinuous channel 12 in the plate above described. In the channel 12 is placed a continuous pipe 14.

The structure above described may be duplicated at the ends of the plate, and when this duplication exists, spacers 15 are placed between the plates 1 and 9 midway between the ends of the table, so as to separate the table into two parts. When this two-part construction is resorted to, a second pipe 16, resembling the pipe 14, is used.

The numeral 17 designates a steam supply pipe connected with one end of the sinuous pipe 16. By means of a T 18, the steam supply pipe 17 is connected with a pipe 19, united with one end of the pipe 14. The other end of the pipe 14 is connected with a steam outlet pipe 20. A pipe 21 forms a steam outlet for the pipe 16.

The pipe 19 and one end of the pipe 14, the other end of the pipe 14 and the pipe 20, the pipe 17 and one end of the pipe 16, and the other end of the pipe 16 and the pipe 21 are united by unions, which are alike, one of these unions being shown in Fig. 5, in connection with the pipe 20 and one end of the pipe 14. In the channel 12 is formed a shoulder 22 coöperating with a shoulder 23 on the end of the pipe 14. A tapered nipple 24 is threaded into the end of the pipe 14, the nipple 24 including an enlarged circular portion threaded into a correspondingly shaped recess in the channel 12. The nipple 24 terminates in an exterior head 25 onto which is threaded a coupling 26 having a shoulder 27 coöperating

with a shoulder 28 on a sleeve 29 threaded onto the pipe 20. A packing gasket 30 is interposed between the inner end of the sleeve 29 and the head 25 of the nipple 24.

5 The construction, obviously, is such that a leakage of steam at the ends of the sinuous pipe will be avoided. Further, when the tapered end of the nipple 24 is threaded into the enlarged end of the pipe 14, the latter

10 will be expanded, to aid in forming a steam tight joint.

An important feature of the invention remains to be discussed. The pipes 14 and 16 preferably are made of copper, lead or some

15 other material which may be expanded under pressure. When the pipes are placed in the channels 12, they do not of necessity fit tightly therein, but after they have been placed in the channels, the pipes are sub-

20 jected to a high internal fluid pressure, thus expanding them so that they fit closely within the channels. The construction, therefore, is such that a practically solid and exceedingly strong and perfectly steam-tight

25 plate or table may be afforded.

In Figs. 3 and 4, the pipes have been shown as being of rectangular cross section. This construction, however, need not be resorted to. In Fig. 9 of the drawings, the

30 plates of the table are denoted by the nu-

meral 31, the fillers appear at 33 and the channel is shown at 32. The pipe 34, in Fig. 9, is shown as being of circular cross section, it being presupposed that, in Fig. 9, the pipe has not yet been expanded by

35 pressure, as hereinbefore stated.

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

A steam table comprising a frame including opposed side strips having recesses in their inner edges, the recesses defining lugs; spacers each having one end extended into the recess of one strip and shaped to conform to said recess, the other end of each spacer abutting against the lug on the other

40 strip; and a single sinuous pipe disposed between the spacers, and between the walls of the recesses and the ends of the spacers, the pipe completely filling the channels defined by the longitudinal edges of the

45 spacers and by the ends of the spacers and the walls of the recesses.

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In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

OSCAR P. BUSHNELL.

Witnesses:

W. R. JESSOP,
A. M. CLARK.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."