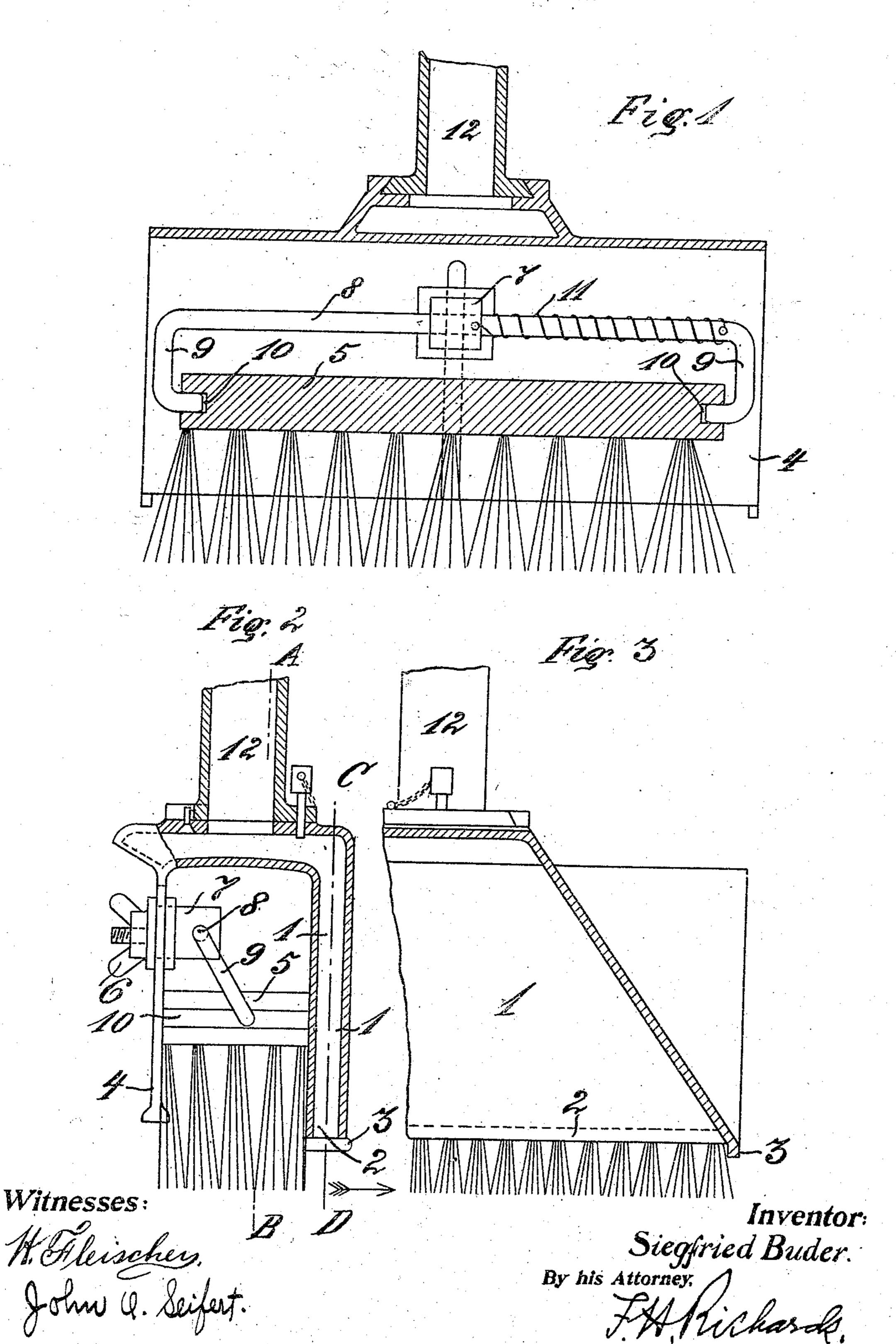
S. BUDER.
PNEUMATIC SWEEPER.
APPLICATION FILED OUT. 10, 1905.



UNITED STATES PATENT OFFICE.

SIEGFRIED BUDER, OF HALENSEE, NEAR BERLIN, GERMANY.

PNEUMATIC SWEEPER.

No. 859,915.

Specification of Letters Patent.

Patented July 16, 1907.

application filed October 10, 1905. Serial No. 282,107.

To all whom it may concern:

Be it known that I, Siegeried Buder, a subject of the Emperor of Germany, residing at Halensee, near Berlin, Empire of Germany, have invented certain 5 new and useful Improvements in Pneumatic Sweepers for Use in Cleaning by Suction, of which the following is a specification.

This invention relates to vacuum cleaning apparatus in which the suction nozzle is combined with a brush 10 for agitating the dust, etc. This class of apparatus are used for cleaning carpets and carved and upholstered furniture. In apparatus in which only suction nozzles are employed, the speed of the drawing-in air current is frequently insufficient for releasing the dust and other matter tenaciously adhering to soft and roughed articles.

In the drawings forming a part of this specification is shown a pneumatic sweeper constructed in accordance with the present improvement and in which

Figure 1 is a longitudinal section taken on the line A—B of Fig. 2. Fig. 2 is a cross section; and Fig. 3 is a longitudinal section taken on the line C—D of Fig. 2.

The suction nozzle is designated by 1, the side walls 3 of which project somewhat beyond the front wall of the bottom opening 2. These side walls prevent the excessive depression of the nozzle opening so that there is always a space between the object being cleaned and the nozzle for the passage of the agitated dust, etc.

The suction member is provided with a depending plate 4 serving as a support for a brush 5 having short and comparatively rigid bristles. A stud 7 is secured to the wall 4 by means of a thumb nut 6, and is provided with an aperture through which passes a bail 8, whose bent end portions 9 project into groove 7 in opposite ends of the stock of the brush 5. The coil spring 11 on the bail 8 yieldably retains the brush in its lower-

most position with the bristles extending below the nozzle 1.

This improved sweeping or cleaning device is adapted to be operated in the direction of the arrow (Fig. 2); 40 that is to say the nozzle 1 is in front of the brush and pressure is exerted on the bristles as required, such pressure tending to raise the arms together with the brush.

The greater the pressure exerted, the smaller be- 45 comes the distance between the nozzle opening 2 and the article or object being cleaned; that is to say the greater becomes the speed of the air which is being drawn in together with the dust thrown under the nozzle opening 2 by the brush by means of a suction pipe 50 12 connected to the nozzle.

Having thus described my invention, I claim:

1. In a device of the character described, the combination of a body, a nozzle whose side walls project below the front and rear walls, a brush yieldably supported in 55 the body at the rear of the nozzle and extending below the same to exert a downward pressure.

2. In a device of the character described, the combination of a body, a nozzle, a brush, a bail supporting the brush, and a spring connected with the bail to press the 60 brush downward adjacent the nozzle.

3. In a device of the character described, the combination of a hollow body, a nozzle at the front of the body, a stud removably secured to the rear wall of the body and lying between the nozzle and rear wall, a bail pivotally 65 carried by the stud, a brush supported on the bail and slidable vertically between the nozzle and the rear wall, and a coil spring on the bail arranged to swing the bail to press the brush downward.

In testimony whereof I have hereunto set my hand in 70 the presence of the undersigned witnesses, at Berlin, Germany, this 27th day of September, 1905.

SIEGFRIED BUDER.

Witnesses:

HENRY HASPER, WOLDEMAR HAUPT