C. W. HITCHNER.

SANDWICH CAKE MACHINE.

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1,220,845.

Patented Mar. 27, 1917.

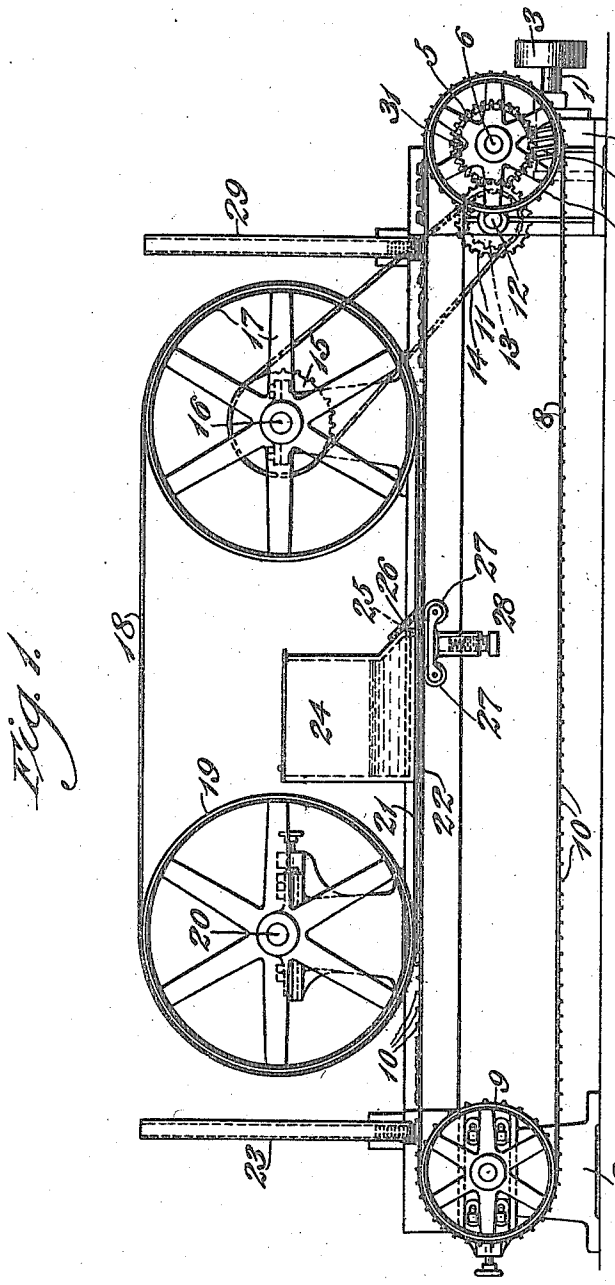


Fig. 1.

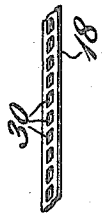


Fig. 2.

WITNESSES

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SANDWICH-CAKE MACHINE.

1,220,845. Specification of Letters Patent. Patented Mar. 27, 1917.

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To all whom it may concern:

Be it known that I, CHESTER W. HITCHNER, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Sandwich-Cake Machine, of which the following is a specification.

My present invention consists of a novel construction of an automatic sandwich cake machine, whereby a filling of any desired nature is positioned between two cakes.

It further consists of novel means to feed a cake, novel means for applying the filling thereto, and novel means of placing a second cake over the filling.

Other novel features of construction and advantage will hereinafter more clearly appear in the detailed description of the invention.

For the purpose of illustrating my invention, I have shown in the accompanying drawings, certain forms thereof which are at present preferred by me, since the same will give in practice satisfactory and reliable results, although it is to be understood that the various instrumentalities of which my invention consists can be variously arranged and organized and that my invention is not limited to the precise arrangement and organization of these instrumentalities as herein shown and described.

Figure 1 represents a side elevation of a sandwich cake machine embodying my invention.

Fig. 2 represents a plan view of one form of stencil belt employed.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings:—

1 designates a driving shaft journaled in the standards 2 and provided with a pulley 3, which is adapted to be driven by any desired source of power. The driving shaft 1 is provided with a worm 4, which meshes with a gear 5, mounted on a shaft 6, to which is secured a sprocket wheel 7 around which passes a conveyer belt 8. The conveyer belt 8 also passes around a sprocket wheel 9, adjustably mounted on a standard 2.

The belt 8 is provided with cake spacing means 10, such as for example, the pins illustrated in the drawings. A gear 31 meshes with a gear 11 mounted on a shaft 12, on which is also secured a sprocket wheel 13 around which passes a sprocket chain 14, which also passes around a sprocket wheel 15, mounted on a shaft 16.

17 designates a driving pulley mounted on the shaft 16 and adapted to receive a stencil belt or band 18, which latter also passes around a pulley 19 mounted on a shaft 20.

The lower stretch 21 of the stencil band 17 travels above the upper stretch 22 of the lower conveyer belt 8.

23 designates a cake or biscuit receptacle, in which the cakes are superposed, and these cakes feed by gravity to the conveyer belt 8 and are positioned on such belt by the spacing means 10.

24 designates a receptacle for the filling, which feeds by gravity from the receptacle through the open bottom 25, and the surplus filling is removed by the blade 26. 27 designates rollers which are provided with a tension device 28 and which are mounted beneath the upper stretch of the conveyer belt to maintain such upper stretch in proper position as the filling is being applied to the cakes.

29 designates a cake receptacle from which the cakes are fed by gravity and discharged upon the filling which has been applied to the cakes carried by the conveyer belt 8.

The stencil band 18 is provided with openings 30 the contour of which varies in accordance with the contour of the filling which is to be applied to the cakes.

In the operation, the conveyer belt and the stencil belt are continuously driven. The cakes which are automatically fed to the conveyer belt from the cake receptacle 23 at the forward end of the machine, travel beneath the discharge port formed by the open bottom 25 and receive the filling passing from the filling receptacle 24 into the openings 30. The surplus filling is removed by the blade or wiper 26, the lower end of which preferably engages the upper face of the stencil band. As the cakes pass beneath the cake receptacle 29, a top cake is automatically placed over the filling on a lower cake, thereby forming a cake sandwich.

By the employment of my present invention, the filling is automatically positioned between two cakes.

It will now be apparent that I have devised a novel and useful construction of a sandwich cake machine, which embodies the features of advantage enumerated as desir-

able in the statement of the invention and the above description, and while I have, in the present instance, shown and described a preferred embodiment thereof which will be found in practice to give satisfactory and reliable results, it is to be understood that the same is susceptible of modification in various particulars without departing from the spirit or scope of the invention or sacrificing any of its advantages.

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

1. In an apparatus of the character stated, the combination of an endless stencil, means arranged above the lower stretch of the stencil to apply filling through the same, an endless cake conveyer arranged with its upper stretch below and in opposed relation to the lower stretch of the stencil, means for feeding lower cakes to the conveyer to be carried by the same below the lower stretch of the stencil and the filling means, and means for placing upper cakes on the filling applied to the lower cakes.

2. In an apparatus of the character stated, the combination of an endless stencil, means arranged above the lower stretch of the stencil to apply filling through the same, an endless cake conveyer arranged with its upper stretch below and in opposed relation to the lower stretch of the stencil and extending longitudinally in opposite directions beyond the stencil, a cake receptacle arranged above one extended portion of the upper stretch of the conveyer to deliver lower cakes to said stretch, and a cake receptacle arranged above the other extended portion of the upper stretch of the conveyer to deliver upper cakes to the filling on the lower cakes.

3. In an apparatus of the character stated, the combination of an endless stencil, means arranged above the lower stretch of the stencil to apply filling through the same, an endless cake conveyer arranged with its upper stretch below and in opposed relation to the lower stretch of the stencil, means for feeding lower cakes to the conveyer to be carried by the same below the lower stretch of the stencil and the filling means, means for placing upper cakes on the filling applied to the lower cakes, and means for exerting upward yielding pressure against the upper stretch of the conveyer at a point below the filling means.

4. In an apparatus of the character stated, the combination of an endless stencil, means arranged above the lower stretch of the stencil to apply filling through the same, and an endless cake conveyer arranged with its upper stretch below and in opposed relation to the lower stretch of the stencil and also arranged with said upper stretch extending longitudinally in opposite directions from the stencil so that cakes may be placed on and removed from said upper stretch.

CHESTER W. HITCHNER.

Witnesses:
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