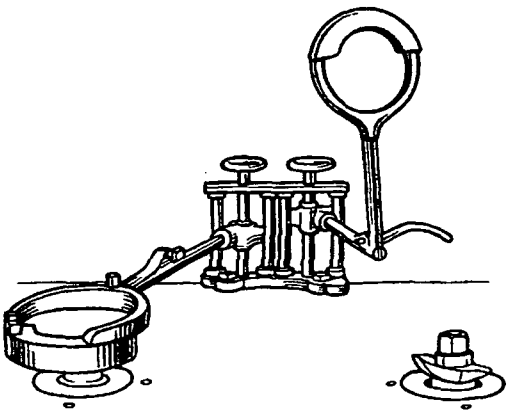

FIG 27-14 — Ring guards for shaper heads

the cutter and also permits the use of a guard, which cannot be kept in position if narrow stock is held by hand Each shop should have a well understood rule that stock narrower than a specified width must be held in a jig Some shops put the limit at 6 in , others as high as 12

Shaper work should be held against guide pins or a fence (Fig 27-15)

When feeding the shaper, the operator must never forget that the direction of the cut must be made in the opposite direction of the rotation of the cutting head It is important to instruct a new operator well

On long shaper runs, ear protection should be worn

Power-feed planers

The planer is so powerful and fast running that it tends to vibrate excessively Vibration can be reduced by anchoring the planer on a solid foundation and by insulating it from the foundation with cork or other vibration-absorbing material If the planer is bolted down, it should have three-point bearing and *must not* be bolted into a twist Distorting any woodworking machine will ultimately cause it to malfunction and, perhaps, to become unsafe

Because of noise it is highly desirable to isolate a planer in a separate room or build a soundproof enclosure for it If neither is practical, ear protection should be worn by those in the immediate area

Cutter heads should be completely enclosed in solid metal guards which should be kept closed when the planer is running There should be good local exhaust from the cutting heads

Feed rolls, cutter heads, and cylinders should be stopped before reaching into the bed plate to remove wood fragments, to make adjustments, or for any other reason If planer parts are driven by belts running on the back side of the planer, belts and pulleys should be completely enclosed by sheet metal or heavy mesh guards, even though the planer is fenced at the back or stands next to the wall

Feed rolls should be guarded by a wide metal strip or bar which will allow boards to pass but will keep the operator's fingers out of the rolls

Danger of kickbacks cannot be entirely overcome by mechanical means Therefore,

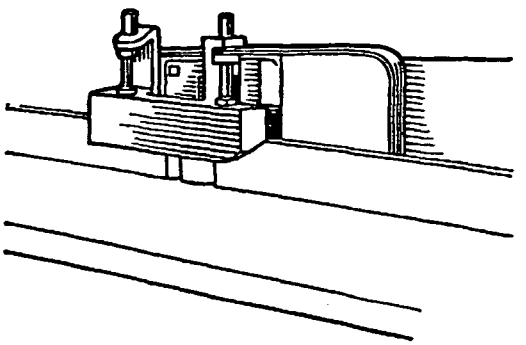

FIG 27-15 — A shaper guarded by a fence and hold-down

the operator should always stand out of the line of board travel Other men should not work or walk directly behind the feeding end of the planer Operators must avoid feeding boards of different thickness at the same time because a thinner board is not held by the feed rolls and can be kicked back from the heads

The operator should wear a face shield or eye protection

The space at the outrunning end should be fenced or marked off to keep workers out of the area where they might be struck by long, fast-moving boards