



THE "UNIVERSAL" SEED CLEANER.

THIS machine is called the "Universal," because in it the makers have attempted to supply a machine that will effectually clean the greater number of the grains and seeds grown in New Zealand and Australia. There are a few weed seeds which necessitate exceptional treatment, such as hair grass and tares, inasmuch that special jump, or cellular, machines have to be used on them; but the "Universal" will clean all the usual grass seeds and grain, and make a high-class sample free from impurities.

The machine under notice has a hopper which is fitted with a regulator for accurately determining the quantity of seed to be fed to the separators, and a mechanical feeder for equally distributing the seed across the whole width of the machine, and to feed the light and rough seed equally throughout the cleaning operation. One large powerful exhaust fan in the centre of the machine draws off all dust and light impurities; the dust is blown away and other matter taken to the side of the machine by a conveyor, and there bagged to be subsequently re-treated if it is found to contain material, such as clover pods, which makes it worth while. The proportion of impurities drawn off from the sample is regulated by a slide, in the leg down which seed is fed into the machine; this is a great improvement on the valve hitherto used, as it enables a much more delicate adjustment to be made. The volume of air passing into the fan is always the same, and no check in the delivery pocket is experienced. The seed then passes to the top riddle frame which holds three riddles, over each of which the seed passes in succession, leaving behind it all impurities larger than seed. From thence the seed passes to the lower riddle frame, also fitted with three riddles, which can be utilised to take out material larger than the seed, or screens can be fitted for taking out smaller impurities. Brushes travel backwards and forwards, beneath each riddle keeping the meshes free, and enabling them to always do full duty. The arrangement of the three sieves one under the other separates the seed from the foreign substance so effectually that there is less recleaning with this machine than any other.

A hummeller-and-polisher of the most ingenious construction is used upon the machine, this rubs off all husk from fog or suckling clover, capsules from red clover, white coats from wheat etc., and generally brightens all kinds of seed and grain and puts that polish on red or white clover which users like to see.

A double elevator is utilised to deliver the seed to hummeller, and waste from lower riddles is raised sufficiently high to be delivered into bags.

A second aspirator upon the outside of the machine extracts all dust, husks etc. removed by the hummeller, and draws off the amount of seconds required to make the sample up to required weight.

All spindles are large, and run in wide brass bearings. The machine is so accurately balanced that no vibration is thrown on the building in which it may be placed.

The machine is very complete and is capable of turning out the very highest grade of clean seed up to any merchants standard, and will add to the good reputation Messrs. Andrews & Beaven's seed cleaners enjoy both in New Zealand and Australia.

NOTICE TO ADVERTISERS.

Change Advertisements for next issue should reach "Progress" Office not later than the 10th inst., otherwise they will have to be held over.

Look for the Maker's Name or Trademark.

IN all lines of merchandise, goods which have become well and favourably known are often imitated and sold to the consumer with the assurance that they are "just as good" as the articles which bear the maker's name or trademark, while as a matter of fact such goods are often "seconds" or goods of an inferior quality, for which reason the maker will not show the name or trademark under which he has built up a valued reputation for quality. Manufacturers usually make several grades of goods and are careful that their best grades shall bear their name or trademark to advertise the excellence of their products, and it follows that they are not only willing but anxious to replace any article so guaranteed to have been made by them and which may prove defective in any way. This is especially true with articles usually sold by hardware stores. It is a common practice with manufacturers of these lines to dispose of their inferior grades under what is known to the trade as "special brands" and also to furnish such goods to buyers of large quantities, marked with the buyer's "private brand" needless to add that private brand goods, bought from whichever manufacturer will make the lowest price on a season's quantity, carry no assurance of quality and it behoves the consumer who desires quality and manufacturer's guarantee to see that goods bear maker's name or trademark.

Value of Advertisement.

THERE was an influential gathering of City men at Anderton's Hotel recently, when Sir William Treloar, on behalf of a large number of friends, presented Mr. W. G. Thame, the late advertising manager of the *Standard*, with a handsome testimonial as a mark of their esteem.

Sir William Treloar, in offering the tokens to Mr. Thame, whose birthday it was, mentioned that he had known the recipient of their good wishes for very many years. That gentleman used to induce him to spend a good deal of money in advertising, and he felt it difficult to dissociate him from the occupation their guest had so ably followed. He (Sir William) had been looking up some old newspapers, and found that forty-one years ago his father had a shop on Ludgate Hill which the Chatham Railway Company acquired when they put a bridge across that thoroughfare. His father brought an action for compensation, and in his evidence he said a good many things about advertising which were interesting. He gave it as his opinion that advertising in a certain number of years repaid to the extent of 10 or 15 per cent. Advertising was a science which it was necessary to study, and although it would not return profits for some time it soon did so. His father also told the judge that he had had a gentleman in his shop who carried a newspaper seven years old, and pointed out that a considerable purchase resulted from the perusal of an advertisement published seven years before it reached the eye of his customer. Some years back Sir William Treloar said his income-tax assessment was doubled. He appealed and found the commissioners not very wide awake. It was not so now—he spoke as an income-tax commissioner. (Laughter) Asked why they overcharged him, one of the commissioners produced three copies of a paper in which he had a whole-page advertisement, and said "It is impossible to spend a lot of money like that unless you have a large income." He laughingly replied, "It shows you know nothing about it. These advertisements are flags of distress which I show when I want business."

The experience of Sir William Treloar is that of every other liberal advertiser, whatever goods he advertises. The "flag of distress" is rarely run up in vain. As Gladstone said, advertising is to business what steam is to an engine the great propelling power. The mistake so often made by advertisers is to cut down their advertising expenses when trade is a bit dull. A wiser course would be the allocation of a larger sum for the purpose of advertising at such times. It is precisely the right thing to do to advertise in slack times, and it is equally far-seeing to advertise when things are brisk. The "flag of distress" should be kept flying all the time.

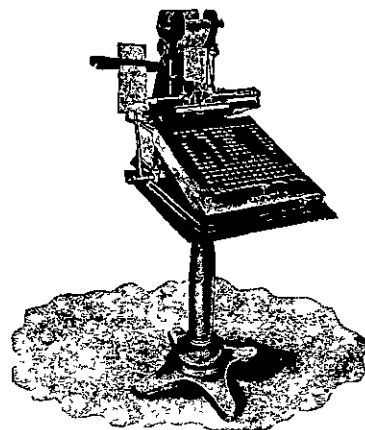
WHAT is claimed to be the largest centrifugal pump ever built has been produced at the Byron Jackson Machine Works, of San Francisco. It consists of a high head centrifugal pump of the five-step series type, operating under a maximum pressure of 250 lbs. per square inch, which is equivalent to a total lift of 580 ft. Its capacity under normal condition is 9,000 gallons of water per minute, and it is driven by four 400-h.p. turbine water-wheels.

A WONDERFUL MACHINE.

THE LANSTON MONOTYPE.

SETS THE TYPE FOR PROGRESS.

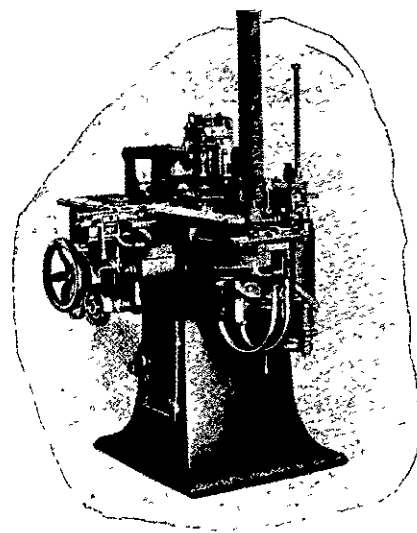
THE accompanying illustrations show the keyboard and caster of the wonderful typesetting machine which has been specially installed for setting the "solid" matter of *PROGRESS*. The Lanston Monotype deserves to be recorded as one of the most remarkable and epoch-making inventions of modern times. Imagine an over-grown typewriter carrying no fewer than 257 keys; these keys, instead of being connected to levers as in a typewriter, are simply caps to small brass rods,



THE KEYBOARD.

called plungers, which are held up to the highest point of pressure by compressed air. When depressed they let air through holes which only coincide when in that position. The compressed air forces up punches which perforate holes in a strip of paper. When complete this paper looks somewhat like the music strips on mechanical pianos and organs. The strip is placed in a second machine which may be in another part of the premises, and which casts the type. Every time a hole in the paper strip coincides with another hole in the machine a type is cast, with molten metal, pumped into a matrix; and this type is cooled, trimmed and set in position for forming the words which are being set. As many as 13,000 letters an hour have been set in this way, though in practice it is not run at such a high speed, the saving over hand-set composition being quite appreciable enough when run in a normal way.

The mechanism by which the humanlike movements are accomplished is naturally a marvellous example of mechanical skill and accuracy, which never fails to excite the wonder of the onlooker. It would be impossible in this necessarily brief and intentionally non-technical article to describe



THE CASTER.

even cursorily the various features of the machine, and we must, therefore, leave our readers to take for granted the ingenuity of its mechanism.

It is capable of dealing with any class of composition, from poetry to railway timetables, and any size and style of face from Pearl to English.

The Lanston Monotype is, indeed, the greatest mechanical boon ever presented to the printer. It is rapidly changing the whole life and aspect of our printing offices, and undoubtedly it is a machine which must immensely influence the future of letterpress printing.