No. 608,537. Patented Aug. 2, 1898.

H. E. WILKINSON.
BATTERY ELECTRODE.
(Application filed June 10, 1897.)

(No Model.)

Fig. 1. Fig. 2.

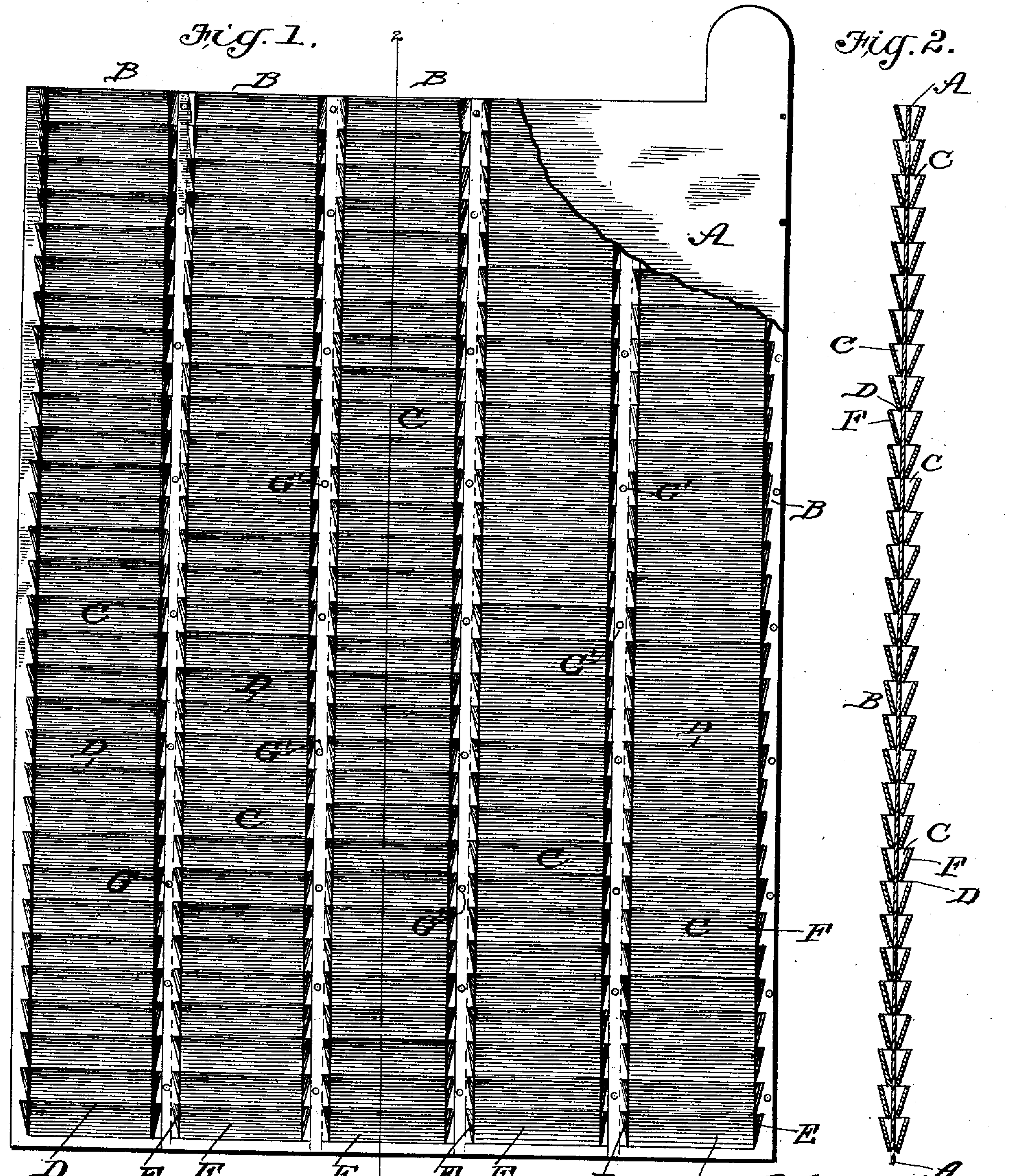
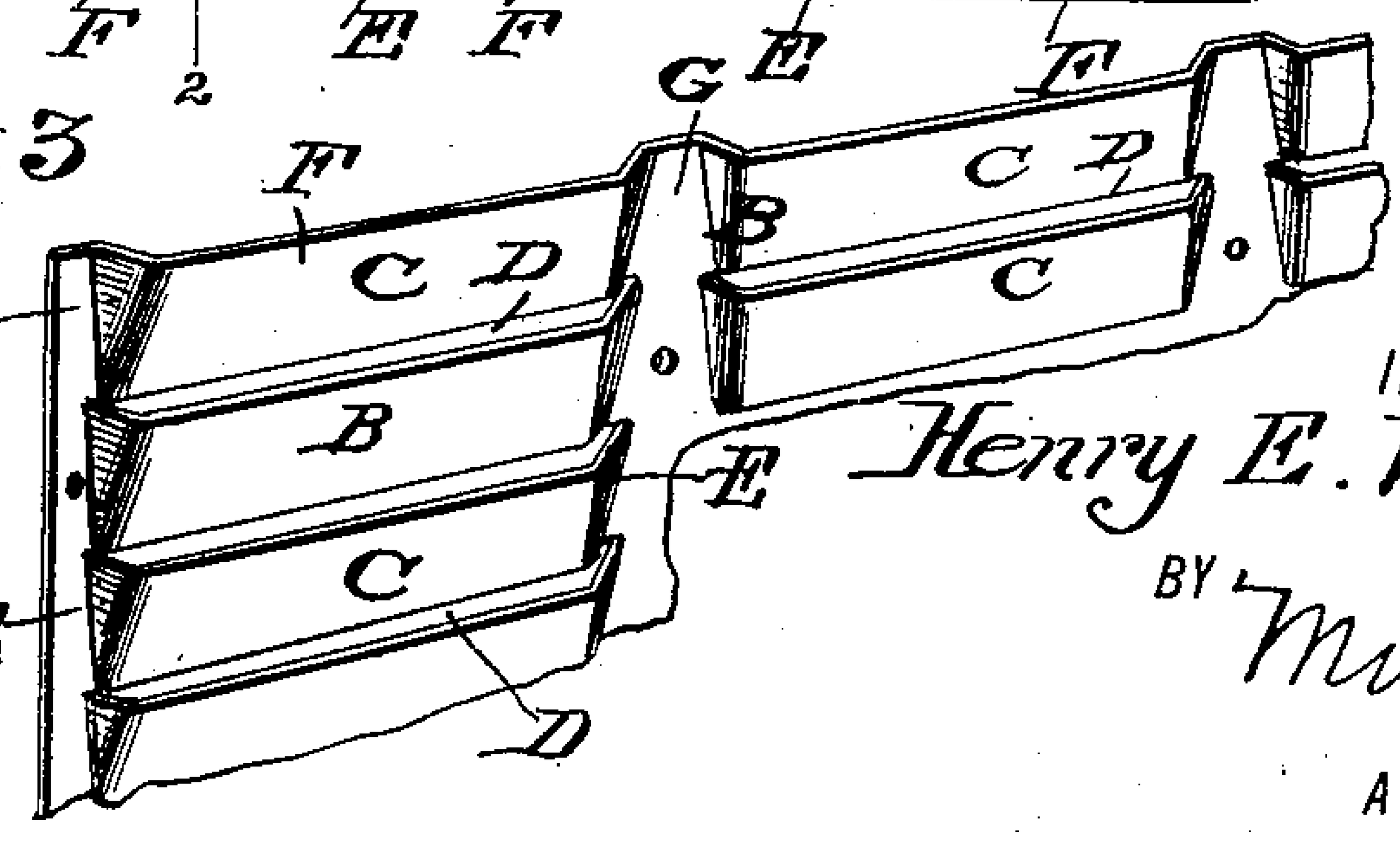


Fig. 3



WITNESSES:
Jos. A. Ryan
P. B. Turpin

INVENTOR
Henry E. Wilkinson.
BY Munn & Co.
ATTORNEYS.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HENRY E. WILKINSON, OF MOUNT VERNON, OHIO.

BATTERY-ELECTRODE.

SPECIFICATION forming part of Letters Patent No. 608,537, dated August 2, 1898.

Application filed June 10, 1897. Serial No. 640,176. (No model.)

To all whom it may concern:

Be it known that I, HENRY E. WILKINSON, of Mount Vernon, in the county of Knox and State of Ohio, have invented a new and useful Improvement in Battery-Electrodes, of which the following is a specification.

My invention is an improvement in grids or battery-electrodes; and it consists in certain novel constructions and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a side elevation of my electrode, partly broken away. Fig. 2 is a sectional view on about line 2 2 of Fig. 1, and Fig. 3 shows a somewhat different construction.

The grid is composed of a central plate A, forming an imperforate back for the pockets and the pocket-plates held to the opposite sides of said plate, as shown. These pocket-plates are of sheet metal, preferably sheet iron or steel, because the resilience of such material coöperates with the special form of the pockets, presently described, in avoiding damage to the active agent held in the pockets by its expansion and contraction in the use of the battery.

In Fig. 1 the pocket-plates B are arranged in sections side by side, extending longitudinally upon the central plate A and riveted at G′ at their edges to each other and to the plate A. These plates B are provided with the pockets C, which are formed by slitting the plate horizontally at D and pressing out the material below said slit to form the pocket, which is open at its top and closed at its sides E and is formed with said ends converging toward the bottom and its front F sloping inwardly toward its lower end. This forms a tapered seat for the active agent, which as the latter expands permits it to rise and also by the resilience of the material permits it to force the front wall of the pocket slightly outward, and yet when the agent again contracts serves to compact the same and maintain it in close contact with the plate and in proper condition for action.

In Fig. 3 I show the pocket-plate in one piece, the material at G between the vertical rows of pockets being bent in to form seats for the rows of rivets by which the pocket-plate is held between each row of pockets to the central plate.

The active agent may be applied to the pockets in any suitable manner, and when therein is freely exposed to the action of the electrolytic liquid.

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

1. A battery-plate constructed of resilient spring metal and provided with a pocket having a front side sloping inward toward its bottom, and ends which converge in a downward direction and are at angles to the sloping front side substantially as described.

2. A grid composed of the main or central plate and the pocket-plate secured thereto and having pockets formed with front sides which slope inwardly toward its bottom and with ends arranged at angles to said front sides and which converge in a downward direction substantially as described.

3. A grid having pockets formed in plate-sections said sections being secured side by side vertically to a supporting-plate substantially as described.

4. A grid comprising the central plate and the pocket-plate secured thereto and having pockets and bent in between said pockets forming seats for the rivets by which the pocket-plate is held to the central plate substantially as described.

5. The improved grid herein described consisting of the central plate and the pocket-plates arranged in sections vertically upon the opposite sides of the central plate, such sections being provided with pockets, open at the top and having their ends converging and their fronts sloping inwardly toward their lower ends substantially as described.

HENRY E. WILKINSON.

Witnesses:
SOLON C. KEMON,
PERRY B. TURPIN.