

should be so complete and the points covered so thorough that both the farmer and the manufacturer could see clearly just what was required of the various engines and just what importance was attached to each and every portion of the test. We will take, for example, the constitution and by-laws of the smallest organization and it will be found that it covers several pages of type, going into minute detail regarding every

point that is liable to come up. Isn't it of just as much importance that every little detail regarding a motor contest be worked out with contest a full and complete explanation of just such and why such importance is attached to each and every element of the score sheet? Everv manufacturer who puts his engine into such a test puts no small portion of his reputation as a builder of farm traction engines into the hands of judges and in doing this is en-

titled to a clear and concise explanation of every detail of the judges' rating. Nothing but a most carefully worked out score sheet will bring this about-one that will cover each and every point.

The reader may wonder why I have indulged in this long discussion regarding motor contests in general and have said nothing about the 1910 Winnipeg con test which has just been held. The facts are that at present

week after the contest closed), there are no de-tailed figures available. Before the figures, as compiled from the various data sheets, were made public it was discovered that some slight errors had been made by the judges which necessitated most careful checking and verification before they are sub-mitted. The ques-

tion of classification also caused same trouble and dissatisfaction on the part of some of the contestans and at present writing it is not known just what the final result will be. However, it is doubtful if any change will be made in the medal winners as given later on, any such changes being recorded in the September issue of this magazine together

with the full and detailed judges table.

The 1910 contest was in some respects the biggest thing of its ever held in the New kind World. From the standpoint of entries it was not as large as last year but from the standpoint of a plowing test it was probably the biggest thing ever held any where and at any time. Practically 320 acres was plowed up in two days' time and as for the quality of the work done, it

I.H.C

It would not be pos-

sible to do a better job under the

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E.

and

by Wm. Cross, ex-superintendent of Motive Power, C.P.R.; Prof. J. B. Davidson, professor of farm

mechanics, Ames Agricultural College, Ames, Iowa; and Prof. L. W. Chase, professor of farm mechanics, University of Nebraska. The other assistants were W . Brooks of The American Abell Engine and Thresher Co., D. J. O'Hara of the Canadian Fair-banks Co., Prof. Musselman of the Michigan Agricultural College, Mr. Charlton of the M. A. C. and Mr. Frith of the C. P. R. Several students of the M. A. C also assisted in taking the read-

one 30 h.p. steam tractor; Goold, Shapley and Muir, one 20 h.p. gas tractor, one 30 h.p. gas tractor; M. Rumley Co., one 23 h.p. kerosene tractor (better known as the Oil Pull) and one 36 h.p. steam tractor; J. I Case Thresh-ing Machine Co., one 12 h.p. steam tractor, one 25 h.p. steam tractor and one 32 h.p. steam tractor; Gas Traction Co., Winnipeg, one 25 h.p. gas tractor; Gas Traction Co., Minneapolis, one 30 h.p. gas tractor; Kinnard

Haines Co., one 40 h.p. gas trac-tor; Burrill Motor; Burrill Mo-tor Plow Co., one 22 h.p. gas tractor-

All engines were supposed to be on the ground later not than Monday, July the 11th, but as is always the case in such matters, some were late. It would have made no difference as the judges did not have the brakes and other apparatus arranged so that it was Wednesday befor real start before a was made. Two brakes were used this year which greatly facilitated matters. One brake

was loaned from the Manitoba Agricultural College and the other was secured through the courtesy of the Avery Co. This latter brake was nicely fitted recording with instruments which greatly aided the judges in taking the readings and in preserving the records as the work of each engine was carefully recorded on charts with recording dynamometers. Two judges watched each brake to-

gether with assistants and one judge and several assistants kept careful measurement of all fuel and water consumed by various en the engines.

The brake test shows several things, viz: First, the amount of horse power de-veloped per unit of fuel and water; second, the steadiness with which the engine runs, or, in

branch of the C. P. R. The work of carrying on the test was directly in charge of professors A. R. Greig and L. J. Smith, professors of farm mechanics in as follows: the Universities of Saskatchewan Manitopa respectively. These gentlemen were assisted

25 h.p. Gas Traction Engine pulling a 6-Bottom 14-Inch Cockshutt Engine Gang.

power; Class F, 90 brake horse power and over.

Eighteen entries were made in the 1910 contest, the list being

International Harvester Co. one 15 h.p. gas tractor, one 20 h. p. gas tractor, one 45 h. p. gas tractor; Avery Co., one 12 h.p. gas tractor, one 25 h.p. gas trac-tor, one 20 h.p. steam tractor and

other words, the variation in its revolutions within a given time; third, the relation between the economical load of the engine and its maximum load; fourth, the efficiency of the engine and fifth, it provides one the factors in making a comparison between the amount of

power developed at the fly wheel and the amount of power devel-

oped at the drawbar.

There were six classes in all same conditions. The contest itself was carried in the 1910 contest, the divisions on under the auspices of the being as follows:

15 H.P. Gas Tractor Pulling a 2-Bottom 14-Inch Cliver Engine Gang

gines

Winnipeg Industrial Exhibition Internal Combustion Engines, Class A, 20 brake horse power and under; Class B, 21 to 30 Association, who provided the facilities for holding the various brake horse power; Class C 30 tests and who furnished the plowing field, the same being brake horse power and over. Steam Engines: Class D, 60 secured on the farm of Mr. W

brake horse power and under; Class E, 60 to 90 brake horse

ings and in checking up the en-



