D. W. CHERRY.

GRATE.

APPLICATION FILED FEB. 21, 1908.

909,756. Patented Jan. 12, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

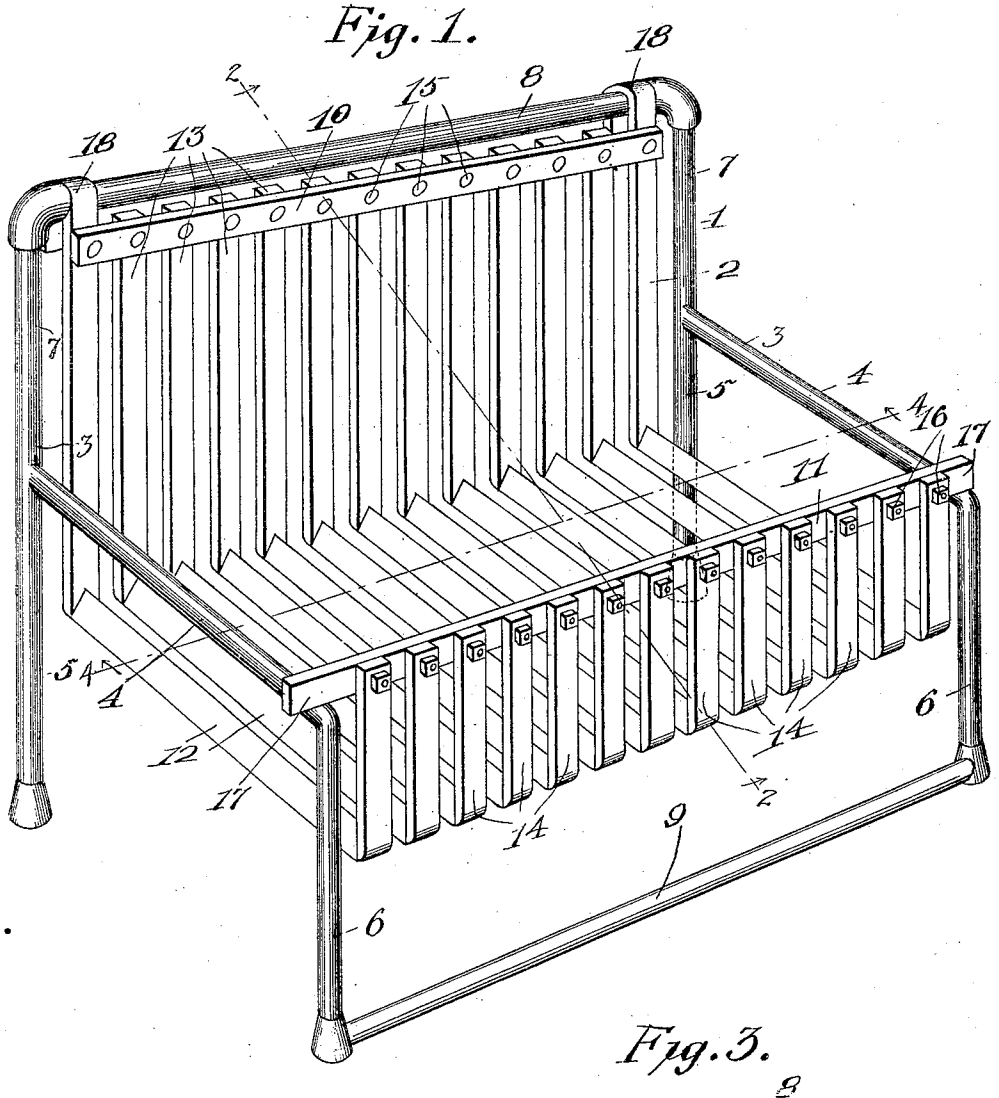
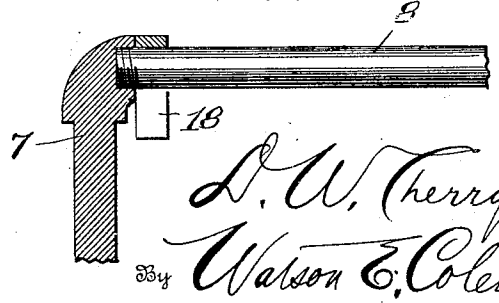


Fig. 3.



Witnesses

James F. Crown

L. O. Little.

Inventor

D. W. Cherry

By Watson E. Coleman

Attorney

THE NORRIS PETERS CO., WASHINGTON, D. C.

D. W. CHERRY.

GRATE.

APPLICATION FILED FEB. 21, 1908.

909,756. Patented Jan. 12, 1909.

2 SHEETS—SHEET 2.

Fig. 2.

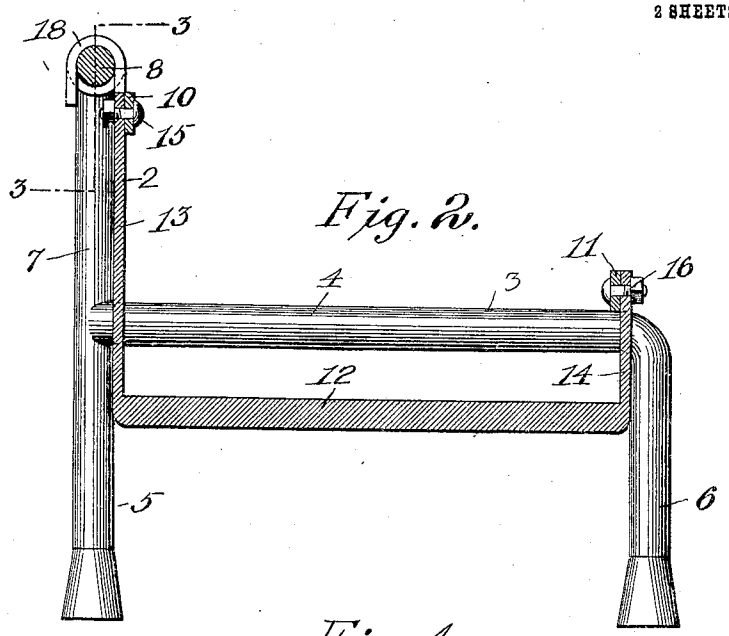
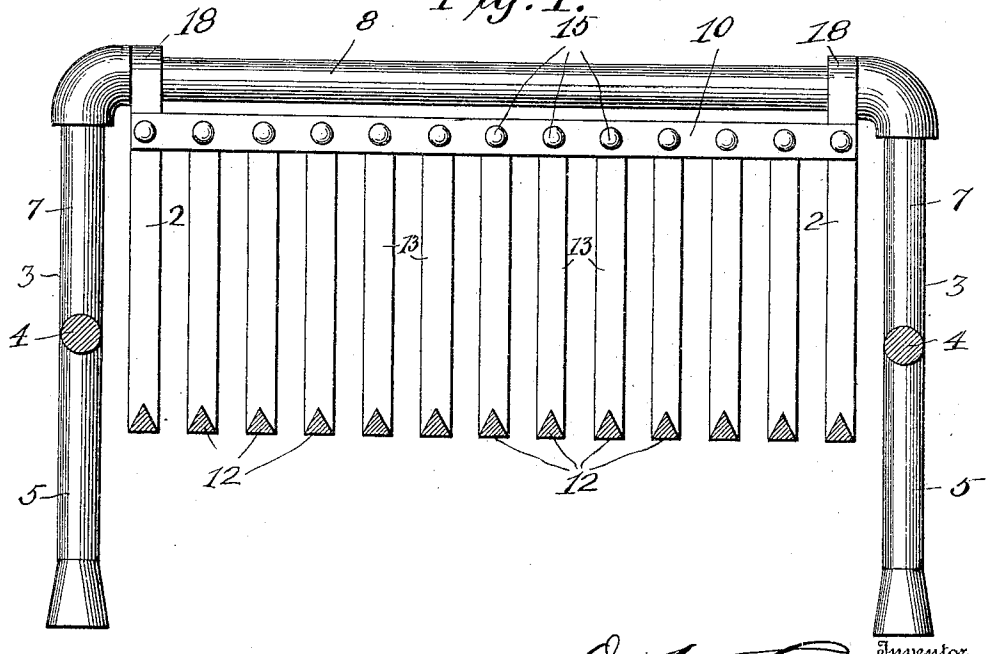


Fig. 4.



Witnesses

James F. Crown

L. O. Little.

Inventor

D. W. Cherry

By Watson E. Coleman

Attorney

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

DANIEL W. CHERRY, OF DONALSONVILLE, GEORGIA.

GRATE.

No. 909,756. Specification of Letters Patent. Patented Jan. 12, 1909.

Application filed February 21, 1908. Serial No. 417,032.

To all whom it may concern:

Be it known that I, DANIEL W. CHERRY, a citizen of the United States, residing at Donalsonville, in the county of Decatur and State of Georgia, have invented certain new and useful Improvements in Grates, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to improvements in andirons and grate attachments therefor, and it consists of the novel features of construction and the combination and arrangement of parts hereinafter fully described and claimed.

The object of the invention is to provide an improved combination device consisting of two parts, namely, a supporting frame or member which may be used for a pair of andirons, and a grate member in the form of an attachment which may be readily applied to or removed from the supporting frame or member, whereby either coal or wood may be burned in the fire place.

Another object of the invention is to provide a combination device of this character which will be simple, strong, durable, and comparatively inexpensive.

The above and other objects of the invention are attained in its preferred embodiment illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view; Fig. 2 is a vertical transverse section taken on the plane indicated by the line 2—2 in Fig. 1; Fig. 3 is a detail section taken on the plane indicated by the line 3—3 in Fig. 2; and Fig. 4 is a longitudinal section taken on the plane indicated by the line 4—4 in Fig. 1.

In the drawings, 1 denotes the combined andiron and grate supporting member and 2 denotes the removable grate attachment. The member 1 is preferably constructed of two cast end pieces 3, each having a horizontal log supporting bar 4, front and rear depending legs 5, 6, and a front upright or standard 7. The upper ends of the standard 7 are united by a longitudinal supporting-bar 8, and, if desired, a reinforcing bar 9 may be employed for connecting the lower ends of the rear legs 6 of the two end pieces.

The grate 2 consists of front and rear longitudinal bars 10, 11 which unite a plurality of spaced parallel grate bars, each of which is substantially U-shaped and has a horizontal bottom portion 12 of triangular shape in cross-section and front and rear vertical portions 13, 14. The grate bars are preferably cast and their bottom portions 12 are shaped, as shown in Fig. 3, so that they have oppositely beveled upper surfaces to cause the ashes to drop off of them. The front vertical portions 13 of the grate bars are united to the front longitudinal bar 10 by bolts 15, and the rear vertical portions 14 of said grate bars are similarly united to the rear longitudinal bar 11 by bolts 16. The fastenings 15, 16 are preferably in the form of bolts so that should any of the grate bars burn out or be broken, they may be easily replaced by new ones. The rear longitudinal bar 11 is of greater length than the front bar 10 so that its ends 17 project over and rest upon the rear portions of the horizontal bars 4 of the member 1 and thus support the rear part of the grate. The front part of the latter is supported by two or more hook shaped projections 18 adapted to take over the front supporting bar 8 of the member 1. Said hooks 18 may be attached to the front upper portion of the grate in any suitable manner, but I preferably construct them by making the front vertical portions 13 of the endmost grate bars of greater length than the intermediate grate bars and curving or shaping the projecting upper ends of said portions 13, as clearly shown in the drawings.

In using the device, it will be seen that when the grate 2 is removed from the supporting frame or member 1, the latter may be used as a pair of andirons so that logs can be supported on the horizontal bars 4 and burned in the fire place. When it is desired to burn coal it is only necessary to apply the grate to the member 1 by engaging the hooks 18 with the front supporting bar 8 and allowing the projections or ends 17 of the rear bar 11 to rest upon the horizontal bars 4. Owing to the peculiar construction of the device it will be seen that its parts may be produced and assembled at a comparatively small cost, and that it will be exceedingly strong and durable.

Having thus described my invention, what I claim is:

1. A device of the character described comprising a supporting frame or member having a front longitudinal supporting bar and rearwardly extending horizontal supporting bars, a removable grate upon said frame comprising front and rear longitudinal bars, a plurality of transversely disposed parallel grate bars each being sub-

stantially U-shaped and having a horizontal connecting portion of V-shape in cross section, short upright rear portions secured to the rear longitudinal bar, and long upright front portions secured to the front longitudinal bar, supporting projections at the rear of the grate to rest upon the rearwardly extending horizontal bars of the frame and hooks at the upper and outer corners of the front of the grate to engage the front longitudinal supporting bar of the frame.

2. A device of the character described comprising a supporting frame or member having a front longitudinal supporting bar and rearwardly extending horizontal supporting bars, a removable grate upon said frame comprising front and rear longitudinal bars united by parallel grate bars, the rear longitudinal bar of the grate having its ends projecting to rest upon the horizontal supporting bars of the frame, and supporting hooks upon the front portion of the grate formed by extending the upper ends of certain of the grate bars and shaping them to take over the front longitudinal supporting bar of the frame.

3. A device of the character described comprising end pieces each having horizontal supporting bars, depending front and rear legs and forwardly-disposed uprights, a front longitudinal supporting bar uniting the upper portions of the uprights, a grate consisting of front and rear longitudinal bars united by parallel grate bars, the rear longitudinal bar of the grate having its ends projecting to rest upon the horizontal supporting bars of the end pieces, and supporting hooks upon the front portion of the grate formed by extending the upper ends of certain of the grate bars and shaping them to take over the front longitudinal supporting bar.

4. A device of the character described comprising a supporting frame or member having a front longitudinal supporting bar and rearwardly extending horizontal supporting bars, a removable grate upon said frame comprising front and rear longitudinal bars, parallel grate bars of substantially U-shape having horizontal connecting portions of V-shape in cross section, short upright rear portions, long upright front portions, removable fastenings uniting the front and rear portions of the grate bars to the front and rear longitudinal bars of the grate, supporting projections formed by extending the ends of the rear longitudinal bar of the grate, said supporting projections being adapted to rest upon the rearwardly extending supporting bars of the frame, and supporting hooks adapted to engage the front longitudinal supporting bar of the frame and formed by extending and shaping the upper ends of certain of the grate bars.

5. A device of the character described comprising a supporting frame or member having a front longitudinal supporting bar and rearwardly-extending horizontal supporting bars, a removable grate upon said ends engaged with said front and rear longinal bars, parallel grate bars having their ends engaged with said front and rear longitudinal bars, removable fastenings uniting the latter to the grate bars, supporting projections formed by extending the ends of the rear longitudinal bar of the grate, said supporting projections being adapted to rest upon the rearwardly-extending supporting bars of the frame, and supporting hooks adapted to engage the front longitudinal supporting bar of the frame and formed by extending and shaping the upper ends of certain of said grate bars.

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

DANIEL W. CHERRY.

Witnesses:
W. M. Pickren,
D. S. Sheffield.