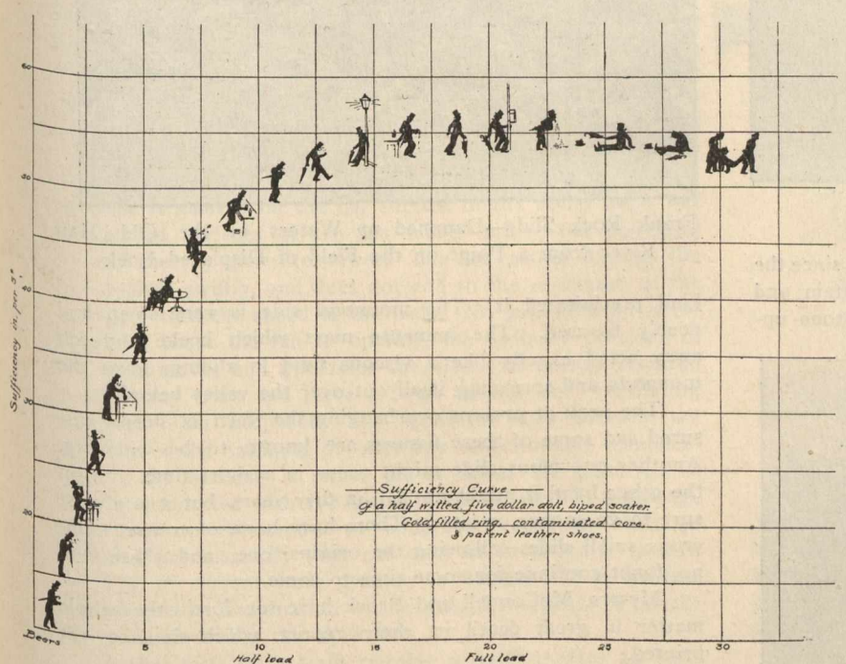
and potato disease, and has for that reason a very useful place in the greenhouse for propagating tropical and tender plants, and in various other ways, such as mulching. The long, fibrous parts, saturated with molasses, are sold for animal food and are said to obtain good results. It is also used for the base of insulating compounds.

The foregoing notes may not particularly interest technical men, but to the farmer, to whom the tilling of heavy clay soils so far has been an unsolved problem which has baffled the most expert, it is important. Before the manufacture of an article there must be a demand for it, and its usefulness and efficiency fully demonstrated, and ways and means of manufacture should not be copied from other countries but should grow out of local demand and be suited to such conditions.

The development of the peat fuel industry is in the more northern parts of much more national, social and vital importance as generally conceded. Thanks are due to the Bureau of Mines for Ontario for their efforts and labor in selecting the best adapted and tried appliances for manufacture of peat fuel, as well as for methods of heating and cooking, and the gleaned facts and data set forth and illustrated in the report are so plain as to be a reliable guide to manufacturer and consumer. The quality of Canadian peat, as shown in the report, is equal, if not superior, to the European material. The manufacturing process also seems to be on the whole on as good a basis as the European. The main difference is found in a greater tendency to the use of air-dried peat, prepared mostly by hand labor, and locally consumed or distributed by cheap water transportation in Europe. This form is more bulky, fragile and rough than lignite briquettes, which are much used in cities. Inventive ingenuity is untiring, and will undoubtedly succeed in furnishing an article that can compete in price and efficiency with coal in the near future.

AN EFFICIENCY CURVE.

The accompanying clever travesty of "an efficiency curve of a ½-h.p. 500 volt bi-polar motor, with cast steel ring, laminated core and cast iron shoes," was designed by Geo.



Bickell, a bright, young Canadian, now chief draftsman for a large electrical firm in the United States. The Canadian Engineer is permitted to publish it, but it is to be understood that this curve is not a part of the official records of the Canadian Electrical Association convention.

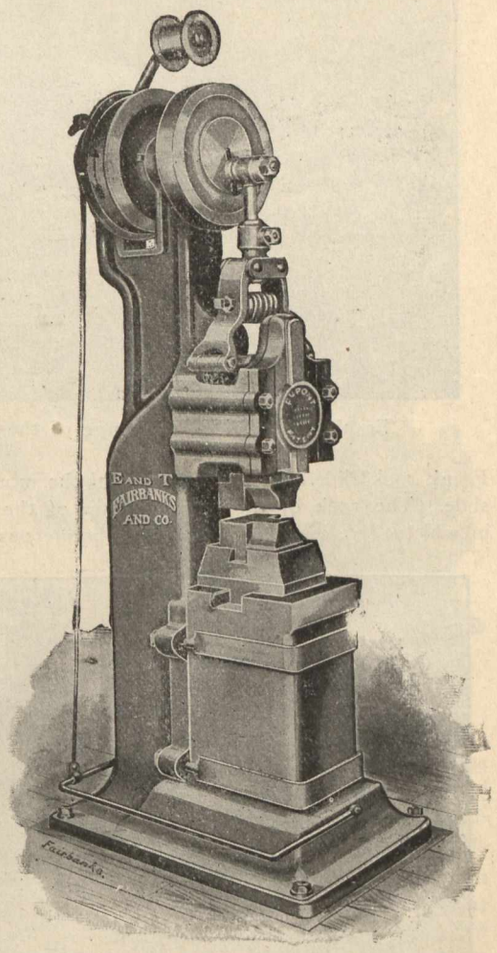
The S.S. "Carrigan Head" having gone aground in Lake St. Peter, by the buoys having become displaced, a recommendation has been made that a steam launch patrol the river three or four times a week to see that the buoys are in their proper place.

CANADA PAINT CO.'S EXTENSIONS.

The engineers of the Canada Paint Company, Limited, are now drawing up plans for their extension on Hunter St., Montreal. The gratifying increase of business which has come to this company necessitates larger premises. The company has purchased a tract of land on Hunter St., bounded by Chatham St. and Notre Dame Lane, which has the merit of being central and close to their present extensive plant upon William St. It may not be generally known that the Canada Paint Company, Limited, is by far the largest paint and varnish manufacturing company in the Dominon of Canada, and the only company in Canada who ship large quantities of painting material to the United States, in spite of the high tariff which our American friends have against us. Shipments are also made to Great Britain and to the Australian colonies. For some time it has been difficult for this enterprising Canadian company to take care of all the business which is offered, and now the directors feel warranted in doubling the color-making capacity and enlarging in all departments. The Canada Paint Company employ their own engineers, carpenters and machinists, and the new works, which will be erected by their permanent staff, will be the most complete yet devised on this continent.

THE FAIRBANKS POWER HAMMER.

The Fairbanks Company are presenting a new power hammer, adapted for work in carriage factories, car works, edge tool and general shops. The hammer, as it will be seen by the accompanying illustration, is operated by an adjustable crank, the crank-pin sliding in a groove in the crank-plate.



allowing the operator to lengthen or shorten the stroke at will. Motion is applied to the head or ram, by means of a circulating rod in a sleeve or collar supplied with a large set-screw, or, as in the large sizes, a clamp to hold the rod in position, and to this sleeve are hinged two side arms, these in turn being connected to the ram by metal links. By the use of a steel spiral spring, carefully adjusted between these arms, the force and weight of the blow are many times