No. 887,722. PATENTED MAY 12, 1908.

M. DORN.

VENTILATOR.

APPLICATION FILED DEC. 14, 1906.

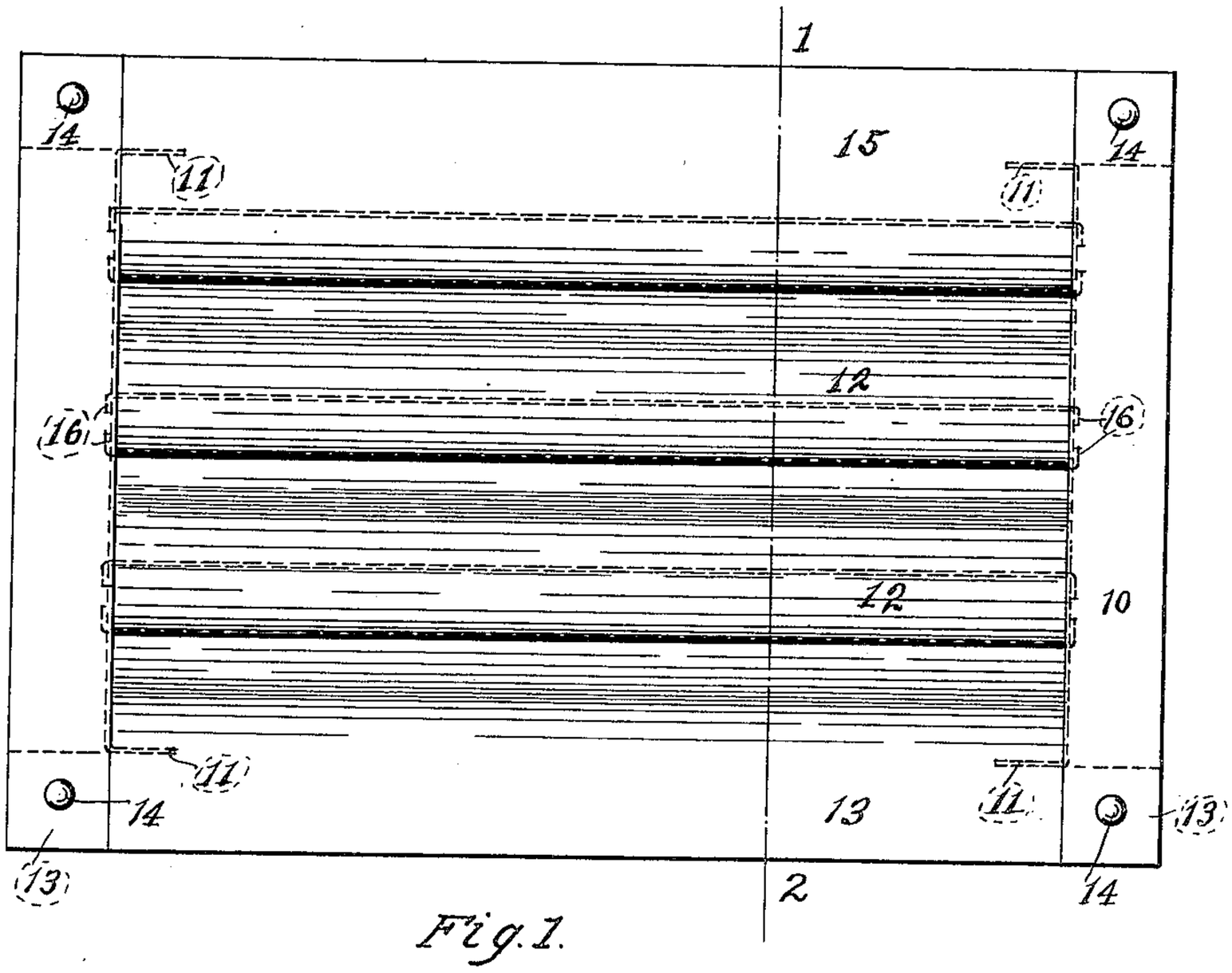

Fig. 1.

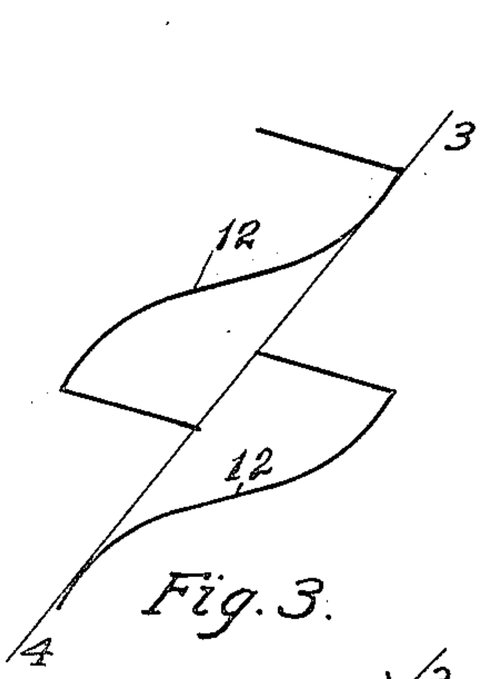

Fig. 3.

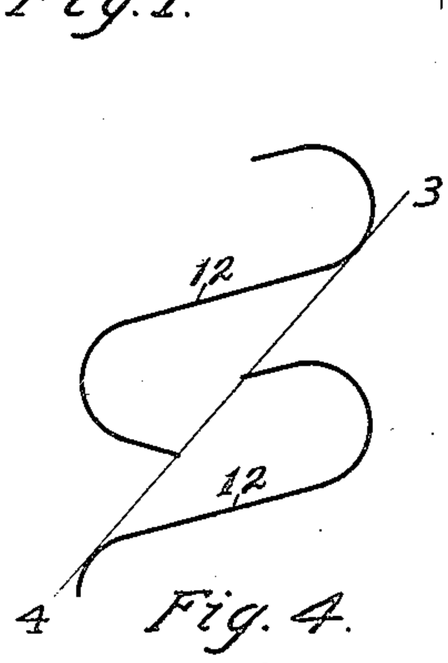

Fig. 4.

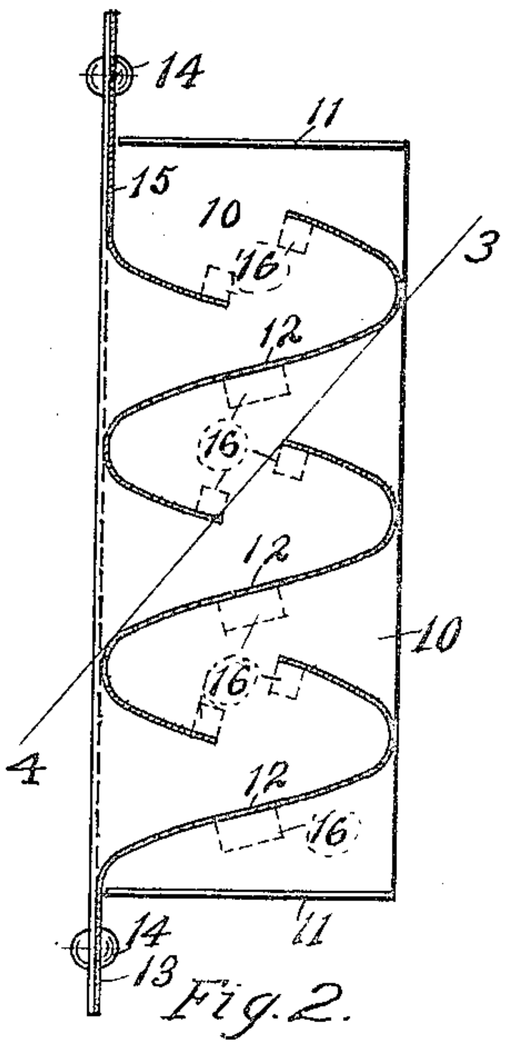

Fig. 2.

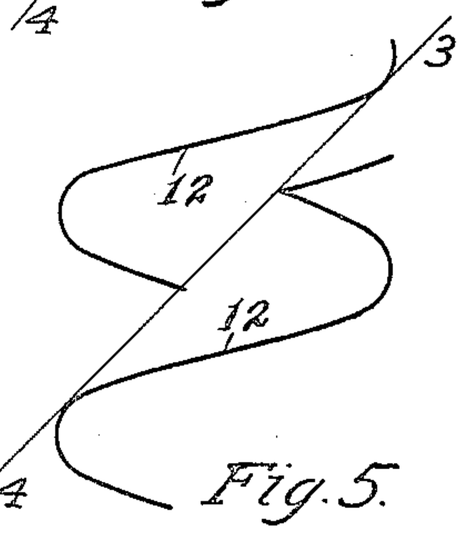

Fig. 5.

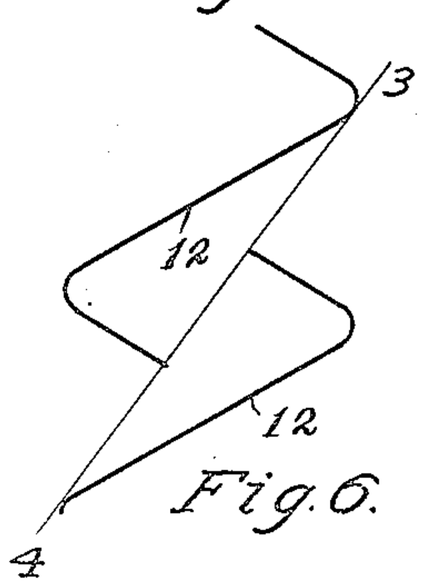

Fig. 6.

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UNITED STATES PATENT OFFICE.

MAX DORN, OF ST. LOUIS, MISSOURI.

VENTILATOR.

No. 887,722. Specification of Letters Patent. Patented May 12, 1908.

Application filed December 14, 1906. Serial No. 347,794.

To all whom it may concern:

Be it known that I, MAX DORN, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented a new and useful Ventilator, of which the following is a specification.

This invention relates to that type of ventilators set forth in Patent No. 313,865, issued March 17, 1885, and embodies primarily novel improvements in the detail construction of the ventilator, by which the parts thereof are simply assembled and secured together in an advantageous manner, and the cost of the device reduced to a minimum by reason of the peculiar formation of such parts and the general structure of the device.

The structure of the invention is especially designed to permit of making the ventilator entirely of metal and the invention is involved in those details whereby the device is made an extremely practical one from a commercial standpoint.

In the accompanying drawings wherein I have illustrated my invention Figure 1 is a side elevation of a ventilator made in accordance with my invention. Fig. 2 is a vertical sectional view taken approximately on the line 1—2 of Fig. 1. Figs. 3, 4, 5, and 6 are diagrammatic views showing modified or different shapes for the parts known as louvers.

The frame of the ventilator includes two vertical end parts 10, which are angular in end elevation or cross section, so that the laterally projecting portions thereof may be attached to the proper framing. The upper and lower ends of the end parts 10 are bent inward toward each other, as indicated by 11. Between the two end parts 10 a series of parts 12, which are known and herein referred to as louvers, are attached. These parts comprise outwardly and downwardly oblique central portions, with upwardly and outwardly extending portions on their inner edges, and downwardly and inwardly extending portions on their outer and lower edges. These parts may be used in any desired number or arrangement. The lowermost of these parts has an extension 13 at each end, which extensions are secured by means of rivets 14, or otherwise if desired, to the end parts 10. The lower and outer edge of this lowermost part 12 extends vertically so that it may be fastened conveniently and securely to the framing of the structure in connection with which the ventilator is used. The uppermost of said parts 12 comprises a plate 15 having a vertical portion which is attached to the parts 10, and a portion extending obliquely downward and inward. These various parts have tongues or extensions 16 projecting through slots in the end parts 10 and then clamped firmly against said parts 10. This makes a strong structure calculated to withstand the usages to which the device may properly be exposed. Other obvious means of connection may be employed instead of the specific means described.

In Fig. 2, to which the above description has been mainly directed, the line 3—4 shows the relation of the edges of the parts or louvers 12 to each other. That is to say, a straight line drawn obliquely downward and outward from the inner edge of one of these louvers to the outer edge of the next lower one will intersect at least one of the extensions on the edges of said parts. This makes it clear that there can be no straight air current through the ventilator, which acts as a sort of break or baffle and causes separation of the entrained substances in the air, preventing the passage of dirt, rain, snow, cinders, and other atmospheric accompaniments, to a maximum degree. The distrained substances are guided by the louvers, downward and outward, which is the obvious result of the peculiar shape of these parts.

In Figs. 3, 4, 5, and 6 other forms or shapes of the louvers are diagrammatically illustrated, and will be readily comprehended by those skilled in the art to which this invention relates. Specific description of the forms or shapes is unnecessary, further than to state that the extensions on the edges thereof intersect the straight lines 3—4 corresponding to the line 3—4 in Fig. 2.

It is obvious that there may be other variations from the specific structure described, without departing from the spirit and scope of my invention.

Without restricting myself to identical features what I claim and desire to secure by Letters Patent of the United States is—

1. A ventilator of metallic construction comprising vertical end parts, each having its upper and lower ends bent inwardly, a series of louvers arranged transversely between the end parts and provided at the opposite extremities with tongues passing through and interlocking with said end parts and connecting them together, the uppermost and lowermost of the louvers embody-

ing a vertical portion having lateral extensions at its ends projecting outward beyond the outer sides of the end parts, a vertical member being formed with each end part projecting outwardly at a right angle thereto and extending at its upper and lower extremities beyond the inwardly bent portions thereof, and fastenings connecting together the lateral extensions of the uppermost and lowermost louvers and the adjacent upper and lower projecting ends of the angularly arranged members of the end parts.

2. A ventilator comprising vertical end plates provided with slots, a series of separate louvers, each consisting of a central portion arranged in a downward and outward oblique plane with an upward and outward oblique extension on the upper edge and the lower edge extending obliquely downward and inward throughout its length, the said extensions on the different louvers being distantly separated throughout their length, and tongues on the ends of the louvers extending through the slots in the end plates and being clamped against the end plates, substantially as specified.

In witness whereof, I hereunto affix my signature to this specification this 12th day of December, 1906, in the presence of two subscribing witnesses.

MAX DORN. [L. S.]

In presence of—
F. J. McCaslin,
J. D. Rippey.