

the operator and the stooker. The packers should all be taken off and if any are badly worn, new ones should be purchased. All the oil holes should be thoroughly cleaned out and the packers put on again and all the nuts tightened thoroughly. It is ad-visable to inspect all parts through which the twine has to pass to see that none of them have sharp grooves worn in them, which are often the cause of the twine breaking and the general habit of the operators in this case is to blame the twine. The chains should next get a thorough overhauling. If all the links of the large drive chain show considerable wear, it is advisable to purchase a new one rather than have valuable time wasted later on in the harvest hurrying to town to nurchase a new one. The town to purchase a new one. same might be said of the elevator chain, better to secure a new chain at the beginning than have trouble with the old one. The cutting apparatus should then be looked to. The pitman has prob-ably begun to rattle loose on the crank. This can be made to work temporarily by putting leather around the crank but it is best to buy a new one. The knives buy a new one. The knives should be removed and all broken sections removed and new ones put in. The guards should all be cleaned and tightened to insure the knives running smoothly. The broken and cracked slats ought to be replaced and on all

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jam nuts on to prevent nuts from rattling off while the machine is working. All the rollers should next be examined and here care is to be taken that they run free and smoothly. All the nuts should then be tried with a wrench and all should be tight. Don't have chains so tight that they will cause undue friction. In putting on canvases care should be taken not to draw one buckle ways use something to pick out the oil holes and see that the oil reaches its distination. When leaving the binder for the night cover the canvases thoroughly with loose grain to prevent dew or rain shrinking the canvas.

When the harvest is over the canvas should be removed at d all noxious weeds cleaned off the binder and it can then be put under shelter again. The tongue should be removed and the bin-



Four Binders at One Time with the Aid of a Gas Traction Binder Hitch

tighter than the other as this will cause the canvas to run towards one end of the rollers. Then with a stiff, sharp wire and some good machine oil go over every part of the machine making sure that the oil gets to every bearing.

While the machine is working the best care should be taken to keep all parts running smothly. Oil the pitman and packers at least every half hour and the rest of the binder every hour. Alder balanced on the drive wheel by putting a support under the frame of the binder. The canvases should be thoroughly cleaned and put away in a dry place where the mice will not get at them. By taking these precautions the

By taking these precautions the binder will undoubtedly wear better, last longer and give better satisfaction than if it were allowed to winter at a fence corner and given as little attention as possible while running.

One of the first considerations when the binder is runing is the lubrication; all bearings and other places where there is any friction must be steadily and effectively lubricated in order to remove friction as far as possible. The oil should form a thin layer between the two surfaces which would otherwise rub against one another. Good oil adheres to the surfaces and forms this thin frictionless cushion between two pieces of metal. It will always pay the farmer to acquire a knowledge of the difference between good and poor oil. Care should be taken never to let the supply of oil stop, either from the stop ping of the oil holes or by not fill-ing them often enough. If from either cause the oil does not get to the point of friction the draft of the binder will become much heavier and the bearings will "cut" very rapidly. A good way to keep the flow of oil steady is to have a piece of wool or cotton waste in the larger boxes.

The next important consideration is the care of the canvases. They should be taken off every night and put under the deck or in some other dry place. Perhaps a handier and more effective way of protecting the canvases is to throw an oiled canvas cover over the binder at night. It never pays to start in the morning before the dew is off, as the strain