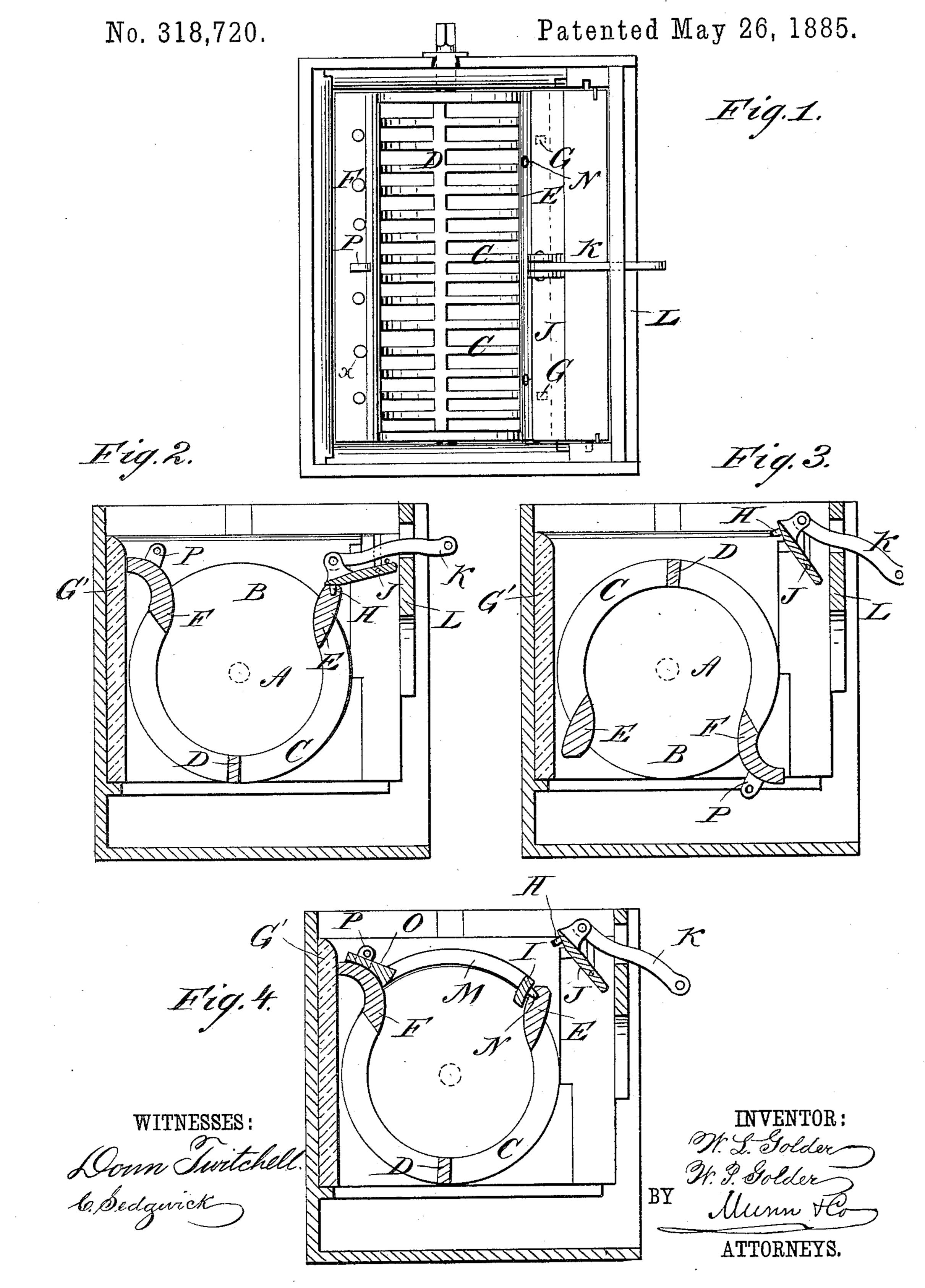
W. L. & W. P. GOLDER.

GRATE.



UNITED STATES PATENT OFFICE.

WILLIAM L. GOLDER AND WILLIAM P. GOLDER, OF PATCHOGUE, N. Y.

GRATE.

SPECIFICATION forming part of Letters Patent No. 318,720, dated May 26, 1885.

Application filed October 10, 1884. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM L. GOLDER and WILLIAM P. GOLDER, both of Patchogue, in the county of Suffolk and State of New 5 York, have invented a new and Improved Grate, of which the following is a full, clear, and exact description.

The object of our invention is to provide a new and improved grate for heating and 10 cooking stoves, fire-places, &c., which grate can be rocked or dumped easily, and can also be used for sifting the coals.

The invention consists in the construction and arrangement of parts, as will be herein-15 after fully described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate cor-

responding parts in all the figures.

20 Figure 1 is a plan view of our improved grate. Fig. 2 is a cross-sectional view of the same raised. Fig. 3 is a cross-sectional view of the same inverted. Fig. 4 is a crosssectional view of the same adjusted as a sifter.

25 The grate A is made tubular, with a pivot on the middle of each end, the outer end of one pivot being squared to receive a key. In the top of the cylindrical grate a longitudinal opening, B, is formed, the width of 30 which is equal to about one-third of the circumference of the grate. The grate-bars C form three-quarters or two-thirds of circles, and are united at the middles by the cast bars D, and at their ends by the bars E and 35 F, of which the latter is curved and fits well against the rear fire-brick. The front bar, E, is provided in its top edge with a recess or aperture, G, at each end, the said apertures serving to receive pins H, projecting 40 from the bottom surface of a pivoted valveplate or damper-plate, J, above the bar E. A lever, K, pivoted to the top of the valveplate J, projects through a slot in the front of the stove-box, frame, or casing L. A seg-

45 mental grate-section, M, is provided on one longitudinal edge bar, I, with studs N, which pass into apertures in the inner surface of the front bar, E. The opposite longitudinal bar, O, of the section M is flattened to fit which the latter is curved transversely up

on the bar F, and is provided with an ap- 50 erture, through which an apertured lug, P, on the bar F passes, through which lug a key is then passed to lock the section M on the grate. Ordinarily the grate is in the position shown in Fig. 2, and is held in place by 55 the studs or pins H on the plate J. To rake the fire, the plate J is raised to release the grate A, and the same is then turned alternately in opposite directions on its longitudinal axis. To dump the grate, it is overturned, 60 as shown in Fig. 3. The grate is then righted again and locked in place by means of the pins or studs on the plate J. When the coals are to be sifted, the section M is secured on the grate A in the manner set forth above, 65 and the grate overturned and rocked forward and back until all the cinders, ashes, &c., have passed through the grate-bars into the ash-pit.

The above grate can be used in open fire- 70 places, furnaces, stoves, ranges, &c. To prevent the bar F from warping, it is preferably provided with apertures, as shown at x in Fig. 1.

We are aware that a cylindrical grate has 75 heretofore been constructed with hinged gratesections; and we do not claim such, broadly, as of our invention.

Having thus described our invention, what we claim as new, and desire to secure by Let- 80

ters Patent, is—

1. The combination, with a cylindrical stovegrate having a longitudinal opening, of a damper-plate hinged to the surrounding casing, and resting on one longitudinal edge bar 85 of the opening, substantially as herein shown and described.

2. The combination, with the cylindrical grate A, having the bars E F, of which the former has recesses or apertures G, of the 90 damper-plate J, hinged to the surrounding casing, and provided on its under side with pins H, adapted to be passed into the apertures G in the bar E, substantially as herein shown and described.

3. The cylindrical grate A, having a longitudinal opening and longitudinal bars E F, of ward and outward to rest against the back | and the latter pins N to enter the apertures fire-brick, substantially as herein shown and I in bar E, substantially as set forth. described.

4. The combination, with the grate A, hav-5 ing bars E F, provided, respectively, with apertures, and an apertured lug, P, of the grate-section M, provided with bars O I, the former having an aperture to receive lug P,

WILLIAM L. GOLDER. WILLIAM P. GOLDER.

Witnesses:

ARINGTON H. CARMAN, WILMOT M. SMITH.