

(No Model.)

S. L. JETER.
GRATE.

No. 544,176.

Patented Aug. 6, 1895.

Fig. 1.

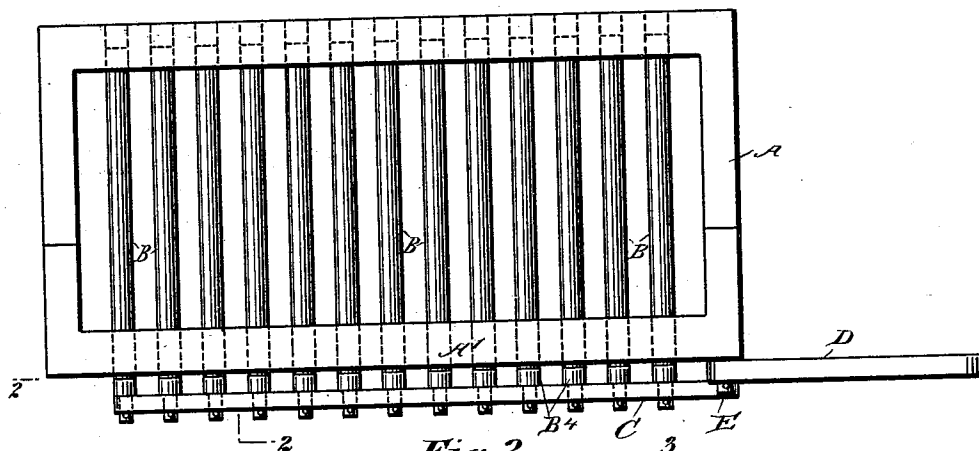


Fig. 2.

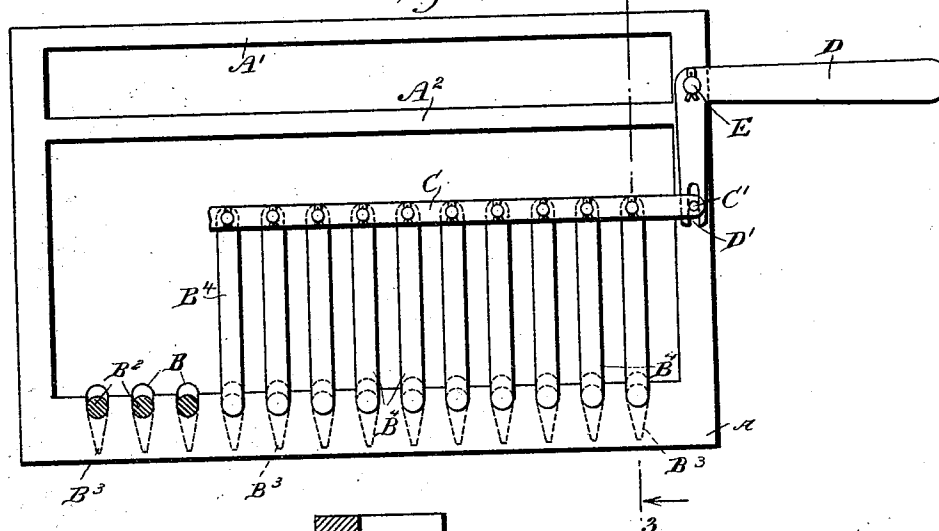
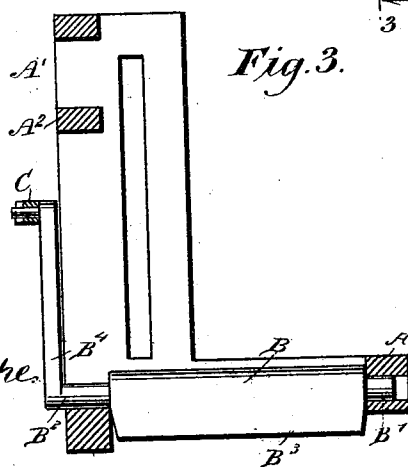


Fig. 3.



WITNESSES:

Edward Thorpe.
Rory H. H. H.

INVENTOR

S. L. Jeter

BY

Munn & Co.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

SAMUEL LEWIS JETER, OF MONTGOMERY, ALABAMA.

GRATE.

SPECIFICATION forming part of Letters Patent No. 544,176, dated August 6, 1895.

Application filed June 4, 1895. Serial No. 551,655. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL LEWIS JETER, of Montgomery, in the county of Montgomery and State of Alabama, have invented a new and Improved Grate, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved grate which is simple and durable in construction, more especially designed for use in open fireplaces, and arranged to permit of quickly and thoroughly removing the accumulating dead ashes to insure a complete combustion of the fuel.

The invention consists, principally, of a grate-frame provided with a basket of grate-bars journaled in the said frame and each provided at its outer end with a crank-arm extending upward in front of the basket to form part thereof, and a lever and connecting-rod for the said crank-arms to shake the grate-bars.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of the improvement. Fig. 2 is a front elevation of the same with part in section, and Fig. 3 is a transverse section of the same on the line 3 3 of Fig. 2.

The improved grate is provided with a grate-frame A, in which are journaled the grate-bars B, extending transversely and having their rear trunnions B' fitted into apertures in the rear bar of the frame A, while the front trunnions B² are dropped into recesses in the front of the frame A, as is plainly illustrated in Figs. 2 and 3. Each of the grate-bars B is provided with a dependent wing B³, so that the form of the grate-bar is approximately almond-shaped, as is plainly indicated in dotted lines in Fig. 2.

On the front end of each trunnion B² is formed or secured a crank-arm B⁴, which ex-

tends upward in front of the basket A', forming part of the frame A or secured thereto, as desired. The crank-arms B⁴ extend in the front of the basket A' and form part thereof, especially for the space between the bottom of the basket and the horizontal bar A², as will be readily understood by reference to Fig. 2.

The several crank-arms B⁴ are pivotally connected with each other by a connecting-rod C, carrying on one end a pin C', engaging a slot D' in a bell-crank lever D, fulcrumed at E on the front face of the basket A' and at one side thereof. Now it will be seen that when the operator manipulates the bell-crank lever D he imparts a simultaneous swinging or shaking motion to the several grate-bars B, owing to the connection between the said lever and the crank-arms B⁴, as above described.

It will be seen that by extending the crank-arms B⁴ upward at the lower part of the basket the said crank-arms prevent fuel from dropping out at the front end of the basket.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A grate comprising a grate frame provided at its front with a basket, grate bars journaled on the said frame and each provided at its outer end with a crank arm extending upward in front of the basket to form part thereof, substantially as shown and described.

2. A grate comprising a grate frame provided at its front with a basket, grate bars journaled on the said frame and each provided at its outer end with a crank arm extending upward in front of the basket to form part thereof, a connecting rod for connecting the said crank arms with each other, and a lever connected with the said connecting rod for imparting a shaking motion to the said grate bars, substantially as shown and described.

SAMUEL LEWIS JETER.

Witnesses:

GEORGE GAMMEL,
JAMES T. SMITH.