

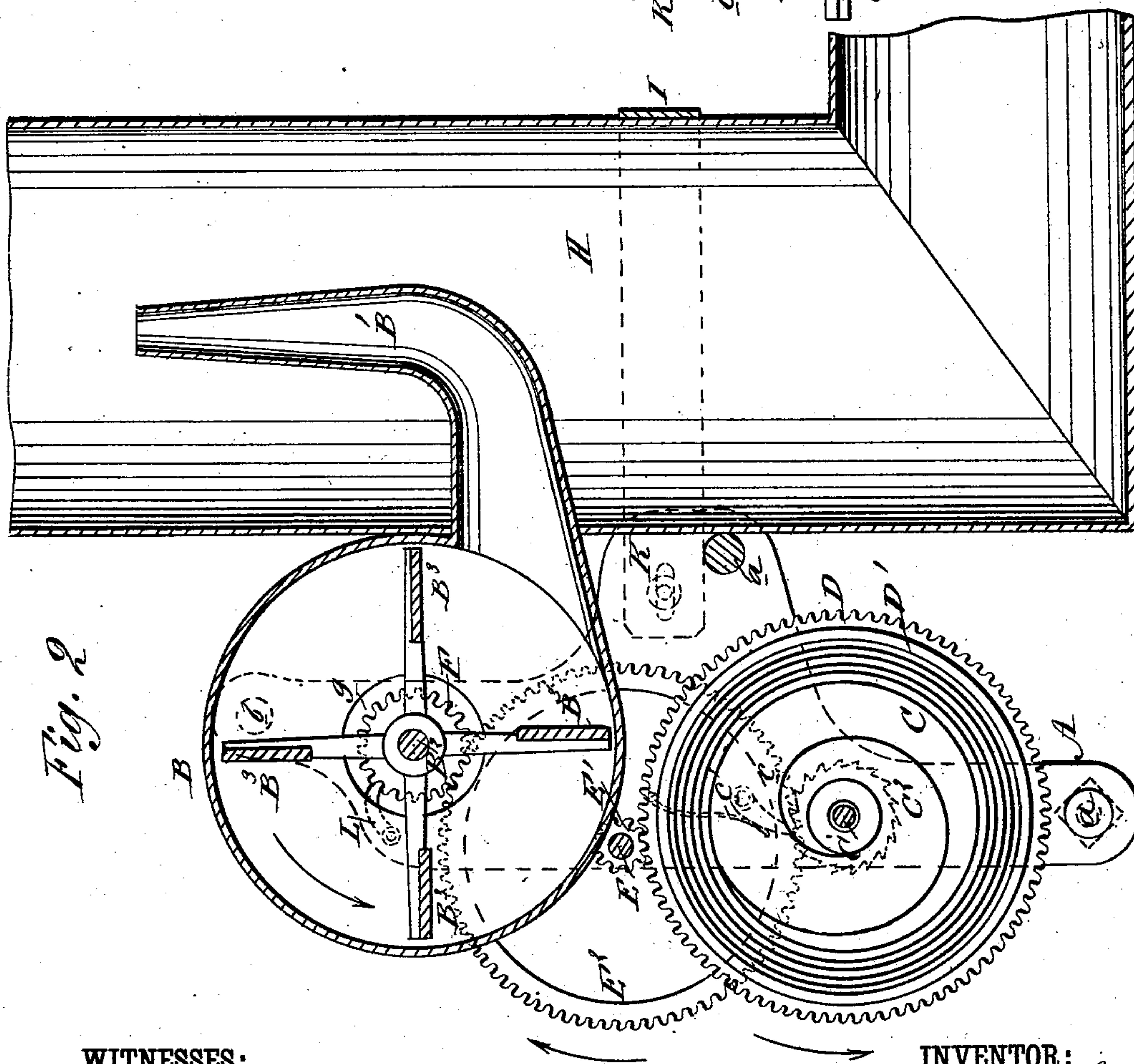
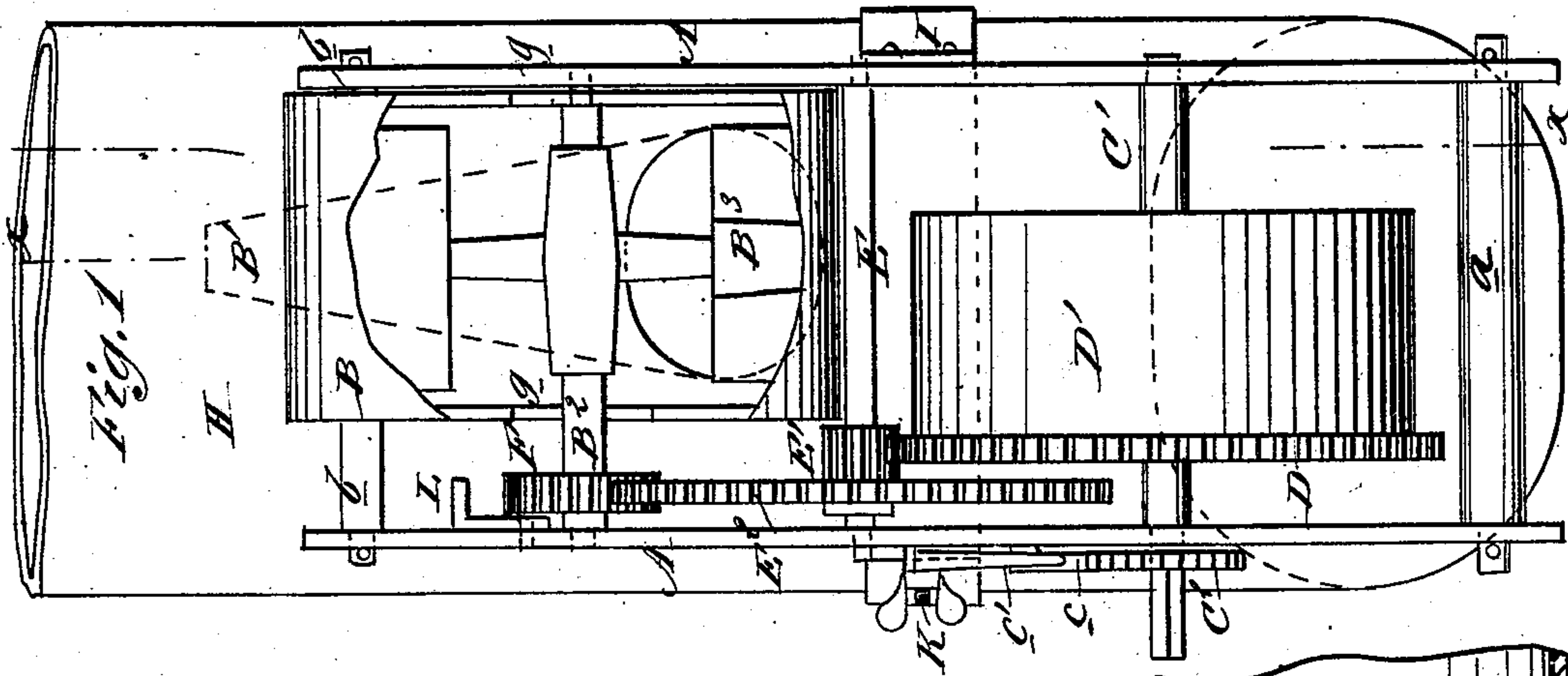
(No Model.)

F. BEAUMONT, Jr.

Draft Apparatus for Stoves, &c.

No. 243,488.

Patented June 28, 1881.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

FRED BEAUMONT, JR., OF LITTLE ROCK, ARKANSAS.

## DRAFT APPARATUS FOR STOVES, &c.

SPECIFICATION forming part of Letters Patent No. 243,488, dated June 28, 1881.

Application filed April 2, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, FRED BEAUMONT, Jr., of Little Rock, in the county of Pulaski and State of Arkansas, have invented a new and  
5 Improved Draft Apparatus for Stoves, &c., of which the following is a clear, full, and exact description.

The object of this invention is to improve and increase the draft of any stove, fire, or  
10 chimney, whereby quicker and complete combustion of fuel can be effected, with a resulting hotter fire and absence of smoke.

Figure 1 is a front elevation of the device applied to a stove-pipe, with parts broken away  
15 to exhibit other parts. Fig. 2 is a sectional side elevation of the same on line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents the frame of  
20 the device, consisting of two side plates, A A, held together by bolts or rods *a a*.

The blower consists of the shell or cylinder B, provided with tapering bent exit-pipe B' and shaft B<sup>2</sup>; carrying arms and fans B<sup>3</sup> of  
25 the usual construction, said shaft B<sup>2</sup> being journaled in the side plates, A A, and the blower-shell B being held in position by studs *b b*, projecting inward from the sides A A, or in any other suitable manner.

Transversely through the bottom of the frame A is passed a shaft, C', on which is  
30 coiled a spring, C, within a covering band or drum, D', on whose outer end is secured the vertically-revolving gear-wheel D, which is turned in the direction of its arrow, Fig. 1, by the uncoiling of the spring C, which spring C is wound up at any time by application of a key to the projecting end of the shaft C'.  
35 On said shaft C' is also a ratchet-wheel, C<sup>2</sup>, and pivoted on the frame A is a pawl or dog, *c*, operated by the spring *c'*, which dog *c*, engaging in the ratchet-wheel C<sup>2</sup>, prevents the shaft C' from being turned in a reverse direction by the spring C.

Above the shaft C' is a parallel shaft, E, carrying a pinion, E', into which the wheel D  
45 gears, and a gear-wheel, E<sup>2</sup>, that gears in the wheel F on the blower-shaft B<sup>2</sup>.

The gearing in this device is so arranged  
50 that comparatively low speed of the wheel D will create a high speed of the blower-shaft B<sup>2</sup>. The uncoiling of the spring C gives motion to the parts, and said spring C is designed

to be of sufficient extent to continue the operation of the blower for several hours.

The gearing may be arranged to produce  
55 any desired speed of the blower, which speed will be regulated according to the capacity or size of the latter, or whether it is applied to a stove-pipe or to a flue or chimney of greater  
60 dimensions.

The blower may be operated by spring and gear-wheels, as herein shown, or by any other convenient mechanism.

The device is attached to a stove-pipe or  
65 chimney, H, by a band, I, that encircles said pipe or chimney H, and is held to the frame A by screw-bolt and thumb-screw K, or it may be attached in any other convenient manner.

When the device is in operation air is drawn  
70 in through the central openings, *g*, of the blower-cylinder B and ejected through the exit-pipe B', which is directed upward in the axis of the chimney or pipe H and contracted at its mouth, so that the air is forcibly ejected  
75 from it, and thereby induces a strong current of air upward from the stove, furnace, or range, to which said chimney or pipe H serves as a smoke-flue.

By the application of this device the fires in  
80 stoves, furnaces, and ranges can be made to burn more freely and with more complete combustion of fuel, and hence an absence of smoke, and wet or unseasoned wood can be burned almost or quite as readily as dry wood.

The device is of special advantage when  
85 kindling a fire and when it is desirable to produce a quick, hot fire for any purpose; hence it may be desirable at times to check its operation when these purposes are effected, which  
90 may be done by dropping a pawl or dog, L, that is pivoted on the inside of the frame A, into the teeth of the wheel F.

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

The combination, with the draft apparatus for stoves, &c., constructed substantially as herein shown and described, of the band I, whereby the said apparatus is attached to a  
100 stove-pipe or chimney, as set forth.

FRED BEAUMONT, JR.

Witnesses:

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