

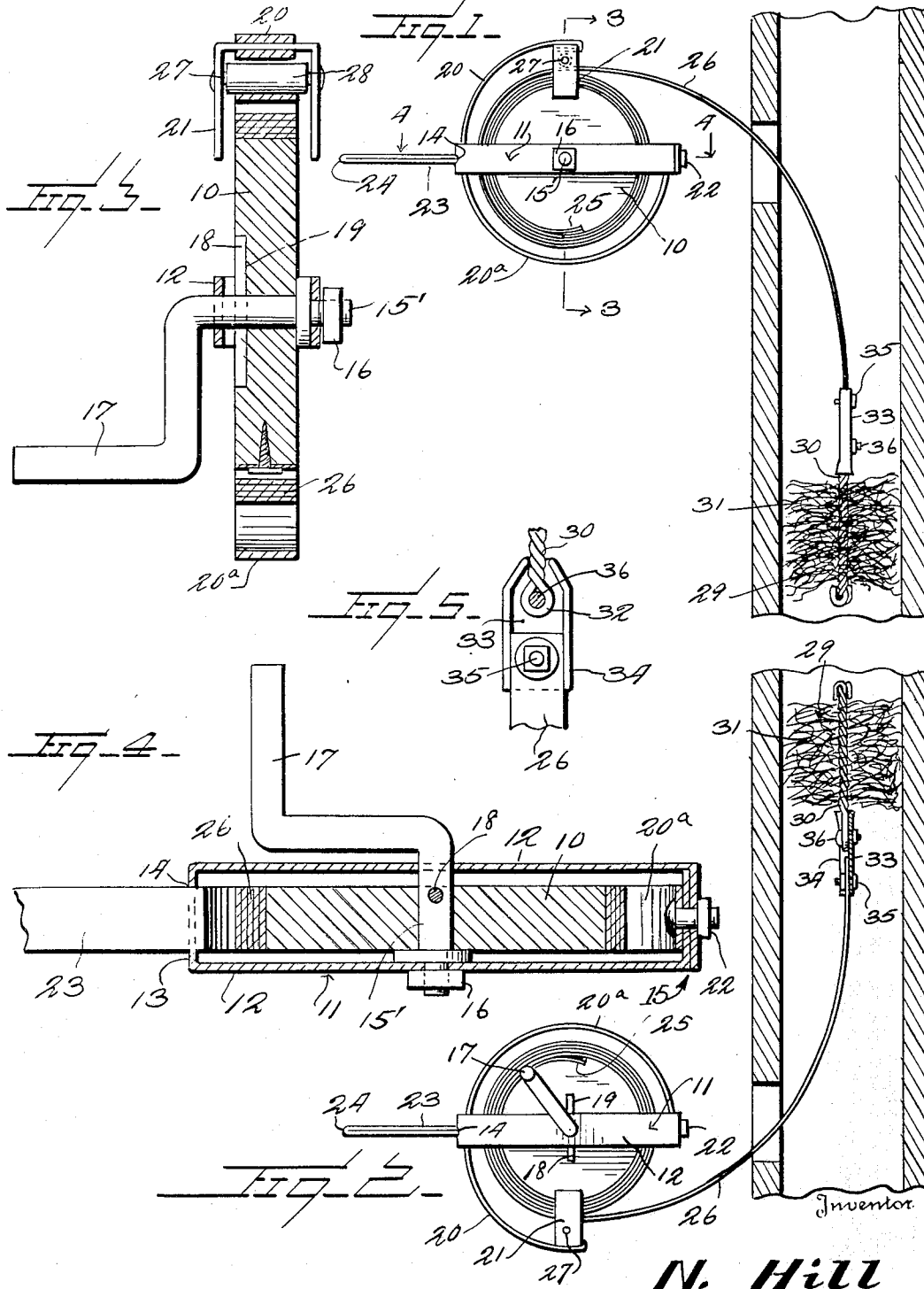
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CHIMNEY CLEANER

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CHIMNEY CLEANER

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This invention relates to devices for cleaning chimneys and particularly to devices carrying a brush by which the chimney may be swept out.

The general object of the invention is to provide a device of this character which is very simple, which may be readily handled and which includes a drum, a band of spring steel wound upon the drum, and means whereby the drum may be rotated in a direction to unwind the band or in a direction to wind the band up, the band of spring steel having a tendency to expand and carrying at its extremity a wire brush preferably having its bristles extending in all directions.

A further object is to provide means whereby the band may be held tightly coiled around the drum until the drum is rotated to unwind the band from the drum, this means, however, permitting the unwinding of the band from the drum.

My invention is illustrated in the accompanying drawing, wherein:—

Figure 1 is a side elevation of my chimney cleaner showing a flue in section and showing one method of using the cleaner;

Figure 2 is a like view to Figure 1 but showing another method of using the cleaner;

Figure 3 is a section on the line 3—3 of Figure 1;

Figure 4 is a section on the line 4—4 of Figure 1;

Figure 5 is a detailed fragmentary elevation of the connection between the brush and the metallic band.

Referring to this drawing, 10 designates a drum and 11 a yoke embracing the drum, this yoke being formed of a single piece of iron bent into an approximately rectangular form to provide longitudinally extending parallel bars 12 disposed one on each side of the drum, the cross bar 13 which is slitted transversely of the drum 10 and the cross bar 15' which is formed by the overlapping of the extremities of the iron which form the portions 12 and 13. Extending through the members 12 of the yoke is the pivot pin or bolt 15' and upon which the drum 10 is mounted for rotation. This pivot 15' at one end extends through the adjacent cross bar 12 and is provided with a nut 16. The opposite end of the member 15' is in the form of a crank handle 17. A pin 18 is driven transversely through the shaft or pivot 15' and is disposed within a recess 19 formed in the drum 10. Thus the drum 10 has rotation with the shank or pivot 15' upon which it is mounted.

Supported upon the yoke 11 is an arcuate iron formed in two sections. One of these sections

at its extremity carries a U-shaped guide member 21 which embraces the margin of the drum. The other of the sections 20a is extended around to the portion 15 and is connected to the portion 15 by means of a bolt 22.

The adjacent ends of these sections are bent at right angles and extended outward through the slit 14 as at 23 and are welded together at the extremities as at 24. It will be understood that the two sections might be made of a single piece of metal bent at 24 upon itself to form the portion 23, the two arms of this single piece being laterally extended to form the portion 20 and the portion 20a.

At one point in its periphery, the drum is notched as at 25 and attached to the periphery of the drum in this notch is one end of a spring steel band 26. The ears of the U-shaped member 21 carry between them the pin 27 and the roller 28 mounted thereon and the several coils of the band 26 when the latter is wound up are disposed between this roller 28 and the periphery of the drum, the yoke 11 preventing this band from sliding laterally off the drum. The extremity of the band 26 has attached to it in any suitable manner the wire brush 29, this brush being formed of a core of twisted wire 30 with wire bristles 31 intertwined therewith and projecting out at all angles therefrom. The extremity of the intertwined wire core 30 is formed with an eye 32 and is engaged with the extremity of the band by means of a clip 33 of sheet metal. This clip at one end is flanged to embrace the extremity of the band 26, the flange being designated 34 and a bolt 35 holds the clip to the extremity of the band, the flanges 34 preventing any pivotal movement of the clip upon the band. The eye 32 of the core 30 is held to the clip by means of a bolt 36 and the flanges 34 are bent over upon the eye 32.

The member 23 constitutes a handle whereby the device may be held. The crank handle is then rotated to unreel the band and this band is sufficiently stiff so that it may be forced into the chimney by this means and yet is sufficiently flexible so that it will follow the irregularities in the flue. After the brush has been thus moved into the flue any desired distance either up or down, the crank handle may be turned to withdraw the brush and thus clean out the flue.

This chimney cleaner may be inserted into the chimney through a stove pipe hole and, as shown, may be forced either up or down the chimney. It may be also forced up or down a stove pipe and is particularly effective if there should be a

fire in the stove pipe or in the flue, in which case a wet rag may be wrapped around the brush and the cleaner inserted and run into the flue or into the stove pipe and in a few minutes the fire will be checked or put out entirely. The device may be made of different sizes but may be made in a size to be readily portable so that it may be carried with ease from one flue to another.

I claim:—

- 10 1. A chimney cleaner of the character described, including an approximately rectangular yoke, a drum rotatably mounted within the yoke and having a crank handle whereby it may be rotated, the yoke having a handle and having two approximately arcuate arms extending approximately concentric to the periphery of the drum, but in spaced relation thereto, one of said arms having a U-shaped member embracing the periphery of the drum and carrying a roller, and a resiliently expansible smooth metallic tape attached at one end to the periphery of the drum

and adapted to be wound up thereon between the periphery of the drum and the roller.

2. A chimney cleaner of the character described including a rectangular yoke having a handle projecting from one end, a drum disposed within the yoke and having a shaft extending through the sides of the yoke, the shaft being provided with a crank handle, the drum being rotatable with the shaft, a semi-circular arm attached on its opposite ends to the ends of the yoke and extending concentric to the drum but in spaced relation thereto, a second arcuate resilient arm extending approximately concentric to the drum from the handle end of the yoke and having at its extremity a U-shaped member embracing the periphery of the drum and carrying a roller, and a resiliently expansible metallic tape attached at one end to the periphery of the drum and adapted to be wound thereon between the periphery and said roller.

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