

G. S. REUTER.
Barley and Malt-Drier.

No. 208,849.

Patented Oct. 8, 1878.

Fig. 1.

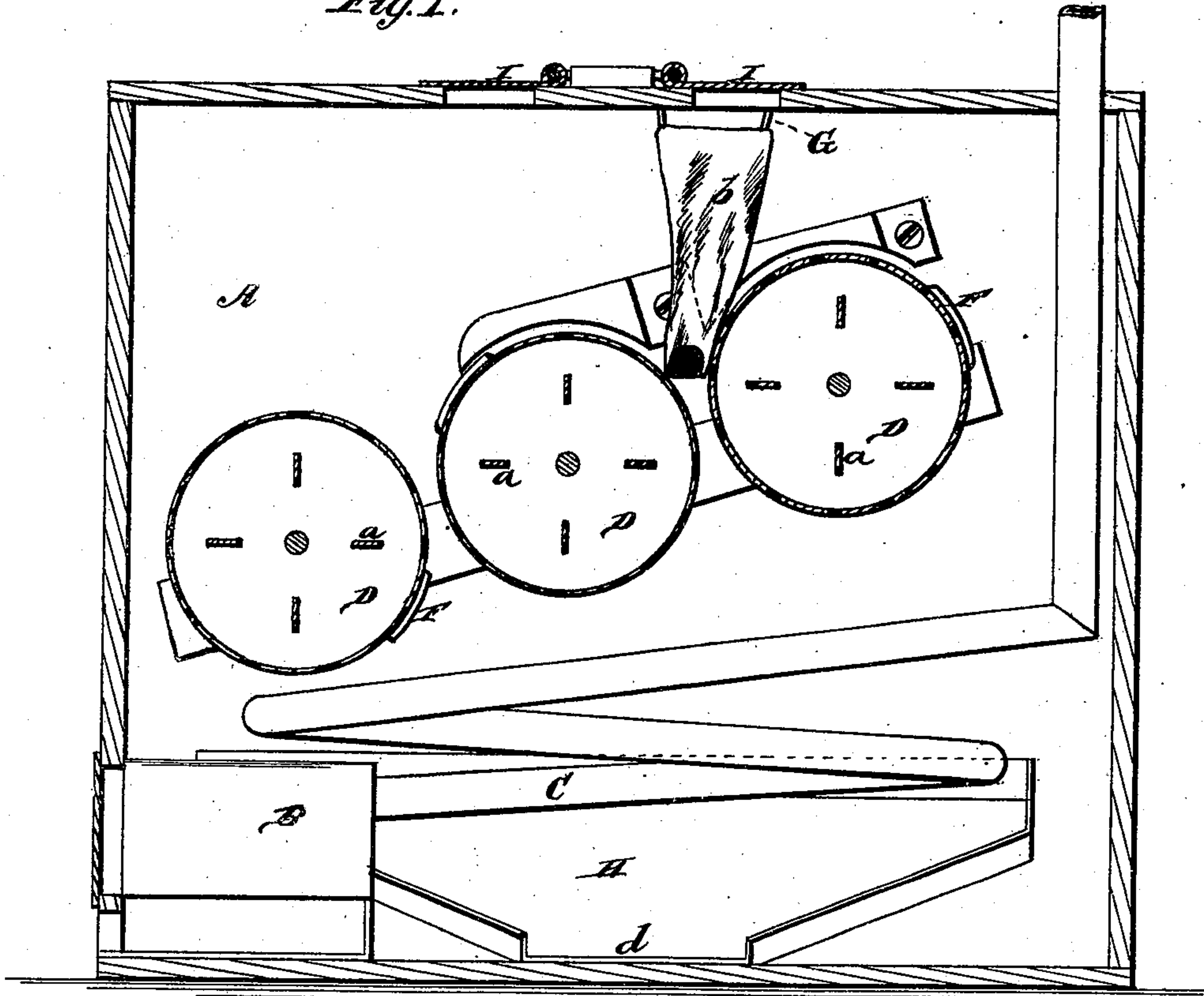
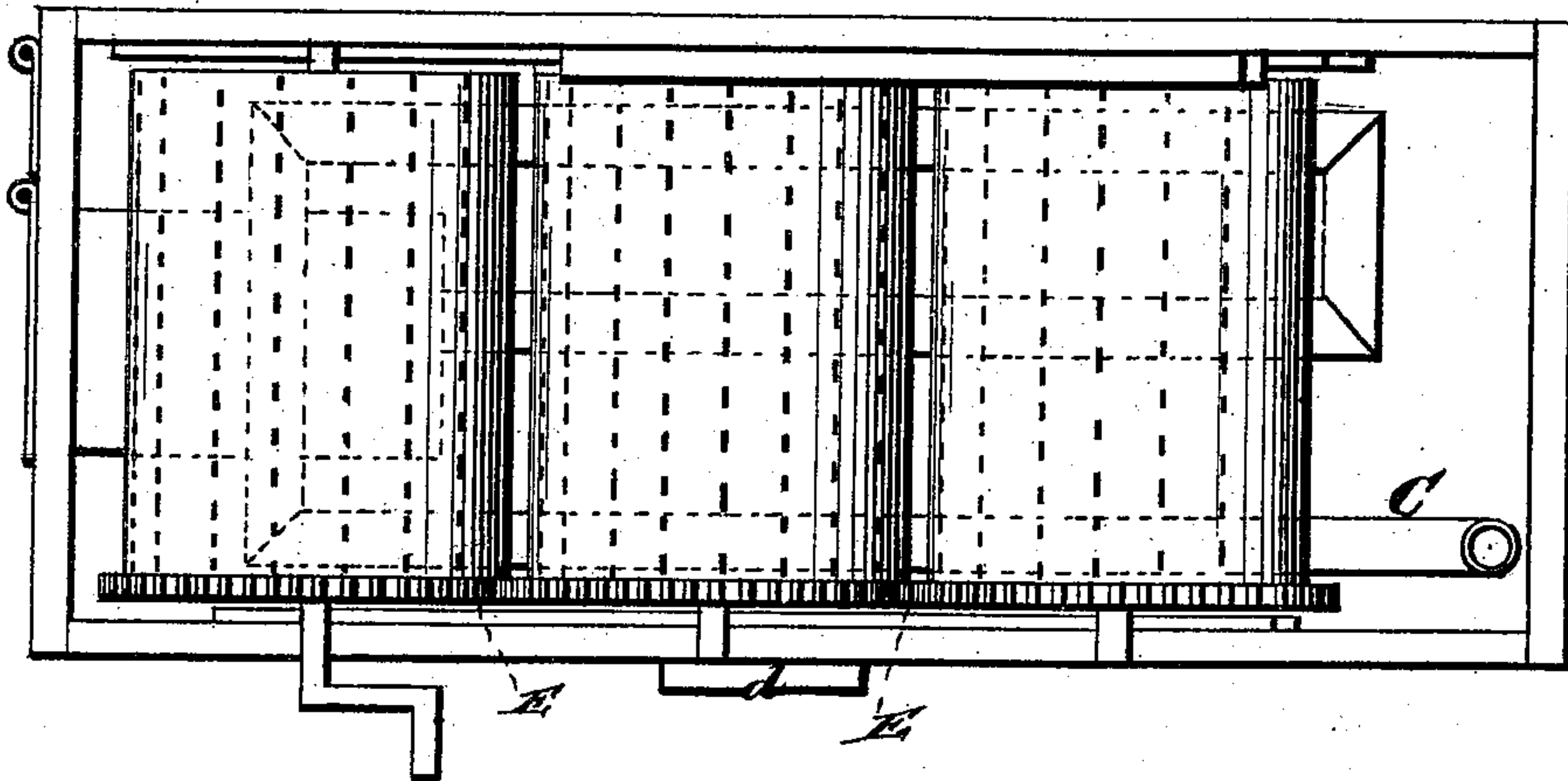


Fig. 2.



WITNESSES
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UNITED STATES PATENT OFFICE.

GUSTAV S. REUTER, OF SONORA, CALIFORNIA.

IMPROVEMENT IN BARLEY AND MALT DRIERS.

Specification forming part of Letters Patent No. **208,849**, dated October 8, 1878; application filed August 24, 1878.

To all whom it may concern:

Be it known that I, GUSTAV S. REUTER, of Sonora, in the county of Tuolumne and State of California, have invented a new and valuable Improvement in Barley and Malt Driers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

Figure 1 of the drawings is a longitudinal central section of my grain-drier, and Fig. 2 is an interior top-plan view of the same.

The nature of my invention consists in the construction and arrangement of a drier for drying barley and malt, as will be hereinafter more fully set forth.

The annexed drawings, to which reference is made, fully illustrate my invention.

A represents a closed chamber, of any suitable dimensions, provided at one end with a furnace, B. From this furnace the smoke-pipe C passes, first, horizontally back and forth in tortuous form, and then upward at the other end of the chamber, and out through the top.

In the chamber A, above the furnace and pipe, are arranged a series of perforated cylinders, D D, which are journaled in suitable bearings, and are connected together by gear-wheels E, as shown. One of the cylinders has one of its journals extending beyond the wall of the chamber, and a crank or other device for imparting motion applied thereto.

Each cylinder has a slide or door, F, for admitting the barley or malt to be dried. This is done through a hopper or chute, G, on the outside, and a flexible conductor, *b*, attached on the inside to said chute, for conducting the barley or malt into either cylinder, as required.

In the heads of each cylinder are fastened longitudinal arms or bars *a a*, for the better agitating the barley as the cylinders are revolved. In the top of the chamber are ventilating-openings, with slides I, as shown; and in the bottom, below the pipe C, is an inclined receiver, H, upon which the barley is emptied from the cylinders when dried, and over which it falls and passes out at the opening *d*.

The cylinders, having received their amount of malt or barley to be dried, are put in motion by hand or otherwise, and the contents are dried by the hot air in the chamber without any danger of being burned, and retain all the aroma and saccharine matter, the heat simply expelling the water and evaporating the same, so as to dry the malt in the best possible manner for use. All sprouts and small seed pass out through the perforations and are discharged over the inclined receiver H, leaving nothing but the pure barley in the cylinders, and this, when completely dried, is discharged or emptied out, as above described.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the chamber A, furnace B, with pipe C, the geared cylinders D, and receiver H, all constructed and arranged substantially as and for the purpose set forth.

2. The chute G, with flexible conductor *b*, in combination with the chamber A and cylinders D, with doors F, for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

GUSTAV SAMUEL REUTER.

Witnesses:

CHARLES HENRY BURDEN,
JAMES KIRKWOOD.