States and Canada. Neither the committee nor the editors claim to know all or even a small part of everything there is to be known; but if you will indicate your wishes a genuine effort will be made to give you the kind of a bulletin you would like.

What interests you most? Let us know by a letter or a post card.

## A Force-Feed Shredder and Mixer



The advantage of the force-feed is that the machine will screen wet, soggy, or lumpy material, whereas, without a force-feed, when the material is wet or soggy the screens will clog, working freely only when the material is fairly dry. The machine is operated by a $3 \mathrm{H} . \mathrm{P}$. gasoline engineE. Hallan.

## Turf Grasses for Pennsylvania

J. J. McNamara, Pittsburgh Field Club, Aspinwall, Pa.

It may be of interest to some readers of The Bulletin to get some of my expetience of twenty years growing grass on Pennsylvania golf courses. It is very amusing to read in the seed catalognes of how many different mixtures the seed people put out, and they want you to tell them the sort of soil you have and they will send you a mixture to suit it, and so on. There are only four or five grasses that are worth anything on either a lawn or a golf course. If the soil is dry or shady, red fescue-cither European or New Zealand-is very good, but creeping bent does better than fescue on putting greens, especially if they are of a damp nature. Then there are only redtop and Kentucky bluegrass for the fairways. If yon wish to put red fescue or creeping bent in the fairways they are gool
but cost more. Sheep and red fescues are about the only grasses for the rough, but the former seems more subject to the brown-spot fungus than the latter, if sown on heavy soil. Of the fourteen different grasses in my trial patches, sheep fescue was the only one which was badly affected last year with the brown-patch fungus. Crested dog's-tail died out the first winter. Rhode Island bent I have not been able to get in the past few years. Last year I obtained a small amount of this seed from a large seed store at a high price, but. I found out that when it came up in my trial patch it was nothing but redtop. Canada bluegrass and several of the other rough grasses have no place on lawn or golf course. Use them where you wish. There are only five turf grasses worth while-creeping bent, red fescue, redtop, Kentucky bluegrass and Khode Island bent. I planted some creeping bent by the vegetative method last year in the trial ground and it did very well. I planted out a large patch this fall and expect to try it on some new greens next year. It is a nice thing to see when it blooms, as it grows so thick and orily about a foot high.

## Training Greenkeepers

The supply of competent greenkeepers is far below the demand. While there are many first-class men engaged in this work, everyone of them, as a rule, is satisfactorily located. It is almost impossible for a new club, or an old one which has lost the services of its greenkeeper, to fill the position with an experienced man. At present there are no systematic efforts being made to train men for this work. The laborers on golf courses seldom grow into greenkeepers; most of them lack the intelligence and executive ability which a greenkeeper must have to be successful.

The Green Section wishes to start a movement to correct this condition. It believes the best source to draw on is the students in the agricultural colleges. The course of study pursued at such colleges gives these boys a training which should be very helpful to them in greenkeeping work. But few of them know anything about golf. Most of them would not know a green from a sand trap. It would be a gamble, with the odds heavily against the club, to hire an inexperienced agricultural college graduate as a greenkeeper.

In order to give these boys the practical experience they must have before they can become greenkeepers we would suggest that as many clubs as can do so take on one or two of these young men as laborers during the summer vacation. The college year closes early in June, and the vacation perior lasts until about the middle of September. Many of these students are working their way through college. Most of them are farmraised and familiar with hard work.

The Green section is willing to act as a clearing house to bring together these boys and the dubs that wish their serviees. We ask that every club which desires to take on one or more of these students this coming summer write us, stating the wages it will pay, and we will do our best to induce a sufficient mumber of the students at the varions agricolturat colleges to take the jobs. Many of them will be amxious for surh work as soon as they are made to sere what such an experience means to them in the future.

