To all whom it may concern:  

Be it known that I, WILLIAM A. HILL, of Saluda Old Town, in the county of Newberry and State of South Carolina, have invented a new and useful Improvement in Fly-Traps, of which the following is a specification. 

My invention relates to that form of fly trap in which an endless belt carried over rollers and driven by clock gearing is arranged in a frame and is baited with molasses or sweetened water so as to carry the flies under a superposed cage in which they pass and are imprisoned. 

My invention consists in the peculiar construction and arrangement of the parts designed to secure greater simplicity, cheapness and efficiency, as will be hereinafter fully described. 

Figure 1 is a vertical longitudinal section, and Fig. 2 a plan view with the cage in section. 

In the drawings A A represent two horizontal sides of the casing which at the top are connected by a table surface B. At one end these side pieces are made wider with downwardly curved ends which are covered by a metal sheet C to form an enlarged housing. 

At one end of the table surface B there is a roller D and at the other end within the sheet metal housing there is another roller D'. Over these rollers there is distended an armless belt E of cloth or other suitable material, the upper portion of which travels upon the upper part of the table surface. To give passage to this belt as it passes from the roller D' onto the table surface there is a slot a in the housing or wider part of the casing which is sufficiently wide in vertical direction to allow the belt with the flies on it to pass without disturbing the flies. At this point the belt passes into an entrance chamber formed by two sides b b and an end c which fits down closely to the belt, so closely as to prevent flies from passing under. Close to the end c there is a comb of to dislodge the flies and prevent them from being mashed under the end section c. Upon this entrance chamber there is detachably fitted a cage F of gauge wire or glass which has at its bottom four (more or less) funnel shaped throats d through which the flies in the entrance chamber may pass into the gauge wire cage and be imprisoned. 

G is a glass door to give light under the closed end of the housing so that the flies may not be disturbed by the darkness. 

In the operation of this fly trap one of the rollers D is connected to a clock gear, or other suitable driving mechanism, shown in dotted lines, so as to be rotated slowly and uniformly. This causes the endless belt to travel in the direction of the arrow. This endless belt having been saturated with molasses or other attractive bait for flies, as it passes over the table surfaces the flies pitch upon the same and are carried first around roller D and underneath the table, and then up over roller D' and through slot a into the entrance chamber. As the belt passes out under the end c of the entrance chamber the flies are disturbed by the comb and rising in flight into the entrance chamber crawl up through the tapering throats d into the cage, where they are permanently imprisoned and from which they can be removed by a door e after having been scalded or killed. 

In pointing out the distinctive features of my invention, I would call attention especially to the table surface B which underlies the upper section of the belt, and extends from one roller D all the way to and underneath the entrance chamber d. This not only holds the belt steady so that the flies are not disturbed by the shaking of the same, but it holds the belt up to the bottom of the entrance chamber so that the flies cannot escape from the sagging of the belt. Furthermore the frame A made with one end wider and extending up and around roller D' and forming the end of the entrance chamber, and an enlarged housing with glass door, serves to give plenty of space and light for the flies as they pass up into the entrance chamber. The comb c also serves a useful and distinctive purpose. 

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

1. The combination with the endless belt, its roller D D', an entrance chamber with superposed cage arranged above the belt, said entrance chamber having both its inlet and closed sides between the rolls a table surface
arranged between the rollers and extending under the entrance chamber, and the main frame A having enlarged sides at one end extending above the rollers and provided with a sheet metal housing C with glass door G substantially as and for the purpose described.

2. The combination in a fly trap, of a traveling endless belt, a superposed cage, and an entrance chamber surrounding a portion of the belt beneath the cage, and a comb c' arranged in the entrance chamber to dislodge the flies before being dragged and mashed under the outlet edge of the entrance chamber, substantially as shown and described.

The above specification of my invention signed by me in the presence of two subscribing witnesses.

WILLIAM A. HILL.

Witnesses:

EDWD. W. BYRN,
SOLON C. KEMON.