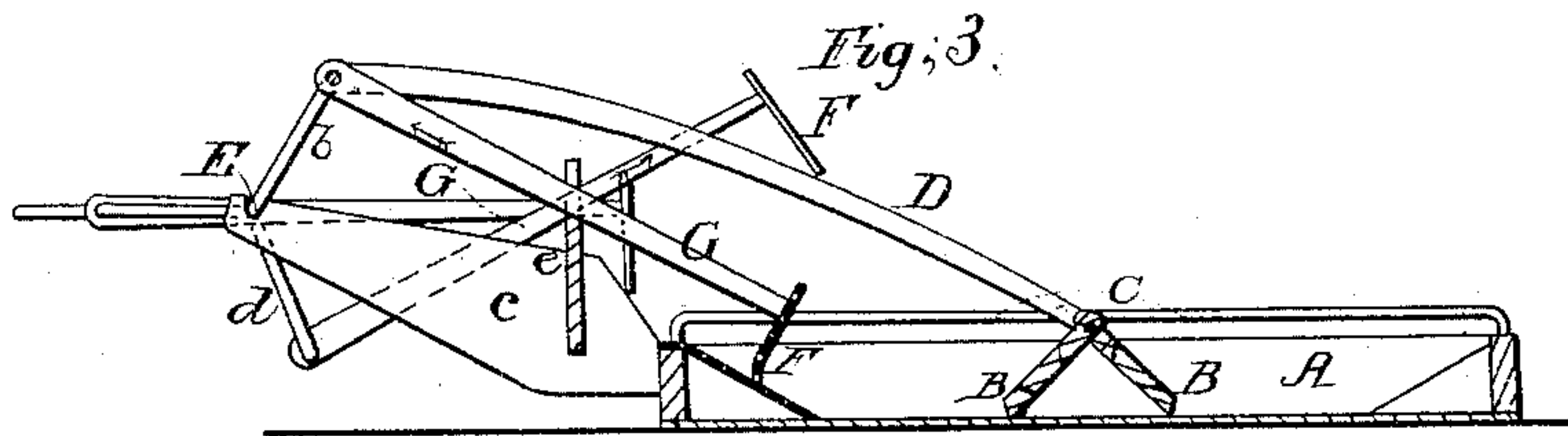
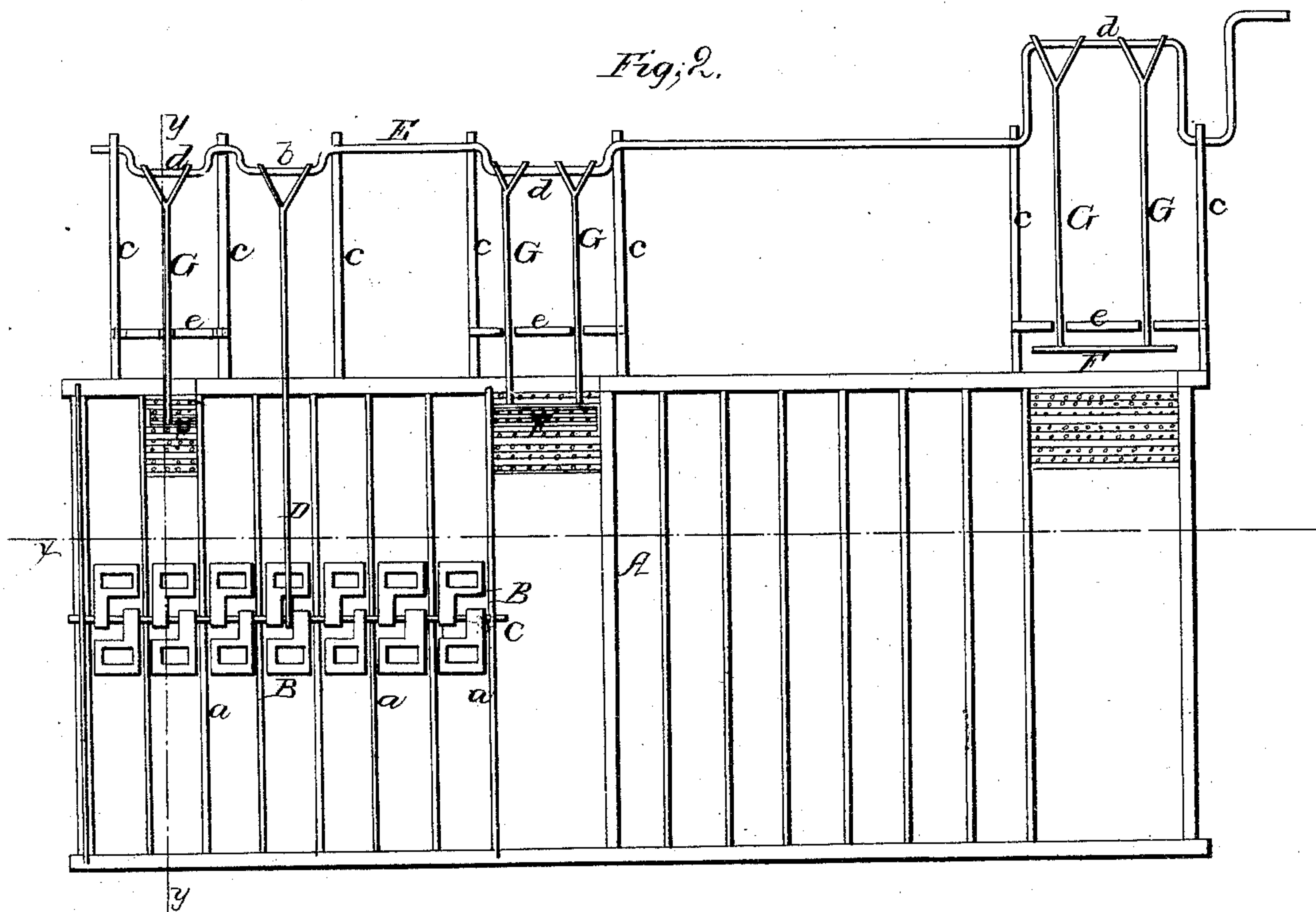
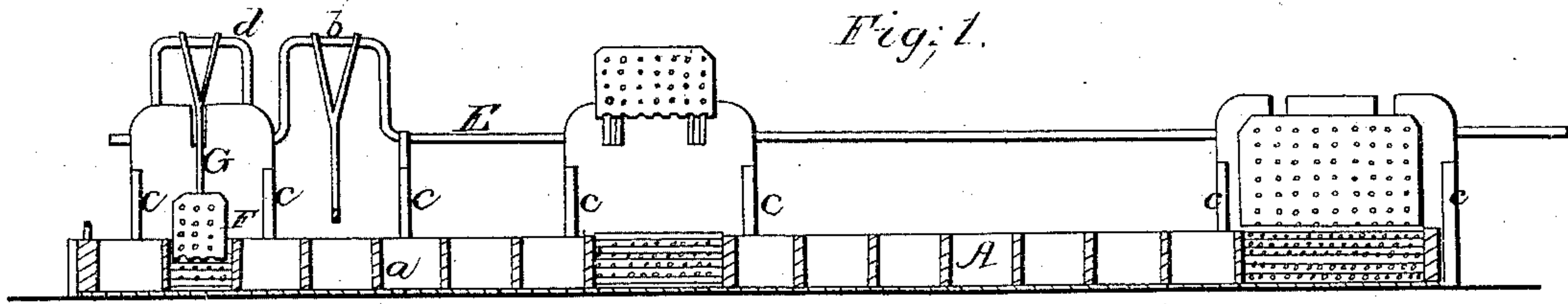


R. C. Nourse.

Evaporating Pan.

Nº 57,954.

Patented Sept. 11, 1866.



Witnesses;
J. M. B. Langton
Wm. Fourn

Inventor,
R. C. Nourse
Per Wm. Fourn
Attorney

UNITED STATES PATENT OFFICE.

ROBERT C. NOURSE, OF CORYDON, INDIANA.

IMPROVED EVAPORATOR.

Specification forming part of Letters Patent No. 57,954, dated September 11, 1866.

To all whom it may concern:

Be it known that I, ROBERT C. NOURSE, of Corydon, Harrison county, State of Indiana, have invented a new and Improved Sugar-Evaporator; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a longitudinal vertical section of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a plan or top view of the same; Fig. 3, a transverse vertical section of the same, taken in the line *y y*, Fig. 2.

Similar letters of reference indicate like parts.

This invention relates to certain improvements in means for stirring and skimming the juice of the sugar-cane during the process of evaporating and concentrating the same, whereby the labor attending the manipulation above specified is greatly diminished and the work effected in a thorough manner.

A represents an evaporating-pan, which may be constructed in any of the known forms and divided into any suitable number of compartments.

B represents stirrers, which may be constructed of wood or other suitable material. The stirrers are arranged in two rows, and incline in opposite directions, as shown clearly in Fig. 3, and are fitted at their upper ends on a rod, C, which rests on the partitions *a*. These stirrers may be of rectangular form and have an open center, as shown in Figs. 2 and 3, and their lower edges rest upon the bottom of the pan A. The rod C is connected by an arm, D, to a crank, *b*, on a shaft, E, the bearings *c* of which are attached to one side of the pan A.

From the above description it will be seen that when the shaft E is rotated the stirrers B will be moved back and forth and keep the

sirup well stirred, one row or series of stirrers operating efficiently when the rod C is moved in one direction, and the other row or series operating efficiently when the rod is moved in the opposite direction, as will be fully understood by referring to Fig. 3.

E represents skimmers, which may be constructed of wood or metal and perforated with small holes. These skimmers work in the compartments of the pan, and they are attached by rods G to cranks *d* on the shaft E. The rods G of the skimmers rest or bear upon supports *e* attached to the bearings *c*, and these bearings cause the skimmers to rise and pass over or above the sirup in the pan while being moved forward to enter the pan, the skimmers, as they descend, coming in contact with the lower ends of perforated inclined planes H, up which the skimmings are drawn by the skimmers and out from the pan.

Thus, by this simple arrangement, the sirup is stirred and skimmed by the turning of a single shaft, and the work performed with but little labor and in a thorough manner.

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

1. The stirrers B, arranged in two rows and applied to a common rod, C, connected by an arm to a crank-shaft, substantially as and for the purpose set forth.

2. The skimmers F, operated from the crank-shaft E, in connection with the inclined planes H, all arranged and applied to an evaporating-pan, substantially as and for the purpose specified.

3. The combination of the stirrers and skimmers applied to an evaporating-pan, to operate in the manner substantially as and for the purpose set forth.

ROBERT C. NOURSE.

Witnesses:

HENRY JORDAN,
GEO. S. WILSON.