To all whom it may concern:

Be it known that I, WILLIAM F. MARBLE, a citizen of the United States, and a resident of Georgetown, county of Essex, State of Massachusetts, have invented an Improvement in Stacking Attachments for Strip-Feeding Machines, of which the following is a specification.

In the manufacture of heels, which are made, in part, of leather board, and which contain one or more wedge lifts, the wedge lifts are usually formed by cutting sheets of leather board into strips, and by splitting these strips on a bevel, so that two wedge-shaped strips are formed from each strip which is removed from the sheet. These stripping and splitting operations are usually performed by a single machine at one operation. When delivered from the machine, prior to my invention, it has, so far as I am aware, been customary to permit these strips, which are often about four feet in length, to fall on the floor or into a basket or other receptacle. As these strips bend rather easily, they swing down of their own weight, so that their ends touch the floor close to the machine before they are freed from the feed rolls, and consequently, they are liable to fall in almost any direction when they are freed therefrom, and unless they are immediately picked up, are likely to interfere with the work of the operator of the machine.

In order that the strips may be conveniently taken to some other part of the factory, as the dieing-out machine, it is customary, or convenient, to lay the strips side by side with their ends nearly even and to tie them in bundles, so that it usually requires the full time of a person, in addition to the operator, to take care of the strips which are delivered.

Moreover, the strips are liable to be broken, in falling or handling, so that additional loss, and inconvenience, often results. In addition to this, the bending and touching of the strips on the floor is liable to retard, and otherwise interfere with the operation of the machine.

The object of my invention is to provide a receiver for the strips, as they are delivered from the machine, which will at all times, hold the strips in a nearly horizontal position, so that they will not be bent or injured, and which will conduct them away from the point of delivery from the machine, and pile or stack them side by side, with their ends approximately even, so to support them, that they may be readily and easily tied in a bundle and removed, said device to be adapted to be readily applied to, or used in connection with any ordinary stripping or splitting machine, in which the strips are delivered in uniform lengths, successively.

I accomplish these objects by providing a horizontally disposed table arranged to receive the strips as they are delivered, said table being transversely inclined, so that after the strip has been delivered thereto, it will slide therefrom transversely of its length, and by providing a pair of U-shaped supports arranged to receive the strips as they slide from the table, which are adapted to hold them in position to be readily tied into a bundle and removed.

For a more complete understanding of my invention, reference is made to the accompanying drawing in which:

- Figure 1 is a side elevation of a strip receiver embodying my invention and
- Fig. 2 is an end elevation thereof.

In the drawing, the stripping and splitting machine, in connection with which the device embodying my invention may be employed, is merely indicated by a pair of feed rolls, a and b, and a splitting knife c, it being understood that the strips of stiff, somewhat flexible, material are delivered horizontally from the machine, in pairs when split, one pair following the next in rapid succession.

According to my invention, I provide a table d, the surface of which comprises a horizontally disposed upper portion, supported by legs e at a level slightly beneath the level at which the strips are delivered by the machine, the surface of said table being inclined toward the front side, or crosswise of its length, in a gradual curve to an angle of approximately 45°.

A pair of U-shaped supports, or bands f, are arranged side by side in parallelism and connected at corresponding ends to the inclined lower side edge of the table, at suitable distances apart, the opposite ends or portions being supported by legs g, and the lower portions being sustained a short distance above the level of the floor. A trough shaped holder is thus formed.

In practice, the table d is placed in line with the direction in which the strips are
fed, and in such a lateral position relative to the position in which the strips are delivered from the machine, that, as the strips pass beyond the splitting knife, they will bend down so that the side portion of the strips opposite the steeply inclined portion of the table will rest on the nearly transversely horizontal portion of the table, and will slide along on said portion as they are fed, while the opposite edge portion of the strips will, at the same time, overhang said more steeply inclined portion of the table, and be unsupported thereby, but will be retained in this position and held from tipping or sliding laterally by the feeding mechanism of the machine until they are finally freed therefrom. The table thus supports the strips, as they are being fed, in approximately the position in which they are delivered, and, by so doing, materially assists in the efficient operation of the machine, for, if the strips were permitted to bend down to the floor, or were deflected to one side, the operation of the machine would probably be interfered with. As the table is smooth and the strips slide readily along its surface, it will be apparent that there will be no tendency to retard, or otherwise interfere with the feeding of the strips or to deflect them from the course in which the machine is designed to feed them. As soon as the strip is split, so that it is free of the knife, it will then be free to tip laterally or swing down at its unsupported edge portion, so that it will immediately tip and slide sidewise down on the steeply inclined surface of the table, the approximate successive positions of the strips from the time they first touch the table to the time when they are sliding down the inclined surface thereof, being indicated by dotted line positions in Fig. 2. It is noted, in this connection, that the dropping of the end portions of the strips from the machine onto the table, as they are freed from the machine, tends to accelerate the tipping action of the strips, also that, in the particular connection illustrated, the splitting knife sometimes holds the strips from tipping sidewise until they are pushed therefrom by the next succeeding strip.

As the strips slide from the table they will be caught by the U-shaped supports \( f \), as shown in Fig. 2, so that, as successive strips are fed, they will fall in a pile, side by side, with their ends approximately even.

It is practically essential, to the successful operation of the device, that the strips be supported in the line with the feed and in an approximately horizontal position, until freed from the feeding mechanism, so that a strip will not begin to slide or fall laterally until both ends are free and it is free to fall while in a horizontal position, for, if a strip started to fall while in an inclined position, it would strike on its lower end first, instead of on its side, and, as a result, the strips would not be likely to fall into parallel positions, with their ends approximately even, as above described.

When the strips have thus been delivered to the supports \( f \), they will be held above the floor in a position in which a binder may be easily passed about them between the supports so that they may be tied in a bundle and then removed.

It will be apparent that the device will be varied in size according to the particular machine, in connection with which it is to be used, and the length of the strips to be received, although it is not essential, so far as the relative length of the strips and table are concerned that the table be as long as the strips, for if they should extend somewhat beyond the end of the table, before they were finally delivered by the feeding mechanism, the successful operation of the device would not be interfered with, even when the strips are of the semi-stiff material which the device is primarily designed to handle, although it will be obvious that there is a point up to which the strips must be supported by the table, in order that satisfactory operation may be secured.

I claim:

1. In combination with means to feed longitudinally in a predetermined direction, and to deliver successively, strips of semi-stiff material of predetermined length, a table having a horizontally disposed surface arranged to support the strips, as they are delivered by said means, and prevent substantial deflection thereof while being delivered, the surface of said table on which the strips are supported when delivered being formed to permit the strips to tilt to one side of the table by their gravity and to fall laterally therefrom in an approximately horizontal position, when freed from said feeding means, and a strip holder arranged at the side of the table to receive the strips as they are discharged from the table and hold them in a pile.

2. In combination with means to feed longitudinally, in a predetermined direction, and to deliver successively, strips of semi-stiff material of predetermined length, a table of similar length having a horizontally disposed surface arranged to receive said strips as they are delivered, and prevent substantial deflection thereof from the direction in which they are fed, and to support them in an approximately horizontal position when freed from said means, the supporting surface of said table beneath one side of the strip, when supported in the position in which it is delivered by said means, being downwardly inclined transversely thereto, to permit the strip to tip to one side and slide laterally from the table by grav-
ity, and means arranged to receive the strips as they slide from the table and to hold them in a pile, suitable for bundling.

3. In combination with means to feed longitudinally in a predetermined direction, and to deliver successively a series of strips of semi-stiff material, a horizontally disposed table arranged to receive and support said strips, as, and when delivered by said means, having one side of its strip supporting surface downwardly inclined transversely of said direction of feed, to permit lateral sliding movement of the strips when released by said means, and a trough shaped holder arranged to receive the strips side by side as they slide from said inclined surface.

4. In combination with means to feed longitudinally, in a predetermined direction, and to deliver successively, a series of strips of semi-stiff material, a table having a horizontally disposed strip-receiving surface of a length sufficient to support the strips thereon, longitudinally thereof, and arranged adjacent the level at which the strips are delivered in line with the direction in which they are fed, to support each strip when delivered from said means, one side portion of said strip-supporting surface being downwardly inclined transversely throughout its length, to permit each strip to be gravity actuated to slide laterally therefrom after it has been delivered thereto, and a strip holder arranged to receive the strips, as they slide from said surface and support them side by side therein.

5. In combination with means to feed longitudinally, in a predetermined direction, and to deliver successively, a series of strips of semi-stiff material, a table having a horizontally disposed surface arranged in position to receive and support said strips, as and when delivered by said means, the portion of said strip supporting surface, at one side, being downwardly inclined transversely of said direction of feed, to permit said strips to slide laterally thereon when delivered thereto and a pair of U-shaped supports suitably spaced apart and extending downwardly from the lower edge of said inclined surface then outwardly and upwardly in positions transverse to said direction of feed, to receive the strips in a pile, as they slide from the table and to hold them in position to be bundled.

In testimony whereof I have signed my name to this specification.

WILLIAM F. MARBLE.