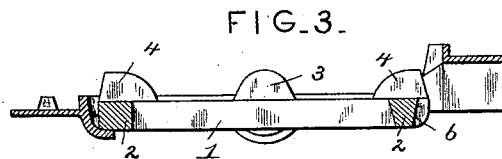
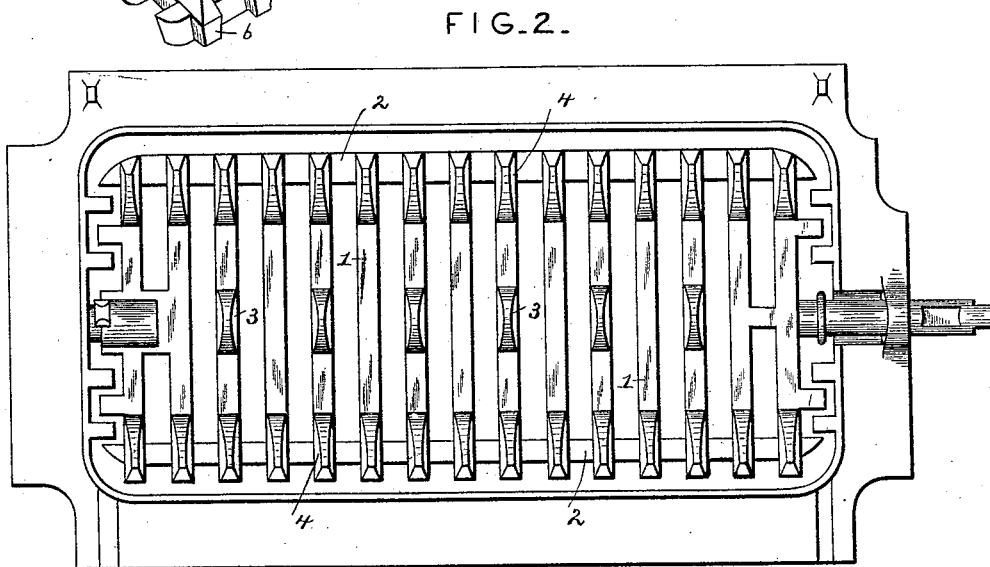
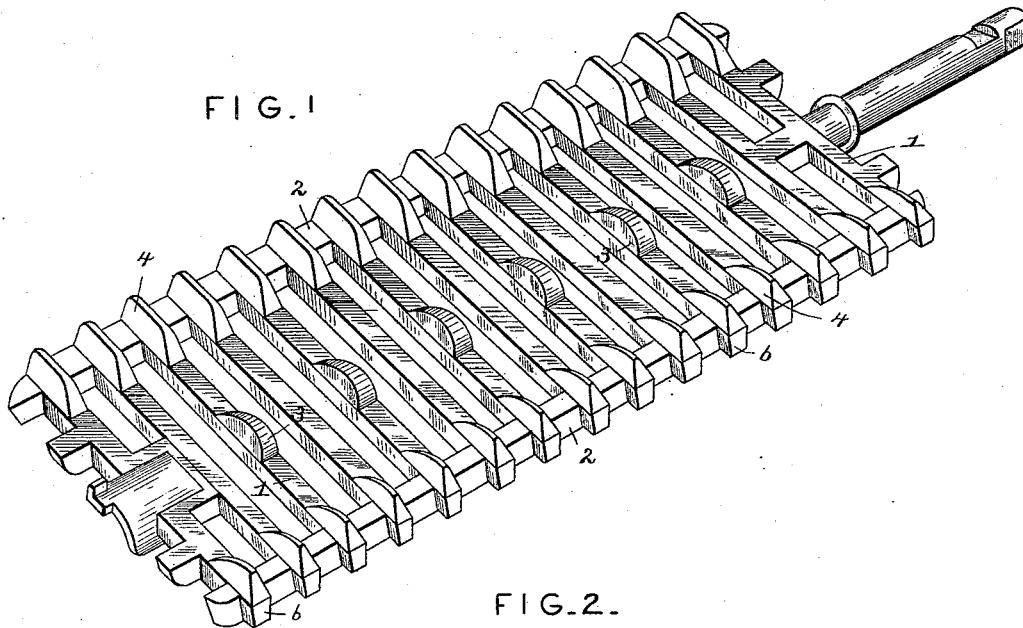


(No Model.)

J. W. COBB.
GRATE.

No. 489,462.

Patented Jan. 10, 1893.



Witnesses

Harry L. Amer.
J. H. Siggers,

By his Attorneys

Inventor.

John W. Cobb.

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

JOHN W. COBB, OF TAUNTON, MASSACHUSETTS, ASSIGNOR TO THE COBB
STOVE AND MACHINE COMPANY.

GRATE.

SPECIFICATION forming part of Letters Patent No. 489,462, dated January 10, 1893.

Application filed April 5, 1892. Serial No. 427,866. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. COBB, a citizen of the United States, residing at Taunton, in the county of Bristol and State of Massachusetts, have invented a new and useful Grate, of which the following is a specification.

My invention relates to improvements in grates, for coal burning-stoves; the objects in view being to provide a grate of the ordinary simplicity, and so construct the same as to support the coal above the bars, whereby warping by reason of excessive heat is prevented; and furthermore to increase the draft to the coal.

With these objects in view the invention consists in certain features of construction hereinafter specified and particularly pointed out in the claim.

Referring to the drawings:—Figure 1 is a perspective of a grate constructed in accordance with my invention. Fig. 2 is a plan view. Fig. 3 is a transverse section of the same.

Like numerals of reference indicate like parts in all the figures of the drawings.

In constructing the grate, I cast the same in the usual manner, and it consists essentially in the usual transverse grate-bars 1, and the opposite longitudinally-disposed or side connecting-bars 2, formed integral with the bars 1. Each alternate grate-bar 1 has formed upon its upper side an integral upwardly-disposed conical lug 3, or if desired, these lugs may be arranged upon each bar or spaced farther apart. The ends of each cross-bar have formed upon their upper sides and at their junction with the longitudinal or side-bars 2, upwardly-disposed lugs 4, each of which has its inner edge inclined as shown, and its opposite side-faces converged slightly

toward their upper ends. Those lugs located at the front ends of the cross-bars, are preferably extended beyond the front side-bar, as at 6, thus constituting intermediate air-passages, for inducing and distributing the draft.

This completes the construction of the grate, and its advantages are as follows: The series of lugs upon the upper side of the grate, support the coals slightly above the grate-bars, and the latter are thereby prevented from becoming superheated, by reason of the close contact with the coals to which they are ordinarily subjected. The draft is also greatly increased, and the bars thus cooled while yet the fire is more intense and the combustion more complete. Yet without the danger of warping of the bars is lessened, and the grate remains unimpaired and in working condition for a much longer time than where the coals rest directly thereon.

Having described my invention, what I claim is:—

The herein-described improved grate, the same consisting of the opposite longitudinal bars and intermediate connecting cross-bars, the latter being provided upon their upper sides with lugs, the front series of which extend beyond the front cross-bar, at the junction of the cross and longitudinal bars, whereby the space between the cross bars is continued beyond the front longitudinal bar, forming a series of draft openings, substantially as specified.

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

JOHN W. COBB.

Witnesses:

E. M. REED,
J. C. REYNOLDS.