

(No Model.)

M. HOFSTAD.

ELASTIC CENTER EMERY GRINDING AND POLISHING WHEEL.

No. 254,011.

Patented Feb. 21, 1882.

Fig. 1.

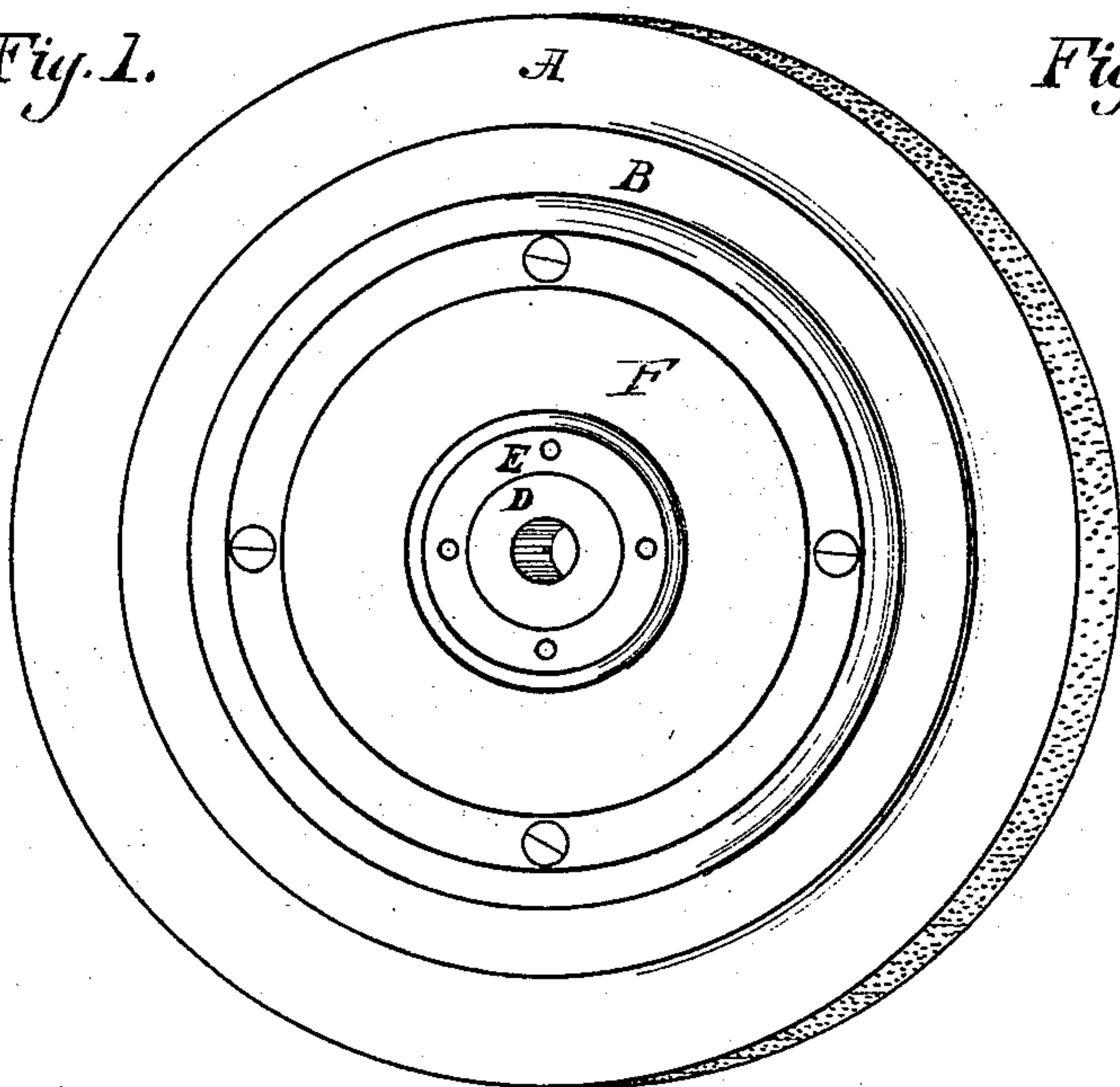


Fig. 2.

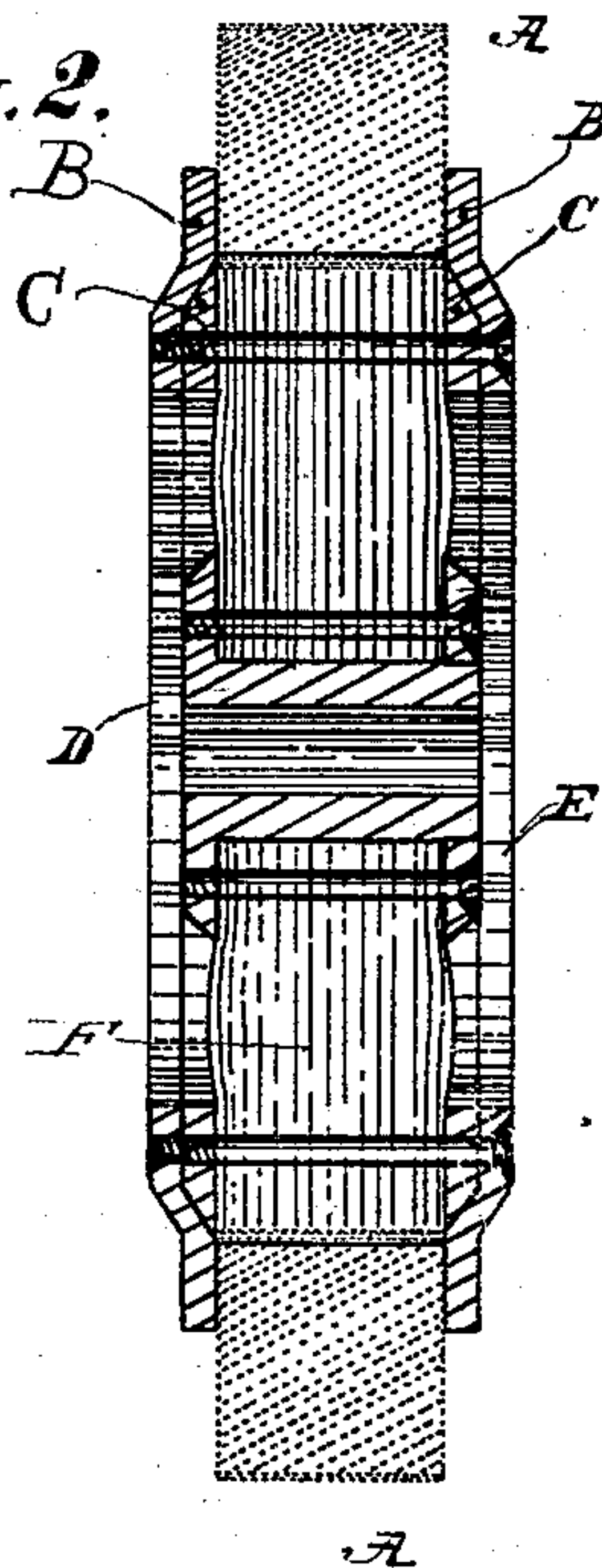


Fig. 5.

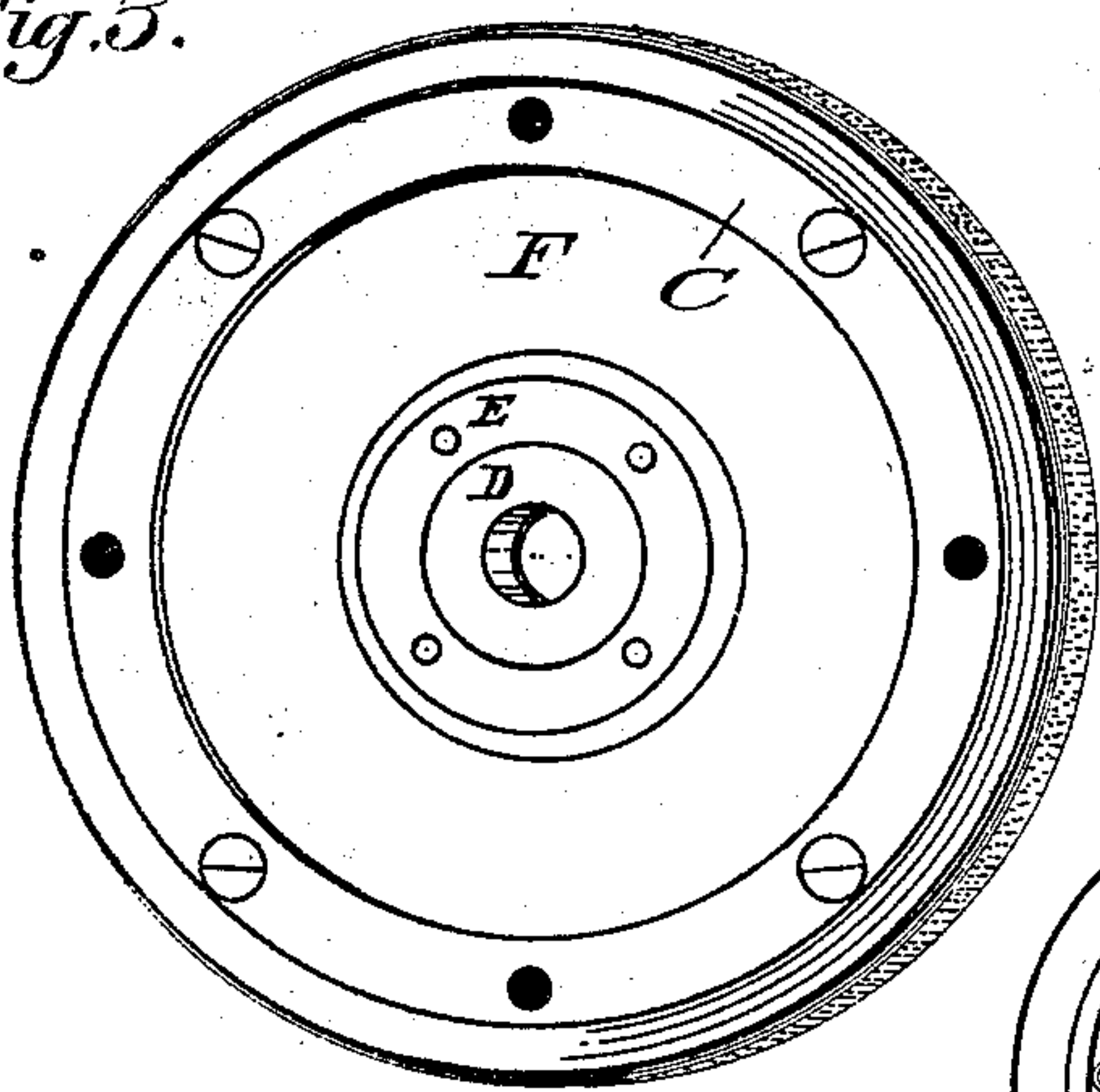


Fig. 4.

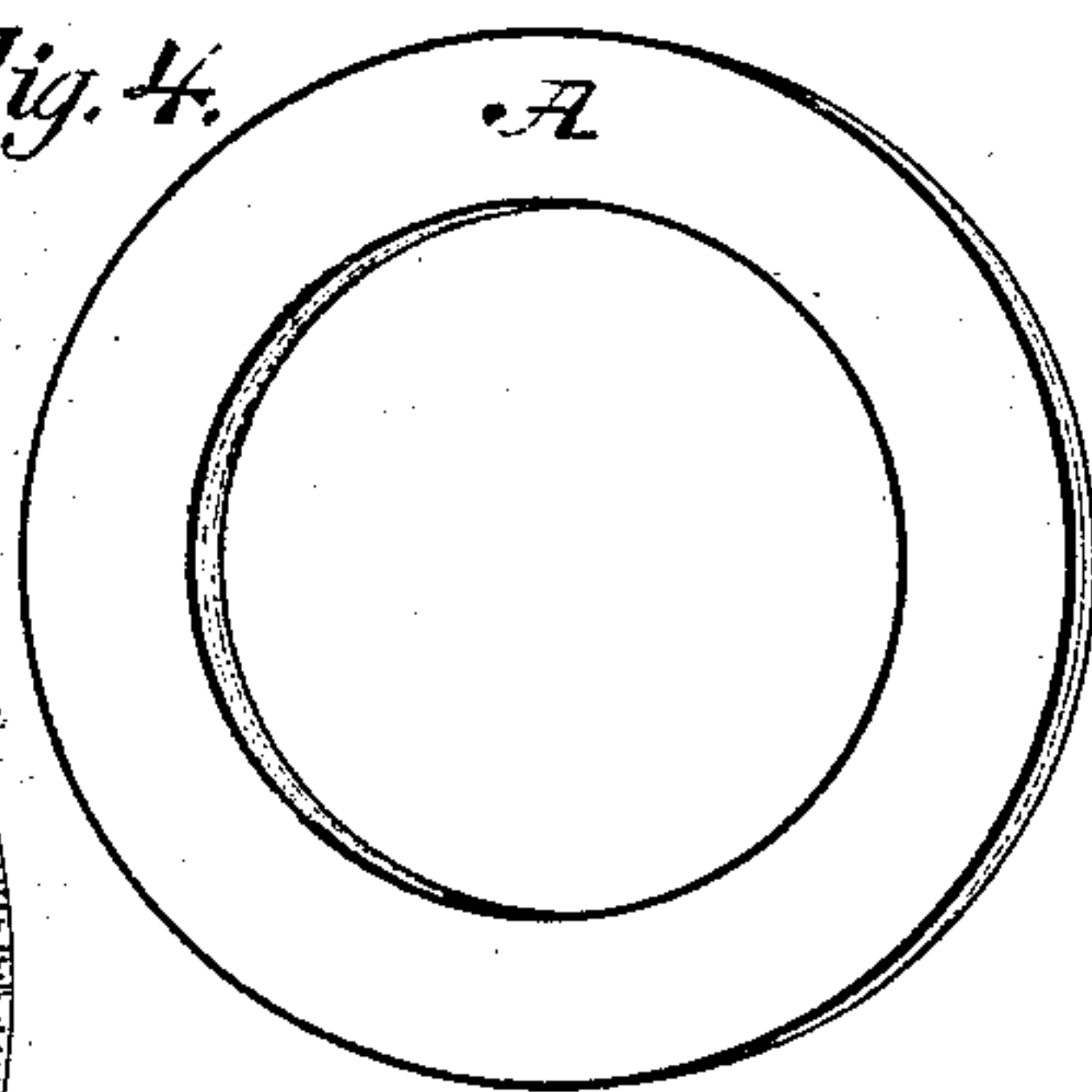


Fig. 5.

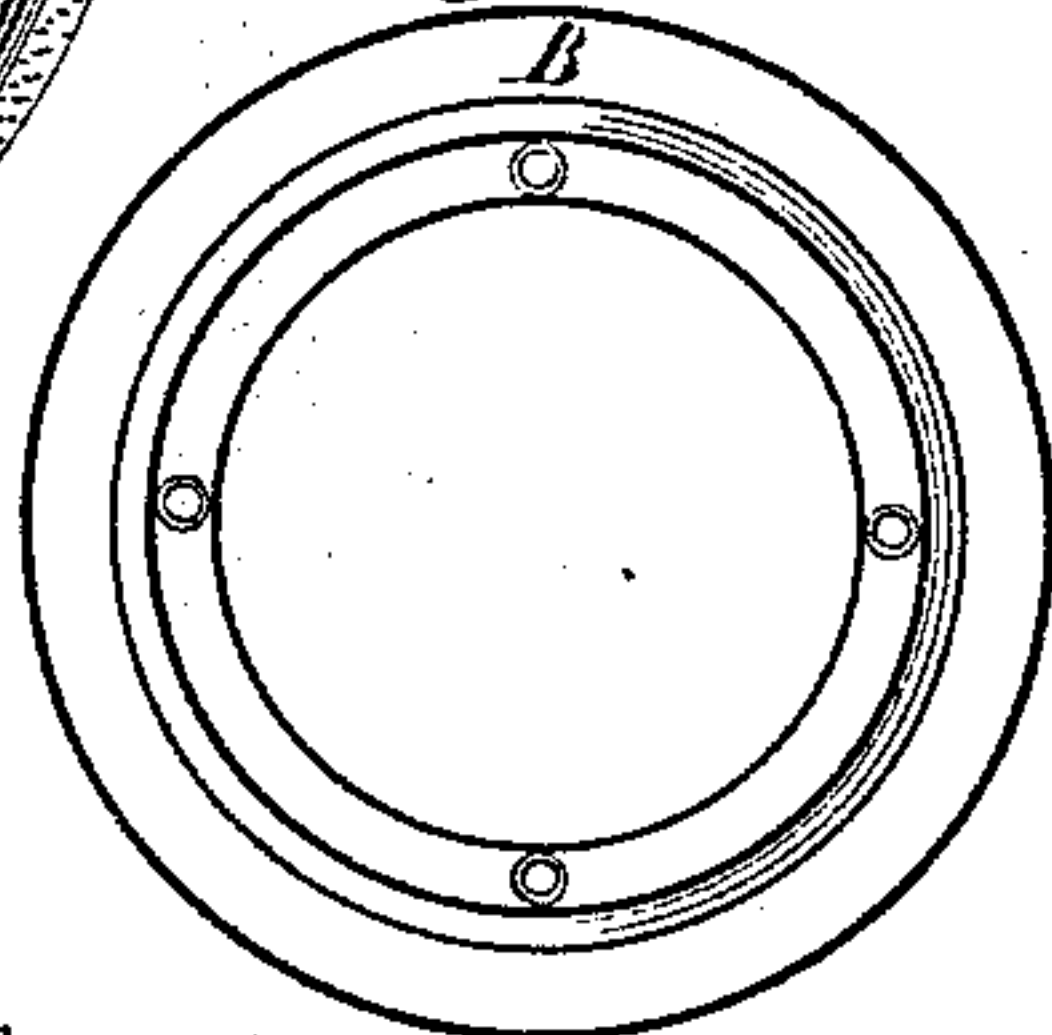
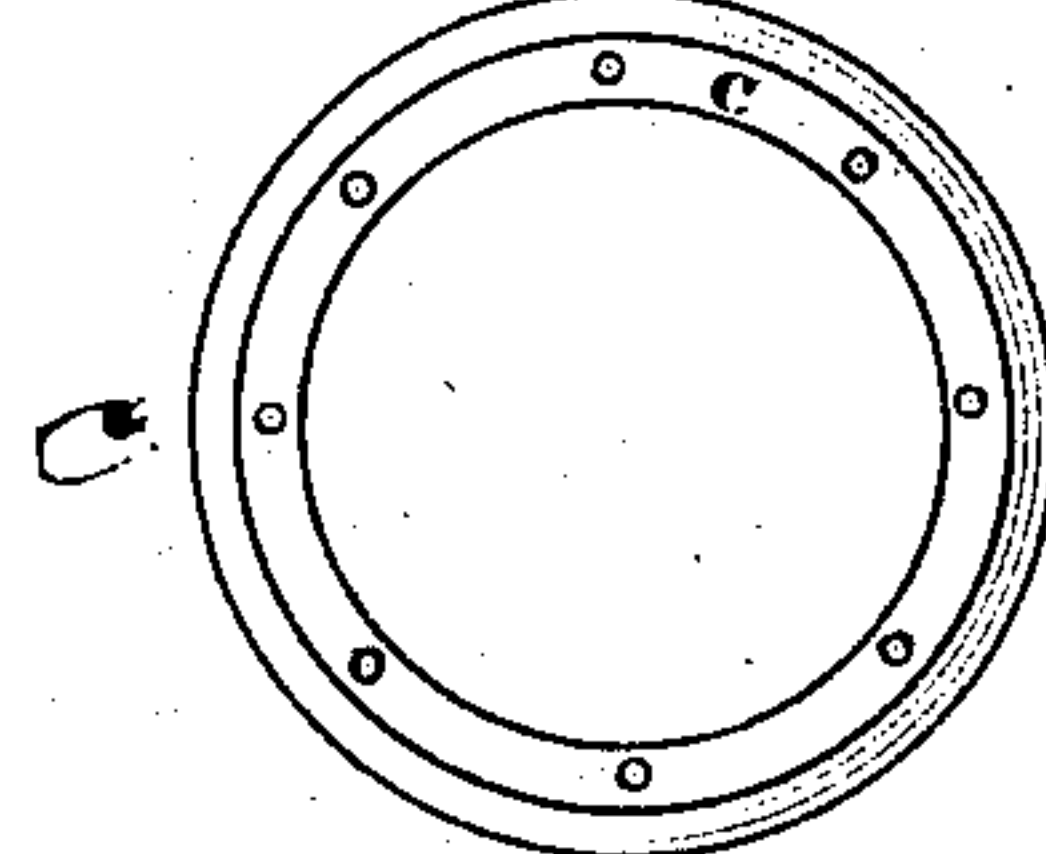


Fig. 6.



WITNESSES.

John H. Redstone.

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MARTIN HOFSTAD, OF SAN LEANDRO, CALIFORNIA.

ELASTIC-CENTER EMERY GRINDING AND POLISHING WHEEL.

SPECIFICATION forming part of Letters Patent No. 254,011, dated February 21, 1882.

Application filed August 3, 1880. (No model.)

To all whom it may concern:

Be it known that I, MARTIN HOFSTAD, of San Leandro, California, have invented a new and useful Elastic-Center Emery Grinding and Polishing Wheel, of which the following is a specification.

Figure 1 is a perspective view; Fig. 2, a section of the combined grinding and polishing wheel complete. Fig. 3 is the polishing-wheel complete; Fig. 4, a solid emery rim for a grinding-wheel; Fig. 5, a flange or outer clamping-ring to hold the wheel together firmly; Fig. 6, the inner clamping-ring to hold the periphery of the polisher and secure an even surface.

A represents the outer or grinding rim; B, the outer clamping-rings; C, the inner clamping-rings; D and E, the flanged hub and center clamp; F, the body of the polishing-wheel, composed of sacking or other fabric or elastic substance. The following is the construction of the same: I make the grinding-rim of emery or other grinding material, composed in the usual way. The inner wheel or elastic center is made of sacking or any suitable textile material, to be packed together and bolted between the rings C and the hub-flanges D E, the loose flange E being taken off for the purpose of inserting through the fabric or other elastic substances forming the center or polishing wheel. These flanges are all tightened, and the edges of the fabric trimmed to an even surface outside of the rings C, and any suitable composition applied to form the polishing-surface in the usual way. When the wheel is

needed only for grinding the same kind of center is used; but the composition for polishing is not necessarily applied to the periphery of the central wheel, but the grinding-rim is secured between the clamping-rings B, directly upon the yielding center.

By the construction before explained I secure the advantages of a grinding and a polishing wheel, both carried on the same hub and adapted with very little trouble to be used interchangeably.

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

1. A combined grinding and polishing wheel consisting of a central hub, a polishing-disk, a removable grinding-rim, and means, substantially as described, for securing the polishing-disk upon the hub and the grinding-rim upon the polishing-disk.

2. The combination, with the flanged hub, the clamping-rings C, and the yielding or elastic center F, of the outer removable clamping-rings, B, and the detachable grinding-rim A.

3. The combined grinding and polishing wheel composed of the outer rim, A, the outer clamping rings or flanges, B, the inner clamping rings, C, the yielding center, and the hub having fixed and loose flanges, all substantially as described.

MARTIN HOFSTAD.

Witnesses:

JOHN H. REDSTONE,
FRANK R. BRANN.