Niagara Falls Outolassed by the Pewer Plant on the St. Lawrence.

FACTS ABOUT THE NEW DEVELOPMENT

Distribution of Urban Population Affeeted by the Trolley and the Telephone-Progress in Other Lines.

and represents an outlay of \$4,000,000.

veyed again to the St. Lawrence. As it have an air of the past, and urban boundary tumbles from the canal toward the De lines, once so sharply defined, disappear Grasse river it passes through a number of with the growing tendency of city and house is 352 feet wide, and in this the water sudden and salutary expansion in area of stands at a depth of twenty-five feet. From the once over-crowded and inelastic city. Here, in cavernlike apartments, seven in number, are situated the immense turbines. ness centers, is the application of electricity two, and each will develop 6.000 horse power. The wheels are the largest made in the Victor type. The shaft, which extends through the wall and connects with the generators, is eightly feet long and twelve and one-half inches in diameter. Each chamber is controlled from the power 1 house by a Geissler automatic electric governor, situated over each shaft, and the speed can be regulated as desired, or each chamber can be operated independently of the others. This dividing wall through which the shaft extends is nothing less than a huge concrete dam twenty-one and a half above. The pressure of the water will close and make them absolutely tight.

into the De Grasse river.

Capacity of the Power House.

In the power house nearly all the space, 352x82 feet, is taken up by the huge generators. A gallery extends the length of the south side of the building overlooking the huge machines, and on this will be the switchboards. The generators themselves pulpitlike construction upon the platform at the east end of the building. The switches for the alternating current will be operated electro-pneumatically, and for exciters a standard direct current switchboard will be installed with handoperating switches. All indicating instruments will be placed in sight of the operator, and direct control is had of each and all of the huge generators from this sta-

Under its franchise the company can dewater it can possibly need-enough, in fact, to give it unlimited power. That portion the St. Lawrence where the intake is situated is near the beginning of the Little Sault rapids, in the south channel, which is unpavigable. The steamboat channel is on the opposite side of Long Sault Island and is unaffected by the capal.

Specimen of Nerve.

Telephone companies take a great many liberties with roofs and back yards they do not own in the national capital and they invade alleys with small respect for the possessors of contiguous property, but generally they are obliged to put their wires under ground owing to the law against erecting any new poles in the streets. But they occasionally meet with disagreeable opposition to plans involving vandalism. An application was recently made by a telephone company to the district commissioners for permission to remove a tree had given his consent to its destruction.

IN THE FIELD OF ELECTRICITY most beautiful cities in the country; that as closely as possible. The horse car the growth of trees is a matter of time, their full growth not being attained until after years of waiting, and that the commissioners feel that the request that a tree man of business or laborer to live more in a public street be cut down simply for than half a mile or such a matter, from the convenience of stringing wires is very the scene of his daily task. Today all this inconsiderate of the public interests." It is changed, and as a consequence the rest was further recommended by this vexed dence district in all such cities has vastly officer that if the wires are now in the trees extended, and people not uncommonly live the company be notified that they must be

> fere with the tree, within thirty days from date of notice Electricity and Population.

removed and relocated, so as not to inter-

The rapid expansion in area of American cities, especially those of the second class, without what would twenty years ago have The power plant recently installed at been thought a proportionate increase in ple are no longer compelled to live close Massens, N. Y., by which some of the power | population, is one of the striking and hopeof the St. Lawrence is converted into elec- ful signs of the times, eavs the Milwaukee tricity, is pronounced much larger and su- Sentinel. Cities are largely losing their and, indeed, is still in process of extension perior to that at Niagara Falls. It has former character of densely packed and been under construction for five years, is unsanitary hives, at once working places and the immense social sanitary and other capable of producing 75,000 horse power and dwelling places, tending to become advantages which have followed the intromore and more congested with the increas- duction of the trolley car, and the subse-The water is conveyed from the St. Law- ing demand for labor in the business disrence by a canal 265 feet wide and twenty- tricts. Towering tenement houses and five feet deep for a distance of three miles continuous rows of dwellings unrelieved by to the De Grasse river, by which it is con- intervening patches of greensward, already turbine wheels and thereby performs its country to merge imperceptibly into each The forebay next to the power other. Obviously the direct cause of this the forebay the water passes through mas- and of the tendency to remove residence sive iron racks into the turbine chambers. districts, even those occupied by the labor-Each unit consists of six wheels, in sets of to means of transit and communication. The trolley car and the telephone are the twin agents that have wrought within the memory of most of us changes which indicate a radical and beneficial distribution of our population in the not distant future. In the gradual redistribution the trolley

car, with its rapid transit and inexpensive service, has, of course, been the more potent agent of the two. It has built up countless new suburban districts, and has expanded urban boundaries until all suburbs and outlying towns and hamlets fall well within the limits of the cities. The worker who feet thick at the base. The walls of the was once compelled to live within fair town without the slightest idea of what he Honolulu Republican. turbine chambers are protected from the walking distance of the factory or the shop, action of the water by Toque waterproof and often in a crowded tenement, with its sell it at all." paint, which is alternated with coats of obvious dangers and discomforts, now has plaster for five thicknesses. Each cham- his home, with its grass plot and garden, ber is provided with gates immediately miles away from the smoke and noise and back of the racks to exclude the water when unwholesome conditions of the business repairs are necessary. The gates are built streets. That great benefits, moral and of Mississippi pine and are operated from physical, to the community, have resulted from the application of electricity to traction will hardly be denied. It is predicted From the wheels the water passes be- by students of the subject that the changes neath, through draught tubes. Each tube already initiated are only the forerunners is eleven and one-half feet in diameter and of greater ones, and that, with the perfecshoots the volume of water out through the tion of the new system of transit, cities, as arches at the rear of the building to flow places of residence, will virtually disappear, "owing to the redistribution of population in a more sanitary and altogether more desirable way." A state which would combine, without sacrifice on either side, urban and rural advantages might well be the ideal one.

Interarban Ratiways

Mr. Guy Morrison Walker has written an are ranged upon the solid rock foundation interesting article for the New York Finanalong the center of the building. They cler on the contest between steam and elecstand 211/2 feet high and weigh 427,000 tricity, and his investigation has convinced pounds each. The spider and shaft, or the him that the "building of steam roads will revolving portion of the generator alone, from this time decrease, and the great supweighs 155,000 pounds. These generators ply of steam road securities that has satisare each of three-phase revolving Field fied the investment demand of the past will type, with external armature, 5,000 horse- diminish, while in their place will be power output, 2,200 volts, 3,700 amperes offered for some years to come an increasand a revolution of 150 a minute. At the ing volume of the securities of interurban east end of the power house are three electric railways." This fact, he says, smaller generators used as exciters for the should lead trust companies, bankers and fields of the large ones, or of each other, investors generally to investigate the infrom the forebay to the tail race. They trinsic value of the securities of the interare each of 300 kilo watts, electric motor urban railways now in operation, and to force of 125 volts, 2,400 amperes and a discover if possible something to their furevolution of 275 a minute. The control- ture by investigating the conditions under ling station for all of the generators is a which they are now competing for traffic in their respective territories. He also makes the point that the earnings of interurban lines are not so quickly nor so severely affected in times of industrial depression as are the earnings of the steam roads. The reason for this is easy to see, for when people begin to economize they naturally first curtail those disbursements

which are heaviest, and as the steam road fares usually amount to considerable sums, their payment is heavy and is early cut off, while the fares of the interurban road, flect from the St. Lawrence river all the being small and light in comparison with the steam road fares, are hardly felt, and, as a consequence, traffic on interurban roads continues heavy long after a considerable shrinkage has been noticed in the travel over steam lines. In Mr. Walker's opinion the electric lines

will be forced into the carriage of freight and express, and that it will in their case, as it has been in the case of the steam roads, prove to be the most profitable branch of their traffic. The possibilities of the development of this class of business when the electric lines shall have been connected into systems, and when roadbed and equipments are standardized so that they will be enabled to exchange raffic with steam roads, are so great that it is idle to speculate concerning them.

Trolley and Telephone.

"The trolley car," says the Electrical Review, "has been perhaps the largest agent in the redistribution of population, making it possible for the people who work in the in front of a house on East Capitol street. crowded districts of cities to live at con-It was stated by the application that the siderable distances away and enjoy the very tree interfered greatly with the telephone great advantages of suburban life. This is wires and that the owner of the premises particularly noticeable in cities of the intermediate size. Twenty years ago cities This extraordinary request was turned of the second class were much condensed over to the engineer commissioner, who in area, for the reason that practically

presently replied that "the trees of the everyone walked to and from his place of city are one of its most attractive features, work, and for this reason the residence serving to make Washington one of the areas crowded upon the business districts My hair now measures just 4 feet 6 inches in length. What Ayer's Hair Vigor has done for me I certainly believe it will do for others." AMELIA PETTEGREW, Oelrich, S. Dak. Always Restores Color "My hair was turning gray very fast, but Ayer's Hair Vigor has completely restored it to its natural color." MISS S. ALLEN, Kellerton, Iowa. Hair Vigor

SCHOOL FACTS AND TOPICS

trolley that it was possible for the ordinary Features of Educational Progress Marking

COST OF SCHOOLS IN GREATER NEW YORK

"To double the radius of a city means to increase its area four times. The trolley by its duplication and triplication of the leges-Health of Pupils city radius, has enabled very large terriand Teachers.

have plenty of room around them, the peo Statistics compiled by Superintendent together, and to this degree a very impor-Robertson of the public schools of Brooklyn, tant social revolution has been wrought, No one can deny the benefits of a freer life quent extension of residence neighborhoods. "But another agency has not been idle, The principal objection to country life has been its loneliness and the absence of those conveniences which differentiate the city house from the country residence. The loneliness, by which is meant the lack of intercourse with neighbors, has been in a great degree removed by the telephone Perhaps the best work that the independent elephone movement has accomplished has been the popularization of the telephone and its introduction at low rates into sparsely-settled neighborhoods, thus removing the bugbear of isolation which has dent. But the telephone has done more furnish them a means for social conversaand valuable addition to the farmer's means for making a living. By putting him in Hawaii's School System immediate touch with his markets, whether One of the first questions asked of a resifor selling or for buying, it enables him to conduct his business in a much more businesslike way than formerly, when the isolated gardner or truckman loaded his

would receive for it, or whether he could

vehicle in the early hours of the morning

those days was at best a poor thing, and I

was not until the coming of the swifter

anywhere from ten to twenty miles away

tories to be included in the suburban dis-

tricts of towns, with the result that house

from their places of business.

Probably for the first time in the history Probably for the first time in the history of Maine logging electricity will be used this winter in the transporting of logs from the woods to a river landing. An electric traction engine is now being constructed for tree on a tract of land in the Dead river

A high-speed efectric railway has recently been opened between Milan and Varese, Italy. The distance of fifty miles is covered in fifty minutes, the train reaching a speed of sixty-six miles an hour. The third rail and four motor cars are used. Power is obtained from the Ticho at Tornavento.

The value of the wiveless telegraph at sea

The value of the wireless telegraph at sea was recently demonstrated when the Campania and the Lucania passed one another in midocean. They were able to communicate with each other for a hundred miles. Each signaled the other about the sighting of teebergs before they sighted each other and when they were thirty-five miles apart. and when they were thirty-five miles apart.

A French electrical journal of standing teports that at a railway station in Vienna they have a phonograph which calls out in stentorian tones particulars of the trains from time to time. The work was formerly done by a railway porter, but as the phonograph is controlled by electricity he has now only to press a button and start the

The Chicago Great Western Railway com-

The Chicago Great Western Railway company contemplates the installation of electric motor power for all its suburban service within a radius of thirty miles of St. Paul. This new departure is a forerunner of the evolution in suburban traffic and local railway transportation. It means steam railroads for the long haul and electric railroads for the short haul.

In St. Louis the nut-cracking industry gives employment to a considerable number

pleted from Detroit to Pittsburg.

A practical use of storage batteries in boats has come to the notice of the Scientific American. A gentleman in Connecticut has a small saunch operated by a storage battery; this is charged in the daytime, and when not in use the boat is tied to the dock from which feed wires run (connected with the storage battery in the boat) to his house, a short distance away. In the evening he thus uses the battery in the boat to light the house and finds it a very satisfactory arrangement.

HAS THE PLANS KIMBALL

Consulting Architect of the Audito rium Company Has Not Fluished Inspection of Latenser's Work.

Thomas R. Kimball, consulting architect of the Auditorium company, returned Saturday from St. Louis, where he had been in consultation with the board of architects of the Louislana Purchase exposition.

In regard to the Omaha Auditorium plans Mr. Kimball said: "These plans at present are in my possession. As consulting architect of the ways and means committee ! must make the investigation of them fuil and complete in every detail. I have not at this time completed the investigation into the details. When I have done so-which will probably be by the middle of the week -I will turn the plans and the recommendations over to the ways and means committee of the Auditorium company."

FIRE RECORD.

SAN JOSE, Cal., Oct. 13 .- The must destructive fire in the history of Los Gatos occurred at an early hour this morning. The entire business section of the town was wiped out. The area covered by the fire is estimated at about four blocks. Property variously estimated in value at from \$100,000 to \$150,000 was completely destroyed. Several manufacturing plants, livery stable and many dwellings were borned. The fire department was inadequate to cope with the flames, which stopped only when all the fuel at hand was exhausted. A number of men were injured, but none seriously,

Beatrice Icehouse BEATRICE, Neb., Oct. 13 .- (Special Telegram.)-Fire at 6 o'clock tonight destroyed the large icehouse of Franklin Salts on West Sumner street. Loss, \$1,500; insurance, \$300. The fire is thought to have originated from carelessness of boys who were smoking cigarettes around the place previous to the fire. Mr. Salts had another policy, for \$700, which expired a day or so ago and had not been renewed.

Horner's Notion House

BALTIMORE, Oct. 13 .- Fire, which oc curred today in the notion house of John A. Horner & Co., caused a loss of \$70,000 fully covered by insurance.

Entries Close November 18.

NEW YORK, Oct. 13.—The Coney Island tockey club announces that entries for the ellowing stakes will close on November 18 next:
For the June meeting, 1902: The Foam and the Surf stakes.
For the June meeting, 1903: The Tidal, the Mermaid and the Lawrence Realization

For the autumn meeting, 1903: The Great Filly and the Century stakes. For the autumn meetings, 1903, and after: The Annual Champion stakes. For the June meeting, 1994: The Lawrence Realization stakes.

the Fall Opening.

the School System of Hawaii-Business Courses in Col-

N. Y., show a marked increase in attendince, compared with the two preceding At the close of the first week of chool in September, 1899, the attendance was 151,312; in 1900, 155,092, and this year. 163,963, the latter being an increase of 8,000 in registration, more than double that of the year previous. The latter figures were about 2,000 greater than were looked for. According to the budget prepared by the Central Board of Education for school purposes in Greater New York for 1902 the Board of Estimate will be asked to provide the sum of \$20,582,506.59, divided between the general fund of \$15,664,584.89 and the special fund of \$4,917,971.70. The general fund, out of which the teachers are paid, is practically mandatory under the new law, while the special fund, which takes care of the business branch of the school disease may, therefore, vary from the mildbeen so long a complaint of the rural rest. | system, is more or less permissive on the part of the Board of Estimate. The genfor those living in the country and in the eral fund is divided between Manhattan and theria. In fact, people showing no sympcountry districts surrounding cities than to the Bronx, \$8,929,896.93; Brooklyn, \$5,348,-676.69; Queens, \$1,019,203.84; Richmond, tion. It has proved itself a very practical \$338,757.43, and the Board of Education.

dent of a new territory by people of the states is "What kind of schools have you?" with the produce of the fields and drove to and with pride in the answer, reports the

The school system of the islands dates back to the year 1843, when the department | fection through the use of dishes, drinking of education was organized and put in charge of a cabinet minister. The first and it is probable that infection through minister of education was Dr. Armstrong, drinking cups, lead pencils and direct perand to his work is to be credited the original lines of Hawaii's educational system. At the present time there are 140 public

schools taught by 352 teachers, and containing 11,501 children. There are fifty-five private schools taught by 207 teachers providing for 4,036 children. Thus the school population attending school is 15,537; there are 8,574 male pupils and 6,963 female. Of this total 4,977 are Hawailans, 2,631 are part Hawaiian. The Portuguese have 3,509 children in the schools Japanese, 1,352; among the American and European.

Under the old order of things the schools taught in Hawaii were known as "common schools" and were free. Those taught pling the service, and somewhat later, as a cases with teachers is four times greater necessary result of raising all the schools than in any other walk of life. to the grade of what had been formerly known as "select schools," tultion in all report is that among those girls who are most cases the change from the old "com- who break down mentally is even much the request of the natives themselves. The their work as teachers. The Prussian min-

Before the end of the year sleeping cars will be put in operation on the trolley line of the Lake Shore Electric company. The sleepers will run on the line from Detroit, Mich. to Cleveland, O., and possibly to Toledo. Through trains with sleepers will run between Cleveland and Detroit, it is promised, by Christmas. This will be the longert electric road in the world when completed from Detroit to Pittsburg. is compulsory, and that the law in this regovernment or an independent school, but school room here are much shorter than in gree of regularity.

The tuition in the government schools in, therefore, entirely free. Among the private schools a small fee is generally charged. A high school was established in 1895 on the property which formerly belonged to the Princess Ruth, and afterward to Mrs. Bernice P. Bishop. The mantion was fitted up for school purposes. making one of the handsomest high school buildings this side of the Rocky mountains. The teachers employed in the public schools are of varied nationalties. There are 100 of Hawaiian blood, 175 of American. forty British, four German, nine Scandinavian, twenty Portuguese and four of other

Business Courses in Colleges. "The action of the officials of the Uni-

ersity of Chicago in adding a 'college of ommerce and administration' to the regular curriculum of that institution," says the Chicago News, "is a significant move in keeping with the times. Already the University of Wisconsin has established a val- and tried Foley's Kidney Cure, which gave uable department of this sort. Several the immediate relief, and I was perfectly years ago when it was seen that the rapid cured after taking two bottles." Be sure extension of manufacturing and industrial you take Foley's. enterprises was bound to create a great iemand for technical experts a number of new manual training and technological schools came into existence, and the wisdom of their founders has been abundantly demonstrated. Just as there is need for special training in the field of industrial art, a special education is necessary to the young man who intends to step immediately from his college into the active ife of the business or mercantile world. "It is significant that simultaneously with the announcement of the new plans for the University of Chicago comes the news of a similar undertaking in England. In a cablegram to the News, published last Wednesday, its London correspondent presented the outline of a plan projected by the London Chamber of Commerce. It is the intention of the English commercial men, who will have the co-operation of business men in other countries, to establish a commercial school with a special view to fitting young men for a career in business. The course will include instruction in certain nodern languages and lectures on the practical details with which every merchant must acquaint himself if he is to win success. So far as possible the method employed in banking and foreign exchange, office methods, maratime affairs, as they pertain to commercial dealings; marine insurance, variations in business methods as practised in different countries, and other kindred topics will be brought up for consideration.

"It cannot be doubted that in an industrial age when the largest rewards are to young men is so largely directed toward business success some such addition to the ordinary courses of university education destined to become almost indispensable." Schools and Contagious Diseases.

The recent opening of the public schools tions against the spread through that means of infectious diseases like diphtheria, scarlet fever, measles, etc. Of these diphtheria for 1900. is probably the most dreaded, and experience has shown that it often gains its strongest foothold through schools. Children between the ages of 3 and 14 years are tagious and easily transmissible, the health authorities and teachers in every city kidneys well.

should co-operate to exclude it from the that the two or three months following the opening of the schools have been marked by a decided increase in the number of diphtherin cases. In Baltimore the health commissioner sends to the principal of every school in the city on Monday and Thursday of each week during the term a circular giving the surname and street address of every person in the city afflicted with diphtheria or scarlet fever. This circular is read to the different schools by the principals and then turned over to the teachers, whose duty it is to see that no child from any of the afflicted homes is allowed in his or her room until after the house has been thoroughly disinfected and pronounced entirely free from the germs of disease by the health department. In Washington diphtheria was prevailing to some extent when the schools opened, three schools in the vicinity having been closed on account of it, and the health board issued a general circular of instruction on the subject to parents and teachers. The following extract from the circular is of general interest:

"One great difficulty comes in the early recognition of the disease; the latty has not yet become educated to believe generally that the mildest sore threat may be of diphtheritic origin, yet such is in fact the case. Whether an infection with diphtheria bacilli will result in the development of a membrane, with swelling of the throat and neck and severe prostration; whether it will result merely in a mild sore throat, or whether it will produce no symptoms whatsoever depends to a certain extent on the susceptibility of the person attacked. The est imaginable sore throat up to the se verest possible type of old-fashioned diphtoma whatever may carry infection. period during which patients who have suffered from diphtheria, but who have recovered from all symptoms, are liable to spread this disease exists in all cases, the infective organism remaining in the throats for a considerable length of time after the membrane has disappeared. Of course, the danger of infection being due chiefly to the Fortunately the residents of Hawaii can discharge from the nose and throat, the answer this question most satisfactorily danger of the spread of the disease exists chiefly in those cases in which such clinical symptoms are present, and is to a certain extent in proportion to their severity. Incups, etc., may, however, occur in any case sonal contact is the chief source through which the disease is spread from mild cases in a school."

Health of Teachers.

"No little stir has been created among the school mistresses of America by an idea recently advanced at the National Congress of Women Teachers at Benn," says the Chicago Chronicle. "Dr. Friedrich Zim-Chicago Chronicle. mern, after considerable study and investigation, has come to the belief that women teachers in Germany at least are particu-Chinese, 1,289, and the remainder is divided larly subject to lunacy and other mental disorders.

"A tabulated list of data received in reply to letters sent to various insane asylums shows that throughout the German-speakin English were called "select schools" and ing world out of eighty or ninety patients in these a small tuition fee was charged. In lunatic asylums one has been a teacher. About fifteen years ago it was decided to According to German statistics there is one close out all that remained of the former teacher in every 350 women. It would as fast as it could be done without crip- seem, then, that the danger of mental dis-

"An important point of Dr. Zimmern's public schools were made entirely free. In preparing to teach the percentage of those mon" to the "select" school was made at greater than those who have entered upon In St. Louis the nut-cracking industry the request of the natives themselves. The gives employment to a considerable number of persons, there being three plants in the city. The nut-crackers are driven by electricity, each nut being fed individually into the crusher. After the shells are cracked the nuts are winnowed by an airblast and the must are winnowed by an airblast and the present school year.

It should be added that school attendance between the ages of 6 and 15 years for this part of the work.

Before the eval of the year sleeping cars is compulsory, and that the law in this re-

doubtless if the facts in the case could be ascertained the showing would be far more favorable to the American than to the German teacher. The hours spent in the within the ages named they must go to Germany and better salaries are paid, which means better food, better social opportunities and more desirable forms of recreation, all of which tends to sanity.

"Each year since the civil war a higher grade of teachers has met the increasing demand. Before the civil war few, if any lady teachers had had a college education Few knew anything of scientific methods of instruction. All that is now changed to the advantage of the teacher who goes before her class not with nervous apprehension, but with an assurance based on intel ligence and intelligent methods. It is true that tenfold more is required of a teacher than was demanded thirty years ago, bu better preparation makes the requirements proportionately easy.

"If statistics could be obtained it would be interesting to compare the school mistresses of America with those of Germany in point of health. Temperaments differ but the environment is certainly in favor of the American teacher.'

J. Odgers of Frostburg, Md., writge: " had a very bad attack of kidney complaint

OTHERS ESTIMATE THE WHEAT Department of Agriculture Gives Out the Yield Tables Compiled

Abroad.

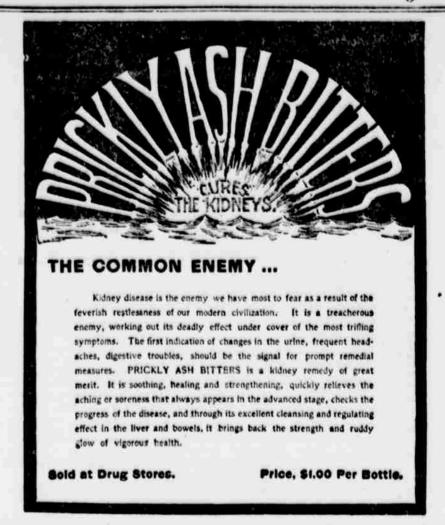
WASHINGTON, Oct. 13 .- The Department of Agriculture announces that the three most important estimates of the world's wheat crop of 1901 so far made agree that the crop is larger than in either of the two preceding years. The estimates follow: Hungarian ministry of agriculture, 2,671, 360,000 bushels of sixty pounds; Beerbohm's corn list of London, 2.711,600,000 bushels of sixty pounds, and Bulletin des Halles' of Paris, 2,790,810,000 Winchester bushels.

Our department withholds its opinion as to the degree in which the world's crop has been approximated in any of these estimates until a considerably larger num-

ber of official returns is available. The official Hungarian estimate says the crop exceeds last year's by 20,886,000 bushels of sixty pounds, or by 212,430,000 Winchester bushels. According to Beerbohm, the excess over last year's crop is 200,200, 000 bushels of sixty pounds, and, according to the Bulletin des Halles, the excess is 117,000,000.

Official reports from the Russian ministry of finance received at the Agricultural department state that not for a long time have meteorological conditions in Russia been so serviceable to the cereal crops as the season concluded with the harvest be won in business and the ambition of of 1901. These advices estimate the following yield for 1901: Wheat 311,112,000 bushels of sixty pounds, against an aver age of 415,796,000 for the years 1898-1899 and of the final official figures of 422,993,000 bushels for the total wheat crop in 1900 The rye estimate is 709,357,900 bushels of has led some cities to take special precau- fifty-six pounds and oats 756,110,000 bushels of thirty-two pounds, against 920,132,006 bushels and \$53,695,000 bushels respectively

Backache should never be neglected. It means kidney disorder, which, if allowed to run too long, may result in Bright's disease. chiefly liable to it, and as it is very con- diabetes or other serious and often fatal complaints. Foley's Kidney Cure makes the



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