

SOD
INDUSTRY
SECTION

'WHY WE DEVELOPED THE BIG ROLL SYSTEM'

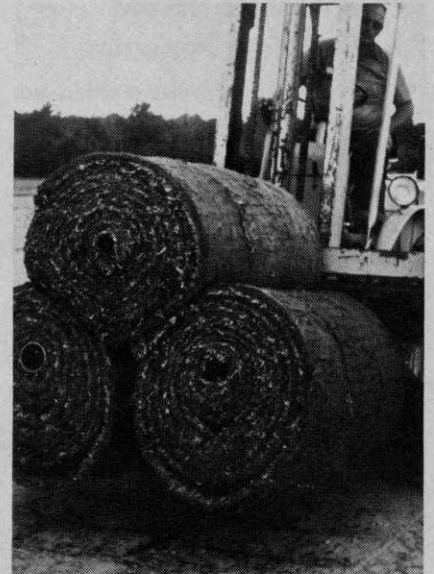
By MARTIN BECK

BECK MANUFACTURING CO., Auburn, Ala.

The total installed cost of sod is often the figure that determines whether a lawn is seeded or sodded. We, like most other sod growers, have always tried to keep our equipment up to date and to keep our costs down so we could grow quality sod at a competitive price. We always relied on service to our customers as a major part of our sales effort. It seemed that there was a considerable amount of equipment available to the sod producer, but almost none that would reduce the back-breaking labor of laying sod on the job. If we could help our customers lay sod more economically, they would get more jobs and we would sell more sod.

Following that line of thought, and considering all the various sizes and shapes that sod was cut, it seemed that a large roll offered the best overall chance of success for a completely mechanized harvesting and laying system. Sod had been produced in every conceivable size that a man could handle. We would produce it in a size that a man could **not** handle! That would mean that machines, not men, would be doing all the hard work.

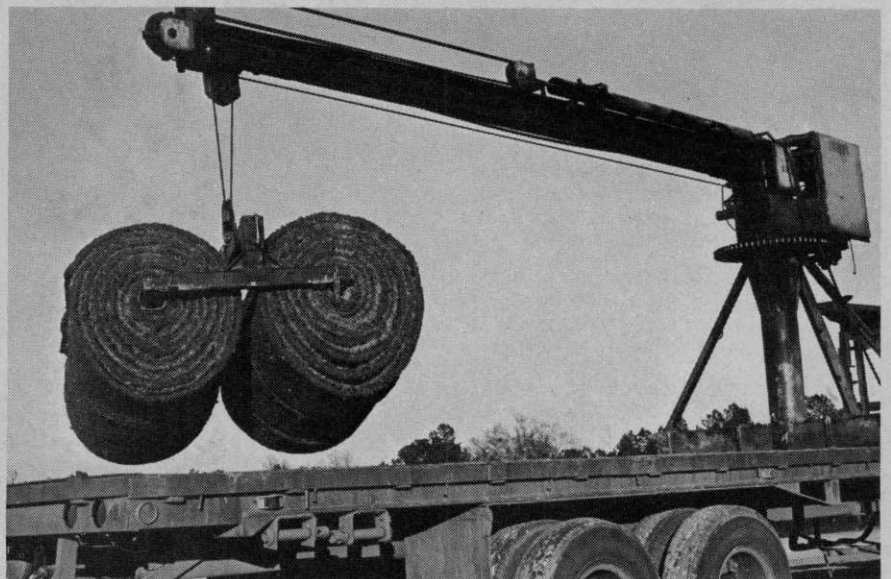
Early tests of the basic idea showed that sod could be rolled into rather large rolls, then unrolled with a tractor. However, development of the hardware needed to turn this into a practical method of harvesting, loading and laying sod was slow. We finally settled on a four foot roll width which, loaded end to end, fully utilized a truck bed width and yielded a roll of a size easily handled with a typical landscaping tractor. Three 16 inch wide cutters were selected to provide a



1. Big rolls can be loaded 2 or 3 at a time with a fork lift. They can be stacked 2 or more layers high on a truck.



2. Starting a big roll is easy.



3. Unloading big rolls with a boom.

machine that would follow irregular ground contours with minimum mechanical complexity.

Our pilot model was completed about one week before the 1970 American Sod Producers Association show in Illinois, and we left for the show without knowing whether it would work with bluegrass or not. As it turned out, the system worked perfectly, although the equipment was not fully perfected and we were inexperienced in its use. We have since greatly improved both the harvesting and the laying equipment as well as the methods of its use. Loading and unloading are easily accomplished with either a fork lift of a boom.

We have adopted wax coated, cardboard tubes 4 inches in diameter, and costing \$.30, as being most economical for our operation. Aluminum or steel tubing can also be used, although they are somewhat more expensive. It is possible to cut the cardboard tubes into 16" lengths and use a removable metal sleeve to hold them together during harvesting and handling. The sleeve is removed at the job site, and the resulting 16 inch wide rolls of about 7 or 8 yards each can be moved about and laid by one man using a

small hand truck device. However, the basic system is so versatile and satisfactory that we are not using the hand trucks at this time. We also experimented with a number of other handling devices, but found them to be largely unnecessary.

Two of our main worries in the beginning were broken sod strips in harvesting, and obstructions such as trees and ditches in the laying process. Both were quickly found to be unimportant. Broken strips, such as might occur at a weak point in the sod, can be wound up with no loss of sod. Obstructions are simply bypassed with the tractor during laying, and the sod is pulled into place with a rake. This goes very fast, and permits laying sod on fairly wooded lots. On small lots, we suggest laying the largest areas with a tractor first, then using the end pieces to patch and fill in irregular areas. Two men can carry and lay a small part of a roll, or one man can cut it into strips of the desired size with a sod knife.

Very steep slopes and ground too soft to drive on with a tractor are not suitable for laying with present equipment. However, a winch type device for unrolling the sod on a slope and a light weight, high-flota-

tion tractor for soft areas could be produced if the demand develops.

This is our first full year to use the big roll system. Some of our customers were skeptical at first, but all were enthusiastic after they tried it, and want to use big rolls whenever they can. I know of several large orders we have gotten because of the economies in laying sod by this method. Big roll systems are in use in Kansas, Illinois, Ohio, Maryland, and Rhode Island. These sod growers have all reported excellent results. In general, the first people to see the advantages are the growers who also lay their own sod.

We have a number of garden center customers who sell sod in blocks, and of course the big roll system is not practical for that trade. We will always have to cut sod in blocks for these people, and for that purpose we have built a cross cutter attachment for our 3-gang cutter that can cut the strips to any desired length. We have placed a number of these in Florida and other states. This makes it possible to cut big rolls, blocks, folded slabs or small rolls with the same machine.

In the planning state for next Spring is an elevating harvester that



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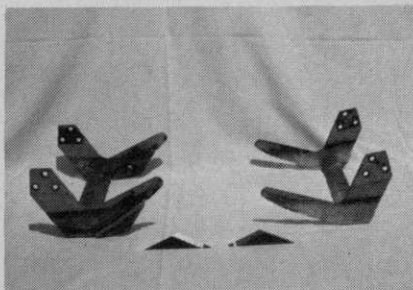
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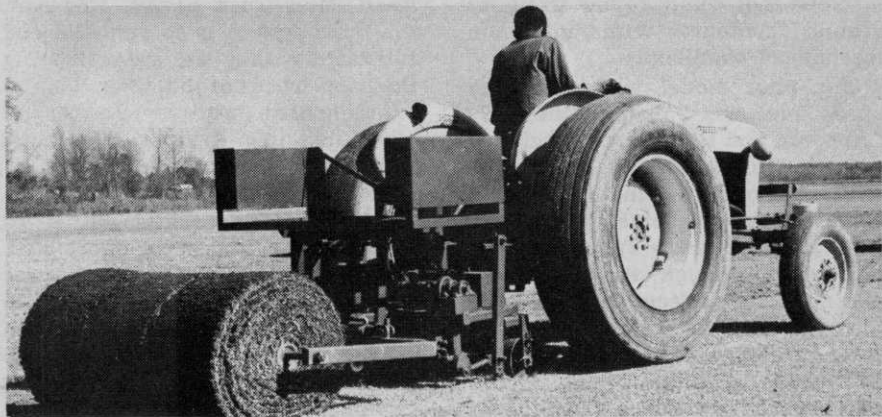
Subsidiary of Harcourt Brace Jovanovich, Inc.,
9800 Detroit Avenue, Cleveland, Ohio 44102

will permit economical pallet stacking of blocks, folded slabs or small rolls. This elevator will be an attachment for the present cutter.

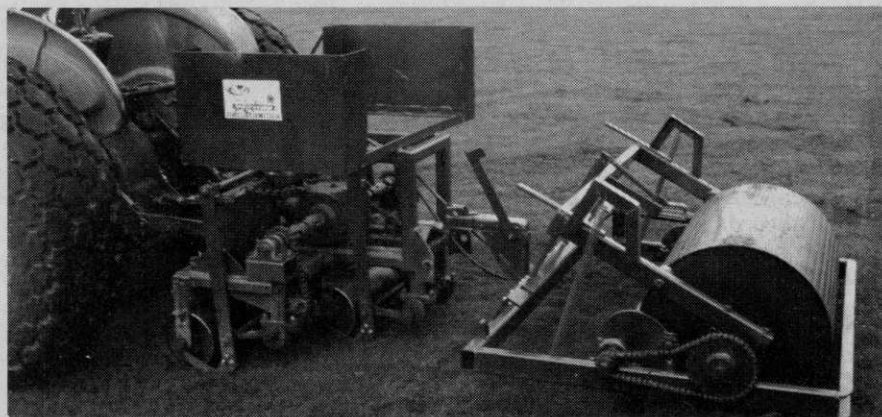
Following are statements made by some of the users of our Beck Sod-O-Matic: Bob Miller, Rogers & Miller Sod and Landscape Service, Spring Hill, Kan.: I am way ahead justing getting it on the ground, not counting the savings in placing the sod; Brian Bouchard, Kingston Turf Farms, West Kingston, R. I.: Crews can harvest and lay sod hour after hour without fatigue; Joe Wolf, Triangle Sod Farms, Inc., Ft. Lauderdale, Fla.: In this highly competitive market we are in a much better position; Tom Gerdes, Gerdes Turf Farms, Xenia, O.: It is the coming thing; Roy W. Georg, Roy W. Georg Landscape Service, Severn, Md.: Good labor saver, also quicker, easier, and a better looking job; Bill Wandell, Sod Now, Inc., Urbana, Ill.: It has saved our hide this year. We have gotten jobs we would not have otherwise; Mac Broward, Broward Sod Company, Ft. Lauderdale, Fla.: After using the Sod-O-Matic using anything else makes me unhappy; Ray Christopher, Northern Turf Supply Company, Eau Claire, Wis.: The Sod-O-Matic is the most flexible Sod Harvesting System we have seen. It is the first system that has considered the landscaper and sod layers problems; Bill Smith, Farm & Garden Supply Company, Oklahoma City, Okla.: The Turf Harvester will cut labor cost at least 25% and will easily pay for itself the first year.



Sod cutter blade repair kit, (photo) was developed by Beck Zoysia & Nursery Co. to reduce the cost of replacing sod cutter blades. When a blade becomes badly worn, the sides are ground down and the repair kit is welded in place. Grinding to remove excess weld material yields a blade that can be used almost as long as a new one. The rebuilding process can be done 2 or 3 times before the bottom blade wears too thin to support the side blades. A hardenable carbon steel is used. It is fairly hard as supplied, but can be heated with a welding torch and water quenched for maximum hardness.



4. Once a roll is started, it rolls up by itself.



5. Cross cut attachment can be made to cut any length.



6. Rolls are easily transported and laid with a landscaping tractor.



7. Trees, sidewalks and ditches presented no problem on this job which was laid by an inexperienced crew.