Jan. 17, 1961 W. J. TYGARD 2,968,231

ADJUSTABLE HOOD DEVICES

Filed Nov. 3, 1958

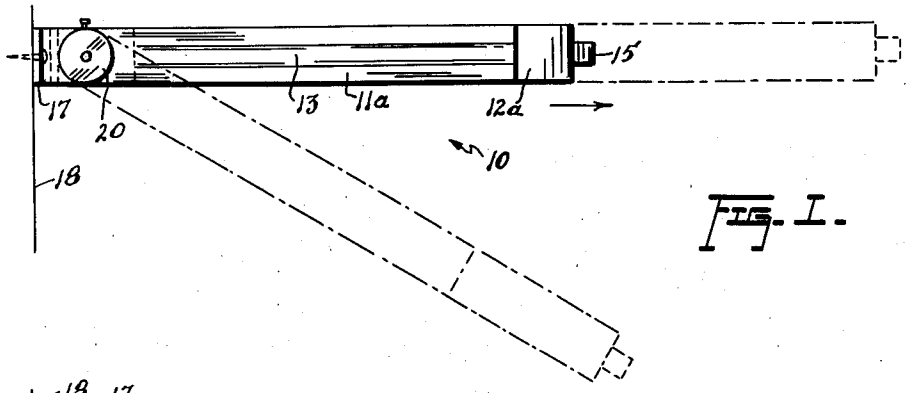


FIG. 1.

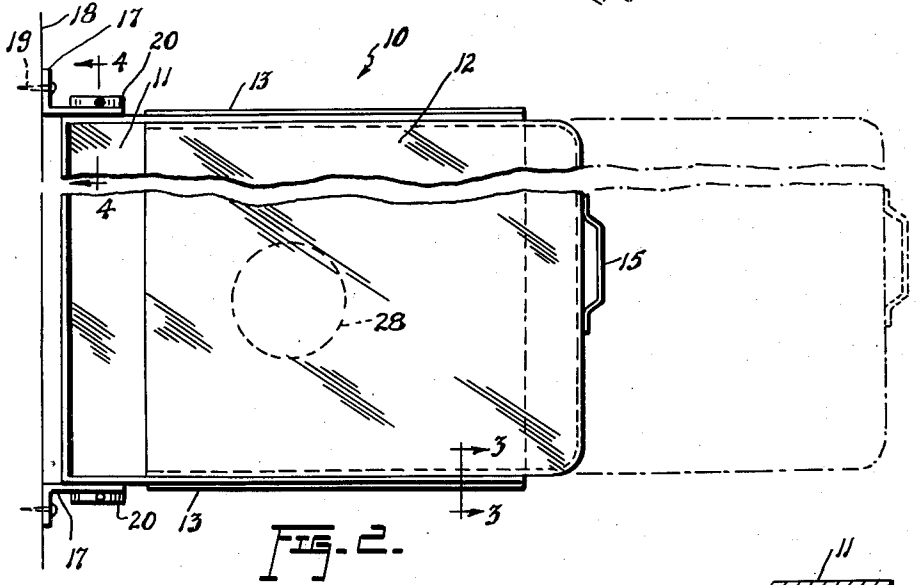


FIG. 2.

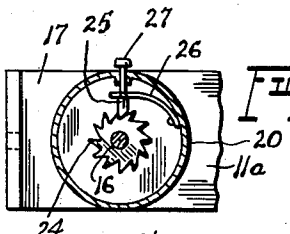
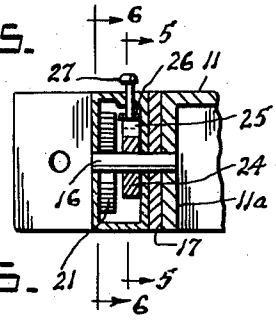


FIG. 5.



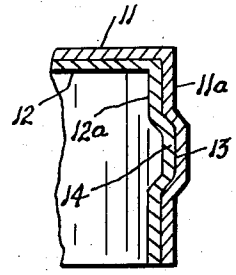


FIG. 3.

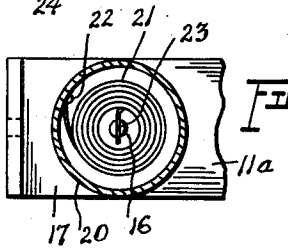


FIG. 6.

FIG. 4.

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ADJUSTABLE HOOD DEVICES

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1 Claim. (Cl. 98—115)

This invention relates to new and useful improvements in hoods such as are commonly mounted above stoves, furnaces, grills, heat treating equipment, chemical tanks, and the like, for the purpose of gathering smoke, fumes, odors, etc., and the principal object of the invention is to provide a hood device of this type which may be quickly and easily adjusted so as to be properly arranged for efficient gathering of the fumes, smoke, etc., which it is intended to collect.

As such, an important feature of the invention resides in the provision of a hood device consisting of two slidably telescoped hood members, one of which may be extended or retracted relative to the other so as to vary the effective span of the hood device as a whole.

The hood device is preferably wall mounted, and another important feature of the invention resides in the provision of means for pivotally attaching the hood device to its wall support so that it is swingable in a vertical plane and therefore may be raised or lowered as desired.

Another feature of the invention resides in the provision of resilient means for urging the hood device upwardly about its pivotal support, thereby counteracting, at least to some material extent, the effect of gravity and permitting the hood device to be raised with comparative ease.

Another feature of the invention resides in the provision of means for automatically locking the hood device in a suitably raised position, such means being easily manually releasable when a change of adjustment is desired.

Some of the advantages of the invention reside in its simplicity of construction, efficient and dependable operation, and in its adaptability to economical manufacture.

With the foregoing more important objects and features in view and such other objects and features as may become apparent as this specification proceeds, the invention will be understood from the following description taken in conjunction with the accompanying drawing, wherein like characters of reference are used to designate like parts, and wherein:

Figure 1 is a side elevational view of the invention;

Figure 2 is an underside plan view thereof;

Figure 3 is a sectional detail on an enlarged scale, taken substantially in the plane of the line 3—3 in Figure 2;

Figure 4 is a sectional detail on an enlarged scale, taken substantially in the plane of the line 4—4 in Figure 2;

Figure 5 is a sectional view, taken substantially in the plane of the line 5—5 in Figure 4; and

Figure 6 is a sectional view, taken substantially in the plane of the line 6—6 in Figure 4.

Referring now to the accompanying drawing in detail, the adjustable hood device in accordance with the invention is designated generally by the reference numeral 10 and embodies in its construction a pair of slidably telescoped hood members, namely, a primary hood member 11 and a secondary hood member 12.

The hood member 11 includes a pair of side flanges 11*a*

which are formed with longitudinally extending depressions constituting guideways 13, while similar side flanges 12*a* of the hood member 12 are provided with longitudinally extending protuberances 14 which are slidable in the guideways 13, so that the hood member 12 may be extended or retracted relative to the hood member 11 to vary the effective span of the hood device. The hood member 12 is equipped at its outer end with a suitable handle 15, it being understood that although the two hood members are slidably telescoped, the protuberances 14 engage the guideways 13 with sufficient friction so that the hood member 12 remains in a pre-adjusted position unless it is manually moved.

The inner end portion of the hood member 11 is pivotally mounted by a pair of coaxial pivot pins 16 between a pair of angle brackets 17 which are secured to a supporting wall 18, or the like, by suitable screws 19. The pins 16 are rigidly secured, such as by welding, to the side flanges 11*a* of the hood member 11 and project laterally therefrom, whereby the entire hood assembly 11, 12 is swingable in a vertical position and may be raised and lowered as desired.

The pivot pins 16, after being rotatably journalled in the brackets 17, extend into disc-shaped housings 20 which are rigidly secured to the brackets. Each of the housings 20 contains a spiral spring 21 having one end thereof anchored to the housing as indicated at 22 and having its other end anchored to the associated pivot pin 16 as indicated at 23, the spring being wound in such manner as to urge, through the medium of the pivot pins, the hood assembly upwardly against the effect of gravity. Accordingly, the springs counteract, at least to some material extent, the gravitational effect and permit the hood assembly to be raised with comparative ease.

Means are provided for locking the hood assembly in a pre-adjusted position, these means comprising ratchets 24 which are secured to the pins 16 within the housings 20 and are engaged by pawls 25 slidably mounted in and projecting upwardly from the housings, as shown. The pawls 25 are urged in engagement with the ratchets 24 by leaf springs 26, also disposed within the housings, and the teeth of the ratchets are shaped so that when the hood assembly is raised, the ratchet teeth skip past the pawls, but when raising movement of the hood assembly is discontinued, the pawls lock the ratchets and thereby prevent the hood assembly from lowering.

The projecting portions or stems of the pawls 25 are provided with suitable finger knobs 27, whereby the pawls may be pulled out of engagement with the ratchets to facilitate lowering of the hood assembly when so desired.

Either or both of the hood members 11, 12 may be provided in the top wall thereof with a suitable opening indicated at 28 in Figure 2, communicating with a suitable duct (not shown) whereby smoke, fumes, etc. gathered by the hood device may be conveyed for discharge into the atmosphere.

While in the foregoing there has been described and shown the preferred embodiment of the invention, various modifications may become apparent to those skilled in the art to which the invention relates. Accordingly, it is not desired to limit the invention to this disclosure and various modifications may be resorted to, such as may lie within the spirit and scope of the appended claim.

What is claimed as new is:

In an adjustable hood device, the combination of bracket means adapted to be secured to a wall, horizontal pivot means provided on said bracket means, a primary hood member carried by said pivot means and swingable in a vertical plane, resilient means disposed at and cooperating with said pivot means for urging said primary hood member upwardly against the effect of gravity, manually

releasable locking means provided at said pivot means for locking said primary hood member in a pre-adjusted position, said primary hood member including a pair of side flanges provided with guideways, a secondary hood member having side flanges provided with guides slidably telescoped in said guideways whereby the secondary hood member may be selectively extended and retracted relative to the primary hood member to vary the effective span of the hood device, and a handle provided on said secondary hood member.

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