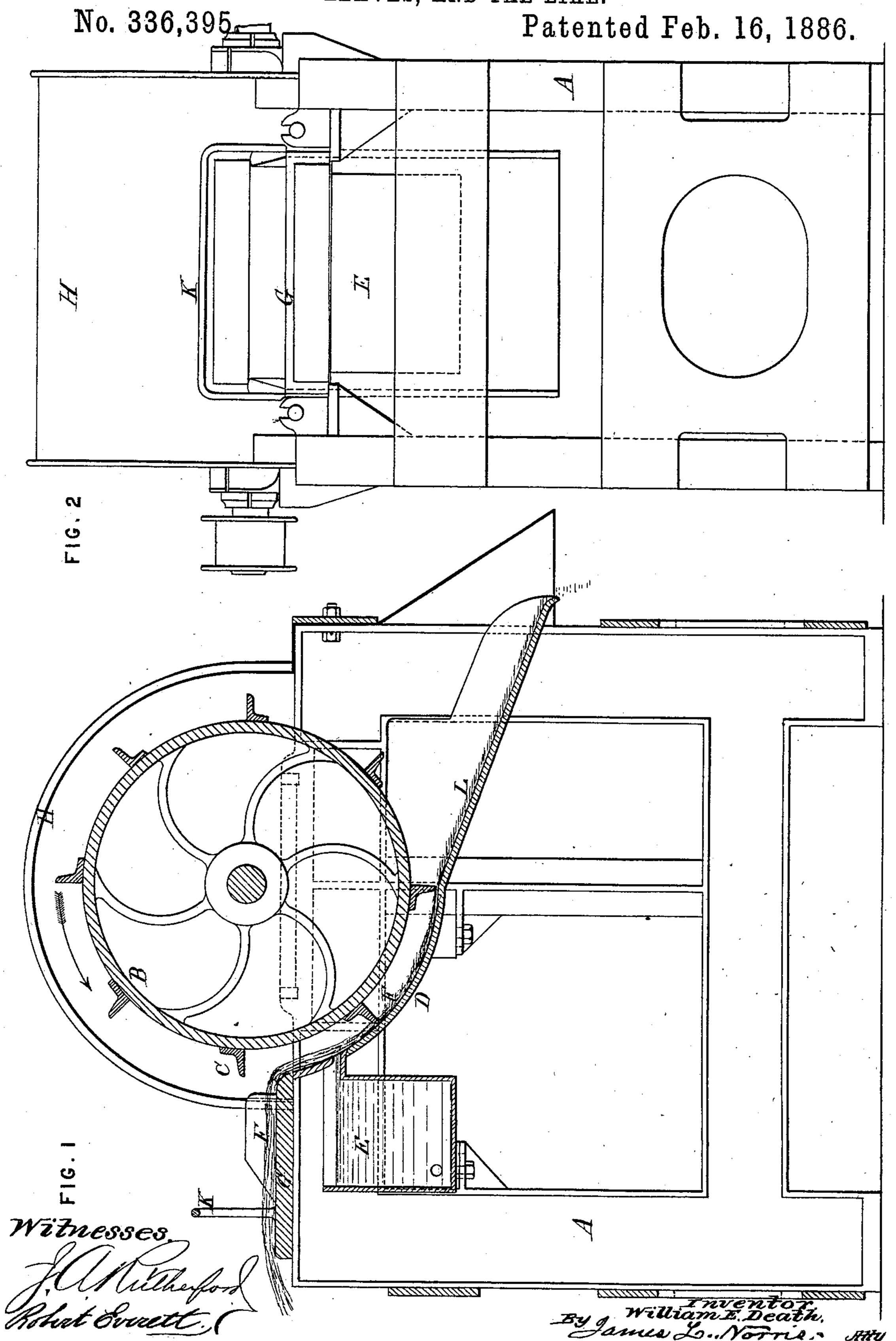
W. E. DEATH.

APPARATUS FOR SCUTCHING AND CLEANSING FIBROUS STEMS, LEAVES, AND THE LIKE.



## United States Patent Office.

WILLIAM EPHRAIM DEATH, OF BRIXTON, COUNTY OF SURREY, ENGLAND.

APPARATUS FOR SCUTCHING AND CLEANSING FIBROUS STEMS, LEAVES, AND THE LIKE.

SPECIFICATION forming part of Letters Patent No. 336,395, dated February 16, 1886.

Application filed September 21, 1885. Serial No. 177,723. (No model.) Patented in England July 13, 1885, No. 8,464.

To all whom it may concern:

Be it known that I, WILLIAM EPHRAIM DEATH, a citizen of England, residing at Brixton, in the county of Surrey, England, have invented a new and useful Improvement in Apparatus for Scutching and Cleansing Fibrous Stems, Leaves, and the Like, (for which I have made application for patent in Great Britain, No. 8,464, July 13, 1885,) of which

10 the following is a specification.

For the purpose of scutching fibrous stems, leaves, and the like, so as to clear the fibers from the pulpy, gummy, and ligneous portions, it has been usual to expose the material 15 to the action of a scutching wheel having blades or beaters which successively strike the stems, while in some cases jets of water are made to play upon them. The action of the blades or beaters being, however, limited to 20 the small portion of the material which for the time is held up against them by the edge of the table on which it is fed, the operation is tedious and imperfect. According to my invention I remedy this defect by placing within 25 a short distance of the scutching blades or beaters and concentric with the circle in which they revolve a curved shield or guard, along which a current of water is made to flow, so that the fibrous stems which extend along this 30 shield, being buoyed up by the water-current, are kept within range of the scutching blades or beaters and are effectually and rapidly operated on by them, while the matter that is disengaged from the fibers is washed away.

Figure 1 of the accompanying drawings is a longitudinal section, and Fig. 2 is an end view, of a scutching apparatus with my improvement applied thereto.

On a suitable framing, A, is mounted a 40 rapidly revolving drum, B, having fixed on its periphery a number of beaters, C. Under this drum I fix the curved guard or shield D,

along which flows a stream of water from a tank, E, which is kept supplied so as to overflow. The stems or materials F to be operated 45 on are held by hand upon a table, G, so as to bend over its edge and extend down along the shield D in the water-stream, which buoys them up, keeping them within range of the beaters C. When the parts of the material F 50 that extend along the shield are sufficiently acted on the material is withdrawn and turned end for end, so as to expose the rest of it to the action of the beaters. The scutching drum is eased by a bent cover, H. The table G is 55 adjustable by screws, so that it can be set more or less closely up toward the beaters C, and it has over it a bent guard-bar, K, to act as a fence for the hands of the operator. The tank E and shield D are held by bolts passing 60 through slotted holes, so that they can be fixed more or less closely up toward the circle of the beaters C. The matter cleared from the fibers is washed down the incline L by the stream that flows along it.

Having thus described the nature of my invention and the best means I know for carrying the same into practical effect, I claim—

The combination, with the revolving drum B, having attached beaters C, the feed-table 70 G, and the curved shield D, of the water-tank E, supported at the upper edge of the shield and having communication therewith, for causing a current of water to flow down the shield and buoy up the fibers thereon, substantially 75 as described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 11th day of September, A. D. 1885.

WILLIAM EPHRAIM DEATH. Witnesses:

OLIVER IMRAY, JNO. P. M. MILLARD.