(No Model.)

B. F. CHOLLAR.

GRATE.

No. 494,462. Patented Mar. 28, 1893.

Fig. 1.

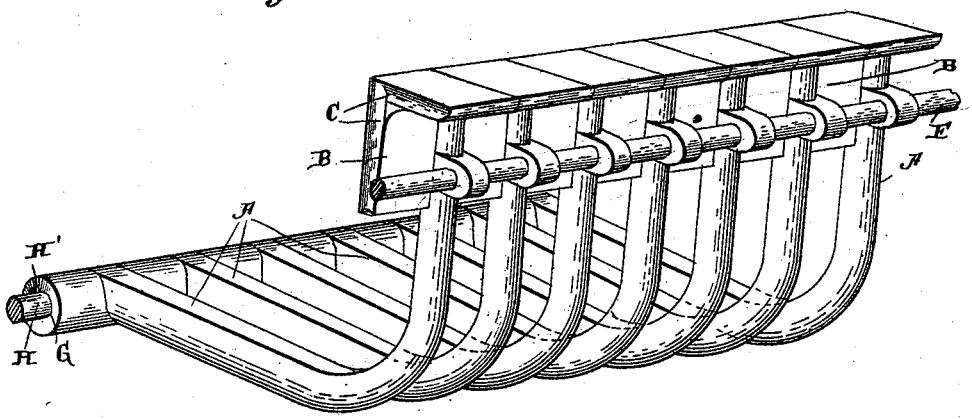


Fig. 2.

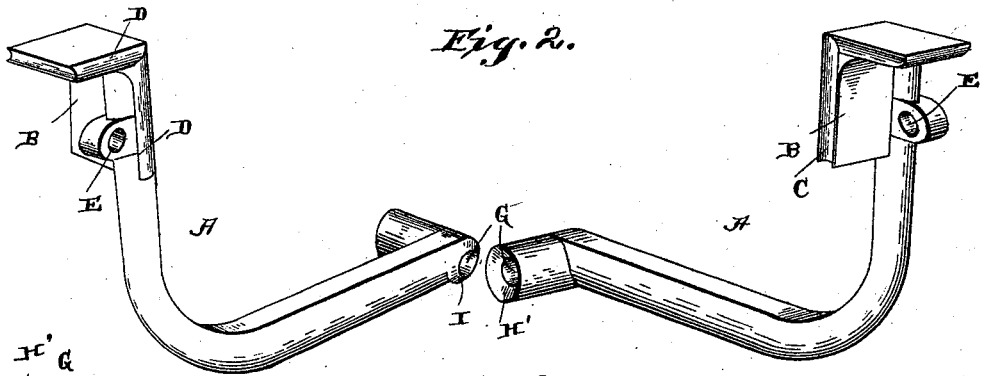
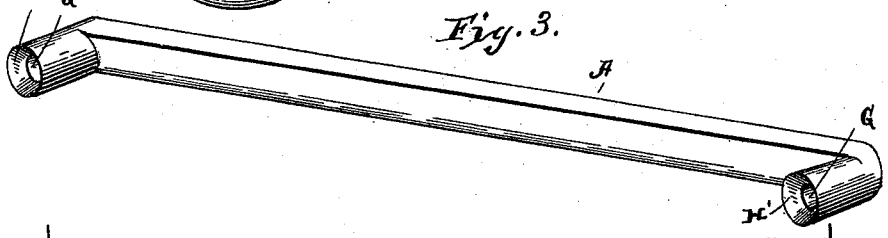


Fig. 3.



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UNITED STATES PATENT OFFICE.

BENJAMIN FRANKLIN CHOLLAR, OF FORT WORTH, TEXAS.

GRATE.

SPECIFICATION forming part of Letters Patent No. 494,462, dated March 28, 1893.

Application filed July 21, 1892. Serial No. 440,719. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN FRANKLIN CHOLLAR, of Fort Worth, in the county of Tarrant and State of Texas, have invented certain new and useful Improvements in Grates; 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in grates: and it consists in the novel feaures of construction which will be fully described hereinafter, and more especially referred to in the claims at the end of this specification.

The object of my invention is to construct a grate which is adapted for use in stoves as well as in fire plaees, and which, being composed of separate bars, may be repaired by inserting new bars, thus saving that portion of the grate which remains intact, as cannot be done with grates formed of a single casting.

Referring to the accompanying drawings,—Figure 1 is a perspective view of my improved grate. Fig. 2 is a view of the bars detached or separated. Fig. 3 illustrates a slight modification.

The bars A, forming the grate are bent or curved as shown to conform to the curvature of the front of the fire box or fire place. Upon one side of the upper end of each of the bars is the angular flange B, against which the next adjacent bar bears thus holding them at this point the desired distance apart. The outer edge of this flange B, is formed with a longitudinal depression C, into which projects the bulge D, of the next bar. By this means the bars are held in the correct relative position. For clamping them together at this point openings E, are formed near the bar ends which are in line and extending therethrough is the bolt F, which holds them most securely together. When the grate is being used in a fire place it may be held up in position by any suitable support secured to the bolt ends. At the lower or inner ends of the bars recessed eyes G, are formed which project to one side as shown and against which the respective adjacent bars bear. Through these eyes extends the lower clamping bolt H. The outer ends of these eyes are reamed out as shown at H′, where they fit over the corresponding projections I, on the sides of the bars A. By means of this interlocking feature just described together with the depression C, and the bulge D, at the opposite end of the bars the same are made substantially into one solid piece, thus relieving the bolts of much of the weight and strain. Bars may also be formed straight as shown in Fig. 3 with the recessed projections both on the same side of the bar. These are for use in constructing flat grates for cooking and other stoves in contradistinction to the grate illustrated in Fig. 1 which is adapted to open front stoves and fire places. Thus it will be seen that a most substantial grate is provided formed wholly of separable bars any one of which may be removed at any time and a new one inserted with the greatest ease.

Having thus described my invention, I claim—

1. A grate composed of the separable bars A, each bar formed integral and having transverse openings at both ends to receive the horizontal clamping bolts holding the bars together, the bars being formed at both ends with lateral projections and depressions to interlock and prevent twisting or warping of the bars, one side of an end of each bar having the lateral tube G integral therewith and countersunk at its outer end and the other side of said end having the raised boss I to fit the countersunk end of the tube of the next bar, as shown and described.

2. The grate composed of the bent bars, each bar being formed integral with the lateral tube at one end so that all the tubes of the bars register, a rod passed therethrough to clamp the bars together, the opposite end of each bar having the lateral angular flange B, the edges of the bars and flanges having corresponding depressions and bulges to intermesh, perforated lugs on the bars, and a clamping bar passed through the same, substantially as shown and described.

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

BENJAMIN FRANKLIN CHOLLAR.

Witnesses:
CHARLES H. REW,
H. C. BARR.