My present invention has reference to a means for preventing flying chips from contacting and injuring the operator of a circular rip saw, and for likewise preventing such injury to persons in close proximity to the saw.

A further object is the provision of a safety guard for circular saws which is yieldably supported over the saw so that the same will give in an upward direction when the work is fed to the same but which is provided with means for closing the outer side and rear thereof to prevent the flying chips, splinters or dust which might inflict injury to the attendant or persons in close proximity to the same.

A still further object is the provision of a safety guard for rip or other saws and means for protecting persons in close proximity to the saws from injury by the flying chips, etc., and means for feeding the work to the saw.

With the above recited objects in view, and others which will present themselves as the nature of the invention is better understood, reference is to be had to the drawings, which accompany and form part of this application.

In the drawings:

Figure 1 is a top plan view illustrating the application of the improvement.

Figure 2 is a side elevation thereof.

Figure 3 is a sectional view on the line 3—3 of Figure 1.

Figure 4 is a sectional view on the line 4—4 of Figure 3.

Figure 5 is a sectional view on the line 5—5 of Figure 3.

Figure 6 is a fragmentary perspective view of one of the elements constituting the gate for the guard.

Referring now to the drawings in detail, the numeral 1 designates the bed for the saws. The bed is provided with spaced longitudinal slots through which project the upper portions of the circular saws 2. Any desired number of saws may be employed, and all the saws are mounted on the same shaft which is revolved in the usual manner.

Having its base secured on the bed 1, outward with respect to the saws 2, there is a standard 3. The standard has its top provided on its edges with lugs 4. Between these lugs there is secured a shaft or pin for a spring arm 5. The spring 5 has its outer end rounded to provide a bearing for a second and elongated shaft 6. This shaft 6 finds bearings 7 in a substantially rectangular frame 8.

Passing through the bearings and fixing the shaft 6 to the frame 8 are set screws 9. The shaft 6 is arranged so that one of its ends projects over the bed and over the saws 2, and this portion of the shaft is fixed by a set screw 10 in a bearing 11 secured on the reticulated top 12 of the guard 13. The side of the guard, adjacent to the frame 8, is open as is the rear thereof, but the outer side and the end thereof next to the standard 3 are closed. The reticulated portions of the guard are secured in a metal frame broadly indicated by the numeral 14. The guard is of a width to snugly receive the saws 2 therein and of a length greater than that of the frame 8.

On the frame 8 there is an upstanding lug 15 to which is pivotally connected a link 16 and this link has its free end pivotally secured to a lug 17 which projects from the standard 3.

The sides of the frame 8 having depending plates 18 which are arranged in aligning pairs, the said lugs or plates having bearing openings for shafts 19 and 20, respectively. On the shaft 19, at the portion thereof that is received in the guard 12, there is a roller 20. The roller 20 has peripherally extending spaced series of teeth 21, and these teeth are arranged between the planes of the spaced saw blades 2. The shaft 18 is of a less length than the shaft 19, and projects only a comparatively short distance into the guard 12. On the end of this shaft 18 there is fixed a single roller 22 having on its inner face a toothed or corrugated wheel or disc 23. The roller 22 is arranged directly over the inner saw 2.

At the open end of the frame for the guard 12, there is fixed a shaft 24. This shaft is arranged at the upper corner of the end frame and supports thereon any desired number of plates in the nature of dogs 25. The dogs 25 have their outer or free ends cut at the same angle, as indicated by the numeral 26 while their upper ends, adjacent to their pivotal connection, with the shaft 24, are formed with fingers 27. The dogs 25, incident to their weight, will gravitate toward the bed and the fingers 27 contacting with the rear portion of the frame for the guard will limit the swinging of the said dogs in such direction.

The dogs are held in spaced relation by washers 28 on the shaft 24. The dogs resting on the work will prevent retrograde movement thereof.

Pivotedly secured to the outer side of the
frame for the guard there are links 30, and to
the outer ends of these links there is pivotally
secured a plate 31.

A board 32 to be cut into strips is arranged
on the bed 1 and is slid through the gate into
the guard. The plates comprising the gate
will rest on the upper face of the board.
The outer ends of the shafts 18 and 19 have
secured thereon pulley wheels 33, around
which is trained a belt (not shown) connected
to a suitable source of power, (not shown).
The corrugated or toothed portion 23 of the
roller 22 will engage the board to move the
same toward the saws. As the board is cut
intostripstothetoothedportions21oftherol-
lers 20 will engage with the several strips
to force the board longitudinally on the bed
1. The guard will prevent chips flying up-
wardly or outwardly therefrom. The dogs,
asstatedwillpreventretrogrademovement
of the work. When the board is cut into
strips and is passed on the bed through the
guard, the guard incident to the weight there-
of and the influence of the spring 3 thereon
will drop to initial position on the bed. The
reticulated body of the guard permits the atten-
dant observing the operation of the saws
It is believed that the foregoing description
will fully set forth the simplicity of my con-
struction to those skilled in the art to which
such inventions relate, but it is to be under-
stood that I do not wish to be restricted to the
precise details herein set forth and hold my-
self entitled to make such changes therefrom
as fairly fall within the scope of my claim.

The pivots 30, which connect the links 30
with the guard plate 31 are removable and
are designed to pass through any one of a
plurality of openings 51 in the guard plate
31. This permits of the guard plate being
adjustable to compensate for the varying
thicknesses of the work operated on by the
saws.

Having described the invention, I claim:—
The combination with rotary saws and a
bed therefor, of a standard fixed on the bed
at one side of the saws, a substantially rec-
tangular frame member opposite the stand-
ard, a pivoted link connection between the
frame member and the standard, depending
elements on the frame member, shafts jour-
neled therethrough, and saw work engaging
rollers fixed on the ends of the shafts, an up-
per shaft fixed on the frame and extending
over the bed above the saws, a spring fixed on
this shaft and fixed on the standard and urg-
ing the shaft and frame in the direction of the
bed, and a saw guard removably fixed on the
outer end of the last mentioned shaft.

In testimony whereof I affix my signature.

JOSEPH H. WULF.