

tables showing the average composition of our feeding stuffs, and ask him to compare the composition with the tables, showing the average digestibility of our feeding stuffs. I believe that he will find there is, as a general thing, from 80% to 55% of the available protein fed which has gone to waste.

I also notice that Mr. Grisdale did not refer to the part of my letter where I stated that the International Stock Food Co. would ship any farmer in Canada 100 pounds of stock food, allowing a four months' trial, with the agreement, that if satisfactory results were not obtained he need not pay for the stock food.

We don't claim a miraculous preparation, but we don't want to be judged by one man or one set of men. We want every farmer and stockman to make a trial of "International Stock Food" on their own account, believing that in a very large per cent. of cases satisfactory results will be obtained.

I also want to go on record as stating that we do not object to the published results of any test Mr. Grisdale may care to make. We simply object to the idea of attacking the stock food industry, which is rapidly becoming a very prominent one in Canada, on the strength of one, two, or even three experiments, which show very little in the face of the thousands of testimonials we have received from practical stockmen the world over.

E. B. SAVAGE.

Experimental Farm and O. A. C. Reports.

The 1904 report of the Dominion Experimental Farms fully maintains the standard of preceding publications in character of matter, number and size of illustrations, typographical effect, and general appearance. It is a credit to Dr. Saunders, the Director, and the Department of Agriculture. The halftones, in particular, are nicely worked on the best of paper, bringing out details, and adding much to the value and attractiveness of the book. Embodying a fairly complete record, with tabulated results of the year's work of the five Dominion Stations, as well as a good deal of practical information by the experts of the Central Farm staff, it is something that will be appreciated by every progressive farmer.

Another volume recently to hand is the annual report of the Ontario Agricultural College and Experimental Farm, including the Macdonald Institute.

The report of the Agronomist, Prof. Zavitz, is very brief, the details of it having been published before, in bulletin form, but the other departments are up to the mark. The appearance of this report suffers by comparison with that of the Dominion Farms, notably in the paucity of its illustrations, several of which are of an inferior character, and the rather common stock on which they are printed. The readability of such reports depends largely upon the printing, and surely the value of the information contained warrants the expense of publication in first-class style.

Chicago International, 1905.

At a recent meeting of the Board of Directors of the International Live-stock Exposition in Chicago, it was decided to open the 1905 show on December 2nd, on which date the students' judging competitions for the Spoor trophies will take place. A committee was appointed, with Professor Curtiss as chairman, to devise some plan of simplifying the method of making awards, it being the general opinion that marking the papers must be eliminated.

In addition to the money offered in the regular position classifications, the American Aberdeen-Angus Breeders' Association appropriated \$5,500; American Shorthorn Association, \$5,000; Galloway Association, \$1,500; Red Polled, \$1,000, and Polled Durham, \$300. The only change of any consequence in the cattle classification was the decision to admit open heifers to competition in the carload lot division. Messrs. John Clay and A. H. Sanders were appointed a committee to secure the services of a British judge for the individual classes of grade and cross-bred steers, and for individual bullock championships.

In the horse department special prizes, practically the same as last year, have already been provided by the different associations. The erection of the immense new arena, with seating capacity of 10,000, is practically assured as the future home of the show.

The Chinaman in South Africa.

The "Chinese" experiment in the Transvaal, which has been the subject of so much discussion and some division in the British House of Commons, has now reached a stage at which its advantages and disadvantages begin to be patent. In some respects it is proving satisfactory to a degree somewhat surprising to the opponents of it. It was feared, for instance, that the utilizing of Chinese labor would lessen the number of whites and Kaffirs engaged in the mines, but in almost every case the number of both has been increased. In the Geduld mine alone there are now employed 260 whites where formerly there were only 60, while in all there are 9,000 more Kaffirs employed than before the arrival of the coolies. On the other hand, the Chinese are adopting the habits of the whites with an almost startling rapidity. They have taken kindly to such luxuries as bicycles and strikes, the latter much to the discomfiture of the mine officials, who had not expected such advanced demonstrations from the "heathen." There are already 60,000 Chinamen in the Transvaal, but no more will be imported until the advisability of the scheme has been more fully ascertained.

Railway Cattle Rates.

In consequence of complaints against excessive and discriminating rates on cattle, the Canadian Railway Commission has ordered that rates not exceeding the following shall be levied on cattle in carloads from the C.P.R. and G.T.R. to Montreal for export.

From the undermentioned groups to Montreal, per 100 pounds:—Windsor, Sarnia and Point Edward, to, but not including, St. Thomas, London and St. Mary's—23½ cents.

St. Thomas, Port Rowan, London and St. Mary's, to, but not including, Simcoe, Brantford, Harrisburg, Galt and Berlin—22 cents.

Simcoe, Brantford, Harrisburg, Galt, Waterloo and Berlin, to Fort Erie, Niagara Falls, Port Dalhousie, Dundas, Guelph Junction and Guelph, inclusive—21 cents.

Hamilton, Campbellville and Rockwood, to Oakville, Streetsville and Brampton, inclusive—20 cents.

East of Oakville, Streetsville and Brampton, to and including Mimico, Lambton and Weston—18½ cents.

Toronto and Toronto points—17 cents.

North of Toronto, to and including Maple and Woodbridge—18½ cents.

North of Maple, Woodbridge, Brampton and Georgetown, to and including Newmarket, Cardwell Junction and Caledon East—20 cents.

North of Newmarket, to and including Barrie—21 cents.

North of Caledon East, to and including Beeton, north of Cardwell Junction and Inglewood, to and including Orangeville—21½ cents.

North of Waterloo to Elmira, north of Guelph to Fergus, C.P.R., Elora branch, and north and west of Orangeville to Crombie's and Grand Valley—22 cents.

North and west of Beeton, to and including Colwell, but excluding Allandale—22½ cents.

North and west of Colwell, Beeton, Crombie's, Grand Valley and Fergus, to and including Phelpeston, Stayner, Creemore, Dundalk, Mount Forest and Harriston—23½ cents.

North of Stratford and Hyde Park, to and including Goderich, Harriston and Mount Forest—23½ cents.

Beyond groups 13 and 14, to and including Kincardine, Southampton, Warton, Owen Sound, Meaford and Penetanguishene—24½ cents.

East of Toronto, to and including Oshawa and Myrtle, also to and including Lindsay (via G.T.R.), and Woodville (via Lindsay), stations between Whitby and Manilla, and C.P.R. north of Burketon to Lindsay—17 cents.

North of Stouffville, to and including Mount Albert, north of Blackwater Junction to and including Lorneville Junction—18½ cents.

West of Lorneville Junction, to Brechin, north of Mount Albert, to and including Sutton—20 cents.

West of Brechin to Orillia, and thence to Barrie—21 cents.

North of Orillia, to and including Midland—22 cents.

North to Lindsay, to and including Fenelon Falls and Bobcaygeon—19 cents.

North of Fenelon Falls, to and including Kinmount, north of Lorneville Junction to Cobocok—20 cents.

North of Kinmount to Haliburton—21 cents.

East of Oshawa, Myrtle and Lindsay, to and including Cobourg, Peterboro and Lakefield—16 cents.

East of Cobourg and Peterboro (present special live-stock tariff rates not to be exceeded)—15 cents.

The Panama Canal.

Away down on the Isthmus of Panama there may be seen one of the busiest and most interesting sights on the face of the old earth to-day. In the little valley, 10 miles wide and 47 long, which reaches out one hand to the Pacific and the other to the Caribbean Sea, under the hot, tropical sun, 6,000 men—Spaniards, Jamaicans, Frenchmen, Colombians, Americans—swarm about at a variety of tasks. The sound of hammers and sledges mingles with the roar of machinery, and all the while fourteen big steam shovels creak and groan as they swing away, lading out solid rock and hard pan at the rate of 1,000 cubic yards per shovel per day. In addition to these a number of old French "excavators" are scratching out the softer earth at an almost equal rate, while, to add to the liveliness of the scene, railway trucks run incessantly, new tracks are being laid, hospitals, repair shops, manufacturing and supply depots are being built, and the whole valley is becoming metamorphosed into a continuous town, whose every activity, however, is directed toward the big ditch that steadily but slowly grows below. That it should become so metamorphosed is imperative, since the work must by no means be checked, and it is necessary that both supplies and repairs may be rushed to the workmen at the shortest possible notice. A peep into the immense shops at Culebra, half way between the seas, and high in the mountains where the air is easy to breathe, would probably give some index to the requirements of the big contract below. These are, in fact, the biggest repair shops in the world, and cover several acres.

Only ten months ago the American engineers began to make the first surveys across the isthmus. It was found, as was expected, to be rickety with malaria and yellow fever, even its

towns—Colon and Panama—being in a dangerously unsanitary state of carelessness and filth. Ostensibly, the first task was to change these conditions, and so completely has this been done that to-day yellow fever is the exception rather than the rule in the valley. Swamps have been drained, mosquito marshes destroyed, old buildings fumigated, and hospitals erected all along the route. In addition, street-cleaning scavengers have wrought a revolution in the towns, and Panama is being equipped with a complete system of water supply and sewers. All these steps were necessary for the safety of the hordes of workmen who, for the next ten years, must work away at carrying out the big scheme which, once set afoot by the Americans, will not be lightly abandoned as was that of the French before them.

The recklessness and extravagance of the French have been a constant source of astonishment to the American engineers. In making the surveys the latter came upon numbers of workshops, half overgrown with vegetation, yet filled with machinery and supplies abandoned twenty years ago. In one place tons of rusted steel pens, even, were discovered, evidently sent thither by some mismanagement and permitted to remain. Of the old machinery much has become obsolete in the light of modern inventions, but the material is being utilized, and the old trucks, locomotives and excavators have been repaired and are doing good service in the lighter portions of the work.

The canal will not be completed for ten years, but even at that, the speed with which it will have been accomplished may be a matter of congratulation well worthy of the demonstration with which will be celebrated the crowning day—that day upon which the great steam shovels will groan for the last time, when sea will join hand with sea, and human skill will laugh at the barriers which sent Magellan and those who followed him painfully groping about the stern headlands of Cape Horn. At present it has not been fully decided whether the excavation will be carried to sea level, or whether the lock system will be adopted; but whichever plan is decided upon, the result is sure to be a triumph to American enterprise, and a boon to the commerce of the world.

Seed Growers' Convention.

In view of the widespread interest taken in the new seed control bill now before Parliament, the general war against weed seeds and weeds, and the policy of seed-grain improvement now under way, there should be a large rally at the annual meeting at Ottawa, June 27, 28 and 29, of the Canadian Seed-growers' Association, formally organized last year. The provisional programme includes addresses or papers by Hon. S. A. Fisher; Dr. Webber, of the Washington Dept. of Agriculture; Dr. William Saunders, Director Experimental Farms; Mr. S. A. Bedford, Supt. Manitoba Experimental Farm, Brandon; Thos. A. Peters, Deputy Commissioner of Agriculture, Fredericton, N. B.; Prof. C. C. James, Mr. G. A. Gignault, Prof. C. A. Zavitz, Mr. J. H. Grisdale, L. S. Klinck, B.S.A., recently-appointed Agronomist for the new agricultural college at Ste. Anne, Que.; S. B. Briggs, Toronto, and others. The following are invited to contribute papers, to be read at the meeting: Dr. J. Hall, Rothamstead, Garten Bros., England; Henry Vilmorin, Paris, France; L. Burbank, Sebastopol, Cal.; H. Snyder, Minnesota; and W. Bateson, Cambridge, Mass. A wide range of practical and important topics will be taken up.

Alcohol Condemned.

A recent issue of the "Farmer's Advocate" contained a brief reference to the opinion of Sir Frederick Treves, one of the most eminent British physicians in the world to-day, on the use of alcohol. We learn from the Daily Express, of London, Eng., that his statements before the Church of England Temperance Society were as follows: It is distinctly a poison, and the limitation of its use should be as strict as that of any other kind of poison. It is, moreover, an insidious poison, producing effects for which the only antidote is alcohol again. It is not an appetizer, and even in small quantities it hinders digestion. Its stimulating effect only lasts for a moment, and after it has passed the capacity for work falls enormously. It brings up the reserve forces of the body and throws them into action, with the result that when they are used up there is nothing to fall back upon. On the march to Ladysmith the soldiers who were drinkers fell out as though they were labelled. The use of alcohol is inconsistent with work which requires quick, keen and alert judgment. Sir Frederick said that the use of alcohol is emphatically diminishing in hospital practice and among professional men who work hard during the day. He favored extreme total abstinence. Being a surgeon, he has seen the effect of the use of alcoholic liquors on the system of those who have to be operated upon, and who recover from the knife with less success than do those who use little or no such beverages. The use of liquors in Great Britain is decreasing, and public sentiment is more and more against them. Even in Russia the Old Believers, a very rich community, are total abstainers.