

F. M. STILES.
CHIMNEY.
APPLICATION FILED JULY 11, 1910.

992,286.

Patented May 16, 1911.

Fig. 1.

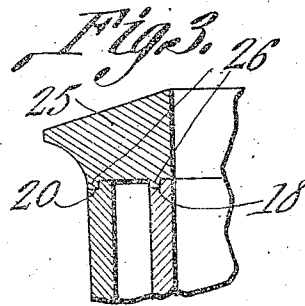
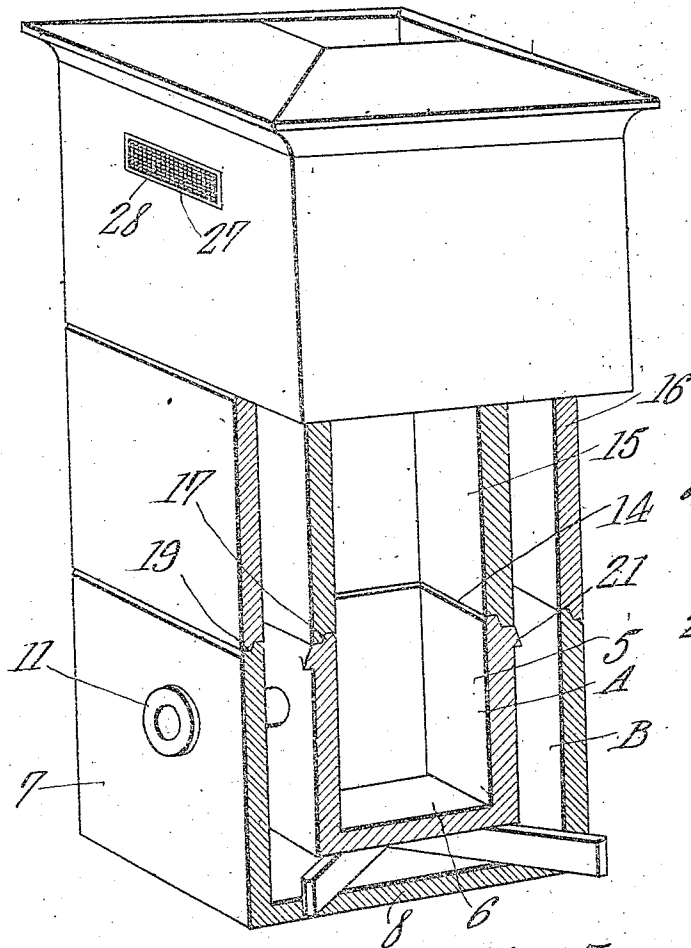


Fig. 2.

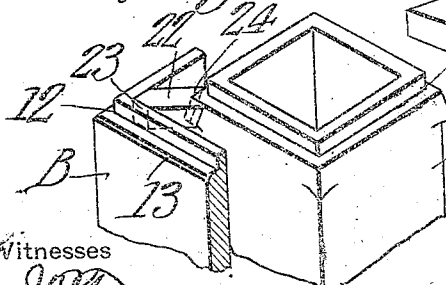
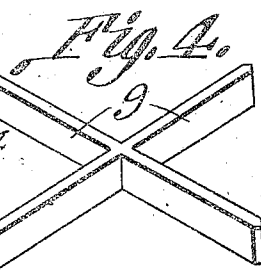
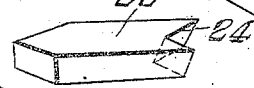


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

FRED M. STILES, OF COOPERSTOWN, NEW YORK.

CHIMNEY.

992,286.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRED M. STILES, a citizen of the United States, residing at Cooperstown, in the county of Otsego and State of New York, have invented a new and useful Chimney, of which the following is a specification.

It is the object of the present invention to provide an improved construction of chimney and the invention aims primarily to provide a chimney which will be fire proof and will embody ventilating means for the purpose of admitting cooling air into the space between the inner and outer sections of which the chimney is composed.

A further object of the invention is to provide a chimney of the class mentioned embodying wedges which are disposed between the corners of corresponding inner and outer sections for the purpose of holding these sections in proper spaced relation.

It is a further object of the invention to provide, in a chimney made up of a plurality of sections including an inner base or bottom section and an outer base or bottom section, means for so spacing the bottoms of the two said sections as to not interfere with the circulation of cooling air currents therearound.

With the above and other objects in view, the invention consists in the general construction and arrangement of parts shown in the accompanying drawings, in which,

Figure 1 is a perspective view partly in section of a chimney constructed in accordance with the present invention. Fig. 2 is a similar view in detail of one corner of two related sections of the chimney. Fig. 3 is a vertical sectional view through the upper end portion of one side of the chimney wall. Fig. 4 is a detail perspective view of the means provided for spacing the bottoms of the base sections of the chimney. Fig. 5 is a perspective view of one of the wedge shaped blocks.

As heretofore stated, the chimney embodying the present invention is made up of a plurality of superposed inner and outer sections and the inner course of sections includes a bottom section of specific construction as does also the bottom course, and the chimney further includes, in its structure, a cap fitted upon and closing the space between the sections at their upper ends.

Of the sections above mentioned, the bottom section of the inner course is indicated

in general by the reference character A and the corresponding section of the outer course is indicated by the reference character B and both of these sections are of substantially the same construction and form. At this point, it is to be noted that while in the drawings, the chimney is illustrated as rectangular, it may assume some other form. However, in the drawings, the inner section A embodies four vertical walls indicated by the numeral 5 and a bottom wall indicated by the numeral 6, this section being open at its top. In a like manner, the bottom section B of the outer course of sections, embodies four vertical walls 7 and a bottom wall 8. The section B is considerably larger than the section A and in building the chimney the section A is disposed within the section B and as a means for spacing the bottom wall 6 of the section A from the bottom wall 8 of the section B, there is provided a spacing member comprising four radial arms 9 which are relatively narrow and are of the desired height and have their ends beveled as at 10 so as to fit snugly in the corners between the vertical walls 7 of the section B, it being observed that the section A is disposed directly upon this spacing member. For the purpose of providing for the connection of a stove pipe with the chimney, a stove pipe thimble indicated by the numeral 11 is fitted through one or more vertical walls 7 of the section B and opens also through the corresponding wall of the section A and consequently into the interior of the section A. The vertical wall of the section B has its upper edge rabbeted as indicated by the numeral 12 and its outer edge beveled as at 13 whereby to shed water. In a like manner, the upper edge of each vertical wall section A is rabbeted as at 14 and also its inner upper edge is beveled.

In addition to the bottom section above described, the chimney includes, in its structure, a plurality of intermediate sections and of these latter sections, those comprising the inner course are indicated by the numeral 15 and those comprising the outer course are indicated by the numeral 16. Each section 15, of which there may be any number, as will be readily understood, embodies four vertical walls and is open at its top and its bottom and the lower edge of each wall of each section 15 is rabbeted as at 17 as is also the upper edge of each wall as at 18. The lowermost one of the sections 15 is disposed

at its lower end upon the upper end of the section A with the rabbeted edges 17 of its vertical wall fitting the rabbeted upper edges 14 of the wall of the section A and the remaining ones of the sections 15 are disposed, in superposed relation, upon the sections above specifically referred to. In a like manner, the lower edge of each vertical wall of the sections 16 is rabbeted as at 19 and its upper edge as at 20 and these sections 16 are assembled in the same manner as are the sections 15, as clearly illustrated in Fig. 1 of the drawings.

From an inspection of Fig. 1 of the drawings it will be observed that the sections 15 and 16 are of the same height so that when the sections are properly arranged, the lower and upper edges of corresponding sections will be located in the same horizontal plane. Each section 15 as well as the base section A is formed at each upper corner with a beveled lug indicated by the numeral 21 and in order to properly space the sections of the inner and outer courses there are provided spacing wedges indicated by the numeral 22, one end of each of the wedges being beveled as at 23, in V-form, so as to fit in the corner between adjacent vertical walls of the outer section which is to be spaced from the corresponding inner section, and the inner end of each wedge 22 is formed with a notch 24 which is also V-shaped and is deeper at the bottom than at the top, the wedge being disposed in the position shown in Fig. 2 of the drawings in which position its notch will receive the related lug 21. It will be readily understood that the wedges will rest by gravity in this position and will rigidly space the sections of the inner and outer courses at their corners. As heretofore stated, the chimney also embodies a cap and this cap is in the form of a hollow rectangle indicated by the numeral 25 and formed upon its under side with ribs 26 which fit in the rabbets 18 and 20 of the uppermost sections 15 and 16 respectively, it being observed from an inspection of Fig. 3 of the drawings that this cap closes the space between the sections of the inner and outer courses although it leaves the upper end of the uppermost section 15 open so that products of combustion entering the inner course of sections by way of the stove pipe inserted in the thimble 11, may pass out through the opening of the cap, as they do by way of the open upper end of an ordinary chimney. It is contemplated by the invention that

atmospheric currents may enter and leave the space between the sections of the inner and outer courses so as to cool to the maximum degree, the sections of the inner course and in this manner to prevent undue heating of the sections of the outer course which would be liable to result in adjacent wood-work being set on fire and in fact this is a disadvantage found in any ordinary chimney, which the present invention contemplates overcoming. In order that air currents may enter and leave the space between the two courses of the chimney, the uppermost one of the sections 16, or the section adjacent thereto, is formed with an opening 27 through one or more of its walls and this opening is covered by a screen 28 which prevents the entrance of particles of dirt, leaves etc., into the space between the two courses of the chimney and also prevents the nesting of birds in this space.

It will readily be understood of course that any number of the sections 15 and 16 may be employed depending upon the height to which the chimney is to be built, and it will also be understood that these sections as well as the other members and sections of the chimney may be varied in form if found desirable or expedient.

What is claimed is:—

1. In a chimney, a plurality of inner and outer sections, each inner section having at each upper corner a beveled lug, and a spacing block positioned between each upper corner of each inner section and the corresponding corner of each outer section and having one end notched to fit the said lug and its opposite ends beveled and fitting in the said corner of the outer section.

2. In a chimney, a plurality of inner and outer sections, an inner bottom section and an outer bottom section, each of said bottom sections having a bottom and side walls, the side walls of all of the inner and outer sections being spaced, and a spacing member, comprising radial arms, disposed between the bottom walls of the inner and outer bottom sections and seating at its ends in the corners of the outer bottom section.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses:

FRED M. STYLES.

Witnesses:

HAROLD BASINGER,
F. M. SHERWAY.