

DRAINAGE SCHEMES IN SASKATCHEWAN.

In a country such as the province of Saskatchewan, where the cultivated area is so small a percentage of the total acreage, it might at first sight seem superfluous for the people to spend much money and energy upon reclamation schemes, but the comparatively low cost per acre of such reclamation work, and the great fertility of what would otherwise be waste land, render such schemes very attractive.

Prior to the passage of the Drainage Act of 1909, the only drainage schemes in the province were built directly by the government out of the general revenue funds. The Act is now becoming more widely known amongst the agricultural community, and as a result there are several propositions under way at the present time. The following is a brief epitome of the working of the Act.

A petition to the government is prepared, which must be signed by resident owners representing at least one-half of the lands of resident owners. Upon receipt of the petition an engineer is appointed to prepare plans, estimates, and a report upon the feasibility of the scheme. When the report has been received and the plans examined, the whole must be submitted to the Lieutenant-Governor-in-Council for his approval. If approved, the next step is to advertise that it is the intention of the government to proceed with the work under the Drainage Act. The cost of the ditch is assessed against all the lands benefited. The signers of the petition have the privilege of withdrawing for any sufficient reason, such as, for instance, that the scheme is to cost more than they anticipated. After these withdrawals, if half the land of resident owners is not still represented, then no action takes place and the scheme falls through, otherwise the government proceeds to issue debentures, running for a term of from 20 to 35 years, to be retired by the assessments which are collected by the municipality.

There is no doubt that in course of time the Act will be more and more widely taken advantage of. The adoption of the Act not only gives a legal right to enter upon land and construct a drain, but renders possible very valuable reclamation work which would probably be beyond the means of a municipality or of any private company of settlers.

The drainage schemes mentioned here are all of them under way, and on some of them a large amount of construction work has already been done. There is the Egg Lake drain in township 20 range 15 west of the second meridian; a very large scheme near Invermay; one at Rama, and another near Shellbrook. The largest scheme of all is the reclamation of flooded lands southwest of Rouleau. It is estimated that this proposition will cost in the neighborhood of \$40,000, but if carried out in its entirety will result in the reclamation of from thirty to forty thousand acres of land.

MODULI OF ELASTICITY.

In a paper recently read before the Society of Engineers, Professor F. H. Hummel gives values of Young's modulus for a number of materials, as the result of experiments made on the flexure of thin strips:

Material.	E. Lb. per Sq. In.
Celluloid (1)	347,500
Celluloid (2)	547,000
Drawing-paper (in direction of rolling) ..	394,000
Drawing-paper (across direction of rolling)	581,500
Thick stiff paper	852,000
Box-wood	174,000
Whalebone	503,000
Copper	15,900,000
Brass	11,600,000
Aluminum-nickel alloy	10,000,000

PERSONAL.

MR. C. DURBAN, of the main drainage department, city of Toronto, has been appointed assistant city engineer of London.

MR. REGINALD A. DALY, formerly of Napanee, Ont., has been appointed head of the Geological Department of Harvard University, Cambridge, Mass., U.S.A.

LIEUT.-COL. GEORGE W. STEPHENS, chairman of the Montreal Harbor Board, in a letter to the Hon. G. D. Hazen, Minister of Marine and Fisheries, announces his resignation from the board.

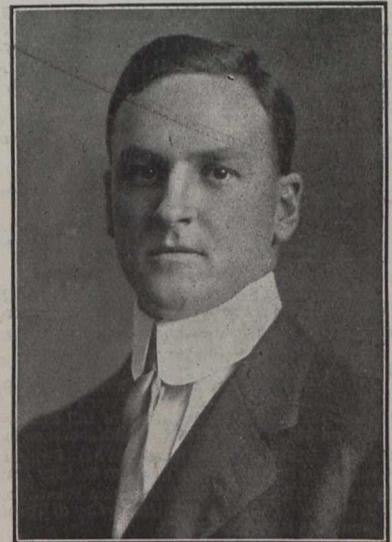
MR. HARRY ANGUS, B.A.Sc., consulting engineer, Confederation Life Building, Toronto, has given up his practice and gone in with the Canadian Domestic Engineering Company, at their Toronto office.

MR. R. W. BROCK, director of the Canadian Geological Survey, visited Rossland, B.C., on his way east from Victoria, where he had been attending the British Columbia meeting of the Canadian Mining Institute.

MR. C. C. KRONK is in collaboration with Mr. Wynne-Roberts upon the question of development of electrical power for the province of Saskatchewan, and is making investigations into the possibility of economical transmission of such power.

MR. R. E. CHADWICK, who has been recently appointed as eastern manager in charge of the Montreal office of the Foundation Company, Limited,

and who succeeded Mr. Alexander Alaire in that position, was born in Toronto. He is an honor graduate of the University of Toronto in mechanical engineering in the class of 1906. Mr. Chadwick was bridge engineer for the city of Toronto during 1909-10. He joined the Foundation Company, of New York in the first part of January, 1911, as superintendent on the Woolworth Building. In May, 1911, he joined the Foundation Company, Limited, of Montreal, Canada.



Mr. R. E. C. Chadwick.

DR. W. W. ANDREWS has been engaged in determining how the gumbo soil, found in some parts of the province of Saskatchewan, can be best treated to render it fit for road traffic. The work is being done under the Board of Highway Commissioners of the Province.

MR. M. J. BUTLER, general manager of the Dominion Steel and Coal Company, has resigned his position. Mr. Butler, as is well known, was deputy minister and chief engineer of the Department of Railways and Canals from 1905 to 1907 at Ottawa, when he was appointed to the general managership of the Dominion Steel Corporation. It is not known what he has in mind, although it is reported that he will become connected with another large undertaking.

MR. L. O. BEAM has resigned the position of inspector of public works of the province of Saskatchewan and has joined the staff of the R. J. Lecky Company. Mr. Beam was a bridge foreman under the old Territorial Gov-