My invention relates to a machine for cutting sheet materials into strips and it has particular relation to that part of a machine of the above designated character which is adapted to control the means for severing the material.

One object of my invention is to provide a knife holder which may be disposed in or removed from its operative position without interrupting the operation of other cooperating knives.

Another object of my invention is to reduce the amount of salvage ordinarily resulting from the operation of present machines.

Among the most common of intermediate products utilized in the manufacture of rubber products are rolls of rubberized fabric or tape. Where it is unnecessary to have the strips of material cut on the bias, it is less expensive and more convenient to cut the material on a machine commonly known in the art as a Cameron cutter. Such machine consists essentially of a power driven cylinder around which the fabric is made to pass. In contact therewith are a plurality of disc knives journaled in individual supports which keep them in operable relation. An extended spring, rigidly connected at one end to a lever and tensioned by an adjustable cross member, common to the several holders of the machine, provides pressure necessary for operating the disc knives.

In operating the machine, the knives are set in spaced relation to cut the desired strips of material, after which the cross member is adjusted to tension the spring and thereby apply sufficient pressure to each knife to sever the desired fabric strips. It will readily be realized that as long as the fabric neither varies in width nor waves back and forth along the cylinder, the strips at either end will be of proper width and consequently the salvage produced will be a minimum. This condition is seldom realized in practice, and, as a result, either considerable time is lost in readjusting the knife holders, or an excessive amount of salvage results.

According to my invention, I have provided a knife holder which may be brought into engagement or released without interrupting the operation of the other knives. The flexibility of the device not only minimizes the salvage but produces an exact width of fabric having a smoothly cut edge.

A better understanding of my invention may be had by referring to the accompanying drawing, in which a cutting device is shown in perspective, that embodies the principles of my invention.

As a rubberized fabric 1 passes around a power driven cylinder 2, the contact made with the disc knife 3 is sufficient to sever the fibrous material. The disc is journaled in slots 4, provided in a lever 5, which rests on its fulcrum 6. A suitable guard 7 provided with a bifurcated end 8 serves to keep the knife edge clear of loose pieces of fabric and at the same time maintains the disc in operable position by resting upon a shoulder 9 provided on either side of the disc and made integral therewith. The guard is adjustably mounted upon the lever by thumbscrews 10 and 11 which pass through slots 12 in the guard. In case the disc 3 is rendered inoperable, the thumbscrews are released sufficiently to allow the guard to be removed from the shoulders of the disc, whereby a new knife may be substituted without further dismantling.

The pressure between the knife edge and the cylinder is maintained by a spring mechanism 15. It consists of a leaf spring 16, one end of which is rigidly secured to a pivoted member 17 by a set screw 18, the other end thereof being held stationary by a suitable member, such as shown at 21. The member 17 pivots on a pin 20 extending between parallel projecting plates 19, which are secured by any suitable means to the lever 5. In order to tension the spring and thereby bring the cutting disc into operative position, a cam member 22, likewise pivotally mounted between the members 19 to engage the member 17, is caused to move in the direction of the arrow. Conversely, if it is desired to disengage the cutting disc, the tension on the spring is released by bringing the cam member into the position shown in the drawing.

It will readily be realized that the above described device affords a convenient and rapid method of changing the width of rubberized strips. Movement of the cam 23 immediately disengages the knife. If certain knives of a series be thus rendered inoperative, the width of the strips may be changed without interrupting the operation of the machine and without any troublesome adjustments. I have found that by mak-
ing the width of the lever an exact differ-
ence between standard widths of tape, it is
unnecessary to measure the distance between
the knives. The operator has only to be
certain that there is no space between adja-
cent levers. Under these conditions, if the
fabric should waver within the last width,
the mere releasing of one cam and engag-
ing of one adjacent thereto is quite all that
is necessary.

Although I have described but one em-
bodyment of my invention, it will be ap-
parent to anyone skilled in the art that it may
be subjected to many wide variations with-
out departing from the scope thereof, and
I desire therefore that it shall only be lim-
ited as indicated by the appended claims.

What I claim is:

1. A cutting element for sheet slitting
machines comprising a rocking cutter sup-
port having a shoulder disc cutter mounted
in a bifurcated end thereof and secured by
means of a bifurcated plate removably at-
tached to the cutter support and having its
ends engaging the shoulders of the disc, a
tensioning device pivoted to the cutter sup-
port at its opposite end, and a cam lever
mounted on the cutter support for regulat-
ing the tensioning device and the cutter.

2. In a machine for cutting sheet material
into a plurality of strips including a sup-
port for cutter units, a cutting unit compris-
ing a lever pivotally mounted on the sup-
port, a cutter element carried by the lever,
a tension member pivotally connected in-
termediate its ends to the lever, and a member
pivoted upon the lever for coaction with an
end of the tension member to vary its po-
sition with respect to the lever.

3. In a machine for cutting sheet mate-
rial into a plurality of strips including a
frame, a cutting unit comprising a lever
pivotally mounted on the frame, a cutter
 element carried by the lever, a tension mem-
ber pivotally connected to the lever and en-
gaging a stationary part of the frame, and a
member pivoted upon the lever for coaction
with the tension member to regulate the ten-
sioning device and cutter.

4. In a machine for cutting sheet mate-
rial into a plurality of strips, including a
frame, a cutting unit comprising a lever
pivotally mounted on the frame, a cutter
element carried by the lever, a tension mem-
ber pivotally connected to the lever, a
spring secured to the tension member and
engaging a stationary portion of the frame
to position the unit, and a member pivoted
upon the lever for coaction with the tension
member to vary its position with respect to
the lever.

In witness whereof, I have hereunto
signed my name.

WILLIAM H. GERSTENSLAGER.