Preliminary Proceedings Affiliation of the Canadian and American Associatlons—The Delegates—The Meetings and Addresses.

The Forestry Congress began its opening session at two o'clock yesterday afternoon in the well-appointed chambers set apart for the use of the Association at 132 St. James street. Over a hundred gentiemen were present, comprising, besides members of the Congress, many of our leading citizens, with several influential gentlemen from other parts of the Province and Dominion.

Prof. Hough nominated, in the absence of the President, the Hon H G Joly, one of the Vice-Presidents, as temporary President of the Congress. The nomination was enthusiastically ratified. Mr. Joly took the chair. Prof. Hough was elected Secretary, and Mr Chas Moore, of Alabama, as temporary Treasurer.

The President briefly explained the objects of the meeting, and announced the order of

proceedings by sections. Prof. Hough announced that the officers of the sections, as appointed at the Cincinnati meeting, would continue in office until the election of new officers. He moved the ap-pointment of a committee consisting of Messrs. Chas. Moore, Bernard Fourneaux, and Wm. Saunders to take into consideration the relations between this Congress and the American Forestry Association.

Mr. J. A. Warder, first vice-president of the Association, said the American Associa tion had come here prepared to co-cperate with this Congress, and to submit to whatever the committee should recommend to-morrow. The Association and done a great deal of good during the last seven years, but they were even prepared to abandon their organization, if neccessary, in the interests of American forestry.

Mr C E Belle, Crown Timber Agent of the of the Congress, a box containing 44 speciadmired by those present.

The delegates then divided into sections the general meeting adjourning until this morning at ten o'clock.

THE DELEGATES.

The following delegates from a distance were in attendance at the Congress yesterday :-

terity.

B-Bureau Senator, St Remi : Butler A W. Brockville, Ind; Beall T, Lindsay; Broster U. Three Rivers; Beadle D W, Barnes Wm S, Baskerville P, St Catharines; Beyeron J G H, Beanharnols; Brigham Dr, Phillipsburg; Bell C E, representing Crown Lands Depart-

ment, Quebec; Banufort E L, Cape Vincent, NY; Brisebois E C, Minneedosa, Mo. C-Chandler-Chicago; Chaffers W H, St Cegaire; Chapais J C, Varennes; Crebassa J G. Sorel; Chapman C, Toronto; Cowper G B, Toronto; Charlton E J. Quebec; Charleson J B, Quebec; Cuthbert E O, Barthier; Ches-

ter F W, Quebec; Chandler G H, St John, N B. D-Dean Harmon, Shelby Co, O; Denton J M, London, Ont; Dampsey P E, Trenton Ont; Dunn L H, Quebec: Dall Caroline H Washington, DC; Dwyer G E, Suttonville; Dwyer E A, Sutton; Dougall J, Windsor; Dawes T H, Lachine; Desrivieres F G, Desrivieres; Dougall John, New York; Da Vernet F H. Toronto.

E-Emerson N P. Sutton Junction; Emery Dr J G. Port Burwell; Emery Vernon H,

F-Fernow B E, Statington, Pa; Fyles Rev T W, Cowaneville; Field J G, Stanstead; Fultoa Rev James, Lachine. G-Guilbeult E. M. P. Joliette: Gillies Jas,

Thos N, Ottawa; Gleed C 2, Topeka, Kan-H-Hough Prof F B, Washington; Hicks

ard J W, Chamely; Hyatt Jas, Stantonville, ing upon the necessity of everyone laboring tons; and in July, 1874, to 15,400 tons. It NY. J-Joly Hon B G, Quebec; Jones W J,

Bowmansvitle; Jonetto S N, New York.

K-Kinsey Chas E, Cincinnatti, O; Kay Andrew, Granby, P Q; Keefer T C, Ottawa; Kerr Thos, Toronto; Kerr Walter. Kemptville, Oat ; King Rev E A W, Levis,

L-Little L G, New York; Little J, Cote St Antoine; Logue C, Maniwaukoe; Lynch Hon W W, Quobec.

M-Mohr Prof Chas, Mobile, Ala; Martin J B, Cayura; Malhiot, H G, Three Rivers; Manning J W, Manning H G, Reading, Mass; Mills W H, Hamilton; Miles H B, LLD, Quebec; Moffatt J R G. London, Eng. Mills W B. Beaufort, N B; Martin R, Martin E, Martin W R, Hamilton; Mitchell C W, Ottawa; Massuo L H Varennes; Mills Jas, MA, Prosident Agricaltural College, Gueiph; Morris D, St Therese; McConville P W, Joliette.

N-Norman J B, Three Rivers,; Nagle R, Ottawa; Norris John, Roseabel Ely. P-Painchaud Dr C F, Varennes; Pardre Avern, Toronto; Peffer Geo F, Pewances; Wis; Perrault J H, Verennes; Pell D, Pem-

broke. Q-Quinn Stephen J, St Hyacinthe. R-Russell A J, Russell J Haig, Ottawa; Rensud Eugene, Montmagny; Ritchie Willlam, Three Rivers; Russell A G, Ottawa; Rodriquez J, Jacksonville; Ross W G, St Nichoias; Robitaille L A, Quebec; Rully

Jas. Sherbrooke. S-Saunders W, London; Studer J H, Columbus, O; Statson John, Toronto; Stephen John, Catcago.
T-Tache E E, Quebec; Thistle W N, Ot-

tawa; Tracy W W, Detroit, Mich. U-Uliricht Alfred, Dresden, Saxony

W-Warder Dr J A, North Bend, O; Wilson H W, Boston; Whiteside E, Cambridge; Winnett W II, London, Ont; Westover D,

Freligheburg. Y-Young W C, Ottawa.

EVENING MEETING.

A public meeting was held last night in Queen's Hall, at which the subject of Ferestry was discussed at length by delegates to the Congress. The platform was tastefully decorated with rare potted plants in full bloom, and upon the table were ranged bouquets of choice exotics. In a conspicuous position behind the President's chair was the legend "Woodman, Spare the Tree," and on either side of this inscription were shields bearing the words "American Forestry Congress, 1882," and surrounded by the American and English flags. The hall was well filled and

the Mayor presided. His Worship said his duty was a most pleasant one. He was called upon to welcome and offer the freedom of the city to gentlemen who had come to Montreal for the purpose of discussing questions of great importance not only to the Dominion of Canada but to the whole continent of America. He would merely briefly introduce to the meeting those gentlemen who were now on a visit to the city, and he hoped they would receive a hearty welcome from all the citizens of

cause this province was the land of forests, an export duty on it.

lace vinderstate and vertice

THE FORESTRY CONGRESS. and the question was not one which awasened a very powerful cone in the hearts of its inhabitants. It was thought that we had an inexpansible supply of wood, and we pointed with pride to the rafts of timber which floated down our rivers and to the vessels which took our lumber abroad. We toought that we supplied not only Great Britain with lumber but also a large part of the continent. Canada, however, did not send to England one-fourth of the lumber she consumed, while what we sent to other parts of of Europe was but a drop of water added to against the ruthless destruction of the forests. He was laughed at then, but he was vindicated to-day. Even two hundred years ago this warning had been given. He had seen in old manuscripts that former French Governors had recognized the danger which threatened our forests. But people asked now, where does all the lumber come from which we see passing down our rivers? It comes from near the height of land which divides the water shed of the St. Lawrence from the water shed of Hudson's Bay 2000 miles away. There was then, it would seem, some need of Forestry, and for the education of the public in this regard. The preservation of our timber was absolutely necessary, as also was the creation of forests in regions where they did not exist. They had to consider what they could do to fight their greatest enemy, forest fires, and to provent the total destruction of timber limits. He desired every farmer to know that with courage, perseverance and a little intelligence he could have an ample supply of timber, not only for firewood, but for building purposes. He then showed that black walnut was the most valuable tree, the essiest to cultivate, and of the most rapid growth. Upon an acre of land planted with black walnut, 400 trees might be readily grown. The average annual growth of black walnut in Canada was half an inch, consequently in forty years 20. Province of Quebec, offered for the inspection | inch trees could be obtained. Black walnut at present was worth \$7 per toot, and calcumens of Canadian wood, natural on one side lating each tree at 25 feet, they would and varnished on the other. I'vey were greatly have the sum of \$1,000 as the result of forty years growth upon one acco of land. He concluded by deprecating the reluctance of individuals to undertake the plantation of trees. All should take a pride in doing something in this direction, although the benefits might only be realized by pos-

Dr. Houar, the next speaker, called attention to the cause which had len to the citablishment of the American Forestry Congress, the maintenance and restoration of forests. should exercise the attention of men of science and men of business, and unless the question was given proper consideration the rapid exhaustion of our natural supplies would result in very great inconvenience. In the older countries necessity had long taught prudence in the management of the forests, but in the United States and Canada property owners must be convinced of the necessity of cultivating and maintaining woodlands for the purpose of supplying their own needs. He spoke of the reckless extravagance with which the lumber regions were worked, and after alluding to the obligations resting upon individual citizens to plant trees, he dwelt upon what he thought Governments should do to protect the interests of citizens in this regard. In glancing at the measure adopted by the United States and Canadian Governments, he said Canada had made a great advance in the question of forest management. making up the returns. The value of the The regulation which prohibited the cutting work completed during the month will be of pines in Quebec of less than 12 inches, was a very good one, but he thought that Carleton Place; Gillies John. Braeside; Gibbs the restriction should be extended, as at that size the growth of the pize was most tons; in July, 1880, to 21,760 tons; In July, rapid. He gave lengthened instruction in 1879, to 18,700 tons; in July, 1878, to 18,100 H-Hough Prof F B, Washington; Hicks regard to the planting of trees, particularly tons; in July, 1877, to 13,900 tons; in July, 1877, to 13,900 tons; in July, 1875, to 22,650 and J W, Chamuly; Hyatt Jas, Stantonville, and J W, Chamuly; Hyatt It was important that they should experiment, observe and record, that they should confess their failures and that they should not omit to make known the valuable things in the preceding seven years. When it is they discovered in order that others might share in the benefits of such discoveries. Mr. BEADLE, of St. Catherines, was next

called upon to speak, but owing to the lateners of the hour he contented himself with moving the adjournment of the meeting in s brief and humorous address.

The motion was carried and the meeting

senarated.

RECEPTION AT VILLA RELIGIOUS MARIA.

Another of those impressive and touching ceremonies, characteristic of the Catholic roligion, took place in the Convent at Villa Maria. Eight Sisters were professed and fifteen took the religious habit. From early morning the friends of the young ladies who took part in the reception arrived at the Convent and were shown to the chapel, which was beautifully decorated for the occasion. There were also present a number of the clergy, among whom were the Rev. Fathers James Calaghan, Chaplais, and Tranchemontagne. Over three hundred Sisters were in

attendance. His Lordship Mgr. Fabre officiated, and after Mass the reception took place. The scene was truly inspiring and created a profourd impression among the assemblage as they heard each fair candidate pronounce her solemn pledge of keeping her vows and bebeld her sever all ties with the world willingly and joyfully. During the ceremony the In exicu Israel was rendered by a choir of voices as sweet as they were numerous. The stood that according to the regulation of the sermon was preached by the Rev. Father Hannon, P. S. S, who has lately arrived from

Baltimore. His subject was the three vows of the religious state, obedience, poverty and chastity. Among the Sisters who were professed are Miss Minnie Barry, daughter of Thomas Barry, Esq , Collector of Customs at Richmond, in religion Sister St. Thomas Becket, and Miss Coogan, of Montreal, in religion, Sister St. Agnes. This young lady before entering the convent taught English in St.

POPE LEO TO THE IRISH BISHOPS. POPE LEO TO THE IRISH BISHOPS.

DUBLIN, Aug. 23.—A letter from the Pope to the Irish bishops, da'ed August 1st, is published. His Holiness, in expressing his profound regret that tranquility has not been restored in Ireland and that murders continue to be committed, says:—"The Irish people, by following the advice of their prelates, may hope for an alleviation of the ills from which they suffer. A Just cause must be shunned. In the words of St. Augustine, 'The first characteristic trace of liberty is the non-commission of crimes.' The priests ought to be the active supporters of order during the present troubles." The letter concludes by expressing a hope that the English Government will do justice to the equitable claims of the Irish people, rembembering that the pacification of Ireland constitutes an element of tranquility in the whole Empire.

gramme for the evening, proceeded to make derry, Ireland, suggesting the removal of the some remarks upon the subject of Forestry, duty of 100 cents per bushel on potatoes; also the addressed himself to the consideration of the subject with consideration of the duty on lumber and the imposition of the subject with consideration of the duty on lumber and the imposition of the subject with consideration of the duty on lumber and the imposition of the subject with consideration of the duty on lumber and the imposition of the subject with consideration of the disease.

| Subject with consideration of the duty on lumber and the imposition of the subject with consideration of the duty on lumber and the imposition of the subject with consideration of the duty on lumber and the imposition of the subject with constant and the imposition of the subject with constant and the imposition of the subject with constant and the imposition of the subject with the subject with constant and the imposition of the subject with the s The U. B. Tariff Commissioners received

25 Minister

SCOTCH NEWS.

(From the Glasgow Herald, Aug. 5th.) On Saturday morning, about balf past six William Logie of the firm of John Logie & Son, china merchants, Montrose, was found suspended from a hook in the roof of the kitchen of his father's bouse quite dead. Decensed who was in his 39th year, had lately

been suffering from nervousness. A Greenock correspondent states that the man Westgate, who was arrested in Venezuela the sea. Fifteen years ago Mr. Little, of in connection with the Phonix Park murders, Montreal, had raised the warning voice was at one time resident in Greenock, and was at one time resident in Greenock, and was employed as a porter at the Dublin steamers. He was accounted somewhat scatter-brained, and went under the nick same of Waistcoat.'

Intimation has been received by Mr. A. E Smith, Aberdeen, the agent of Charles Souter, who now lies in Aberdeen prison awaiting his trial on a charge of feloulously stealing the body of the late Earl of Crawford and Balcarres from the vault at Dunecht House, stating that the petition forwarded by him to have Souter tried before the High Court of Justiciary in Edinburgh has now been presented by Mr. John M. Pherson, W. S. In the event of the petition, as is comidered probable, being refused by Mr. Charles Duncan, Procurator-Fiscal for Aberdeenshire, the trial will, in all probability, take place at the Aberdeen Court of Justiciary, which meets on 5th September.

It is expected in Nithsdale that the Queen will pay a visit to the Duke and Duchees of Buccleuch at Drumlentig Castle on or about the 23rd of August. Confirmatory to the report, it is mentioned that extensive preparations have already been commenced for Her Majesty's reception. It may be remembered that last year it was Her Mejesty's

intention to honor His Grace by visiting him at Dalkeith Palace at the time of the Volunteer Review, and that the intention was reluctantly abandoned in consequence of the Duke's illness. The Prince of Wales and other members of the Royal Family have been for brief periods guests at Drumlaurig. and should Her Majesty's expected visit be made she will not only receive a royal wel-come, but be introduced to one of the most romantic bits of country in all her dominions.

On Monday, at Falkirk Sheriff Court, J. Robertson, coal-weigher from Grangemouth, pleaded guilty to a charge of running oft with steam engine, the property of the Caledonian Raliway Company, on Saturday night. It appeared that while an engine driver had left his engine for a few moments, Robertson and proceeded to discuss the questions of had mounted it, turned on the steam, and ran it along the line at Grangemouth till it came The subject was one which he thought into collision with an ergine belonging to the North British Bailway Company, which was considerably damaged. He was then caught and taken into custody. He pleaded in excuse that he had been drinking, and had got on the engine in a froic. The Speriff said that the offence committed was a very serious one, and might have been attended with very grave consequences. He sentenced Robertson to 30 days' imprisonment, with

hard labour. The amount of new tonnage put into the water during the month of July by the various firms on the Clyde is protty considerable, 21 vessels of an aggregate tonnage of 25,480 tons having been launched from the stocks. The new vessels comprised 4 iron sailing ships, 15 screw steamers, and 2 screw tugs. A vessel of 5100 tons for the North German Lloyds Company, of Bremen, and 2 steamers of 3000 tons each for the Compagnie Nationals de Navigation, Marseilles, assist materially in seen by comparison with the figures for the corresponding period in previous years. In July, 1881, the returns amounted to 26,078 excess of the returns of the month of July borne in mind that the majority of the yards were closed from ten days to a fortnight owing to the Fair holidays, the returns become of more value, and indicate great activity during the time the shipbuilding establishments were open. The prospects of the trade are still fairly good. Several important contracts were secured during the month by the builders in the upper reaches, and these will be quite sufficient to fill the vacancies caused by launches.

An accident which occurred few weeks ago in connection with an interment in the western suburbs of Edinburgh, would seem to indicate a laxity of management which, it may be hoped, is not generally prevalent in our public burying grounds. A Canadian ady, who after the death of her husband, had esided for several years in this country, died in Edinburgh in October, 1880, at the residence of two nieces, who in accordance with the expressed wishes of the deceased, buried her in their own private ground in the cemetery in question. About the middle of the present month these ladies learned from a friend that the body of their aunt had been removed from "the cemetery and taken to Canada. At first they could scarcely credit the story; but on inquiry they learned that it was correct, and that the remains had been disenterred at the beginning of the present month, on the application of an adopted daughter of the deceased, who desired to have the body conveyed to Canada. It is under cemetery, no interference with private ground is permitted, except with consent of the owner; nevertheless, this disinterment was allowed to take place without even the knowledge of the party to which the lair belongs. The cemetery directors, it is said, while admitting that the consent of the owners was not obtained, do not, in the circumstances, regard the action of their superintendent as seriously ablameworthy, in consideration of the representations made by the lady who applied for the disinterment. It may be true means of a large cultivator, and by light that in this case no particular harm has been done to any person; but one can readily conceive how such a system may open the door to grave abusen.

Captain John Mullan, of California, has filed with the U. S. Secretary of State a petition inviting his attention to the second ar-

rest in Ireland of Herry George. Sir Bernard Burke, the autiquarlan, declares: There is not now living a single descendent in the male line of Chaucer, Shakespeare, Spencer, Milton, Cowley, Butler, Dryder, Pope, Cowper, Goldsmith, Scott, Byron or Moore; not one of Sir Phillip Sydney, nor, I believe, of Sir Walter Raleigh; not one of Drake, Cromwell, Hampden, Monk, Marlborough, Peterborough or Nelson; not one of Bolingbroke, Walpole, Chatham, Pitt, Fox, Burke, Grattan or Canning; not one of Bacon,

Papers on the Mineral Constitutents in Plant Growth and on the Yellows of

The third annual meeting of the Society for the Promotion of Agricultural Science was commenced on Monday morning in the Natural History Society Rooms on University street. The membership of the Society is limited to 40, and the qualifications for admission to its ranks are of a high standard, so that it represents the cream of agricultural thought and experience. The meeting was presided over by the President of the Society, Mr. W. J. Beal, Professor of Botany and Agriculture, Michigan Agricultural College, Lansing, Mich., and the Secretary is Prof. E. Lewis Sturtevant, Director of the New York Agricultural Experiment Station,

Geneva, N.Y. Prof D F Penhallow, of Houghton Expariment Farm, Orange County, N Y, was then called upon and read a paper written by Prof trees thoroughly diseased, and also from trees C A Goaseman, Massachusetts Agricultural

College, and entitled :-MINERAL CONSTITUENTS IN PLANT GROWTH. of which the following is a summary :- The recognition of the important influence which certain mineral constituents of plants exert on plant growth, has contributed greatly to the success of modern agriculture. The presence of mineral constituents in an available form in the soil is essential for the reproduction of any plant from its seed. As latens 1830 Von Lichig, one of the leading botsmists of the University of Berlin, asserted that ground bones were of no use as a fertilizer in Germany. Even ten yours later Dumas, the eminent French chemist, considered the mineral constituents of plants as a mere incidental feature in the vegetable conomy. Before 1840 not one pound of Peruvian guance was used upon the farms of Europe, although in 1814 Alexander von Humboldt had described its use as a fertilizer in Peru and some ship loads had found their way to the London market. These instances of comparatively recent ignorance are almost incredible but are matters of history. Agriculturiets of previous ages admit the usefulness of wood-ashes, bones, gypsum, lime and other mineral substances, besides the various kinds of animal manure. Modern rational agriculture, however, does not rest its claim of progress on the mere introduction of any particular new mode of operation, for real progress in this direction consists mainly in the discovery of the principles which control the successful application of these practices in the management of farms. Estional modern agriculture recognizes as a foundation of a successful farming the necessity of a strict restitution of those substances to the soil, in the most economical way. As long as the composition of the air and the water was but little understood and that of the soil practically unknown no correct idea could be formed concerning their mutual relation, and still less regarding their connection with the life and growth of plants. For this reason the first successful attempts to study the relations of the vegetable to these three agencies date kingdom only back to the close of the past century. Between the time elapsing from the first publication of the investigations of de Saussure and Dany and these of Liebig, no material change of opinion was made regarding their more intrinsic value of mineral elements in plant life. The year 1840 is on this account usually cited as the beginning of a new era in the history of agriculture and its associated branches. Liebig taught that a certain amount of mineral eloments are indispensable for the complete development of a plant through all its various stages of life, and that in case the ash constituents of the plant are not supplied in due time, the plant may come to bloowing, will thus be seen that while the ngures for the perfect plant contains, the practi- of some sixty men who played a most important and the perfect plant contains, the practicorresponding period last year, they are in cal experience of the past receives a tent and honorable part in the discovery and and future success a better chance. Liebig's genius has given an impetus to the study of have falled to recognize, through fear that the plant growth with reference to its application | glory of these Catholic pioneers of America in practical agriculture which has been pursued since with an interest and success upperalleled in the history of any province of science. Much has been accomplished, wet more remains to be learned to free our prosent system of manuring from that degree of uncertainty which reasonable prospect of success still demands. A few ash analyses of plants do not suffice to decide what kind and what amount of mineral

> amount the plant under examination contains. It is well known that plants raised in different soils contain different proportions of the same mineral constituents. Science, however, has not yet been able thus far to ascertain the existence of any defunct numerical relation between the exact amount of essential mineral elements of plant food and the amount of organic matter which may be produced by the ald of the former. The writer had spent considerable time and trouble in investigating the subject and subjoined statements of the results of several experi-

> plant food a crop needs, and still less in

what combination they produce the best

effect; they simply tell what kind and

ments with special fertilizers on grape vines and strawberries. Prof. Penhallow then read another paper written by Prof. Goessman, dealing with the

The trees under discussion, the writer, said

were planted Prof. by S.T. Maynord Mich., at dif-

disease known as THE YELLOWS OF THE PEACH.

ferent times, beginning with 1869, and those under special treatment for the disease called the Yellows in 1870; of this planting those on the top of the knoll in light soil have shown the greatest indication of the disease, while those within seventy-five yards, in loose and richer lands, appear to-day perfectly healthy. For five years after planting the trees received but little care, and little, if any, manuring. The land has been kept light and mellow by ploughing once or twice. Two rows of the trees received, in 1876, a dressing with two different chemical fertilizers. trees had been planted twenty feet apart in every direction. The trees which received either one of these fertilizers made a better growth, and produced more and better truit since, than the trees adjoining. The special treatment of the diseased peach trees, pronounced by good authority to be suffering from the yellows, bagan in 1878, when it appeared on the top of the knoll in the College orchard. The general appearance of the diseased trees suggested at first that an abnormal condition of the soil might

be the cause, ascribed either to a more or less general exhaustion, or to an absence of only some one or other escential elements of plant food, or to the presence of some injurious substance accumulated in the soil. He was

lands, when upon adjoining fertilized plots no eign could be noticed. On the other hand, the healthy condition of the roots. even to the last stoge of the disease, and the gradual disappearance of the green colour, indicate insufficient production of chloraphyll which causes the gradual change from healthy appearance to a sickly one. This seems to point towards a localized trouble, a possible interference with the normal cellular functions or a possible alteration of the osmatic action of the cellplar tissue, and thus subsequent death of its affected parts. The writer began, in 1878, to treat slightly affected trees with a phosphate fertilizer in the usual proportion, adding at the same time from three to four pounds of chloride of potassium for every tree, whilst the diseased branches were cut back once or twice to the healthy wood, soon after the new growth of the branches regained its green color. The details of this work were carried out by Prot. Maynard, who to-day reports these trees in a vigorous condition. The writer and Prof. D. P. Penhallow made a study of the condition of the cellular tissues in branches from once diseased but now in a healthy condition. The results showed a remarkable difference in the composition of the mineral constituents of the healthy and the diseased plant. The difference is mest remarkable as far as potash and lime are concerned; the difference is more conspicuous in the branches than in the finit. The diseased objects contain less potneh and more lime than in the case of the healthy ones. Prof. Penhallow's investigation showed that healthy wood shows comparatively little stored starch, but fungus growth is present in the outer layers of the back ; diseased wood shows an abnormal small development of the cells and the invariable presence of large quantities of starch-also au shuadence of fungua growth, diseased leaves show the presence of fungus growth, discoloration and colls filled with starch; the fungus appears first on the surface of the trunk or branches, and thence enters the woody structure when the conditions are favcrible; there is little or no difference between the tissues and cell contents before and after the leaves fall; while fungus is abundant on diseased trees, it is also to be found on trees which once diseased had been restored to a condition of vigorous health. These results pointed towards an interior disorder before the fungus enters the dying tisene. The results are but suggestive of a indicious joined application of microscope and balance, and cannot full to promote the

REVIEW OF BOOKS.

various fungus diseases of plants.

knowledge regarding the first cause of

"CATHOLIC FLOWERS FROM PROTESTANT GAR-DENS" is the title of an interesting volume recently edited by Mr. James J. Treacy. The work has met with general favor, and the Holy Father has been pleased to send the editor liis Apostolic Benediction. volume, which is handsamely bound in fine cloth, with gold and ink designs, contains some of the choicest gems gathered in the wilderness of Protestant literature. Byron, Tennyson, Oscar Wilde, Scott and other famed Protestant poets are represented therein. In perusing the productions of these great poetical geniuses, the Catholic reader cannot fail to experience a surprise as delightful as it is instructive and unexpected, for he finds that there was at least a moment in the lives of these men when they could not refuse to give way to admiration and sing the glories of the "smalle Church. This work is published by " J. Kenmiy, Excelsion Catholic Publishing . are, 5 Barcley street, New York.

THE CATHOLIC PIONERS OF AMERICA. By Dr. John O'Kane Murray. Published by P.

J. Kenedy, New York. This volume will be found to be not the least valuable and useful of the several works of which Dr. O'Kane Murray is the gifted but whose mount the generality of historians would redound on their religion. This work will consequently be found to take the place of a useful necessary appendix to the standard histories of America.

GROWTH OF AMERICAN WEALTH.

No article has been more quoted and discussed than the article of Mr. Mulhall in Bradstreet's . Journal regarding the comparative wealth of different states. According to this authority the wealth of the United States in 1800, when the population was a little over five million amounted to \$1,110,-000,000, or an average of \$210 for each inhabitant. At the present time, with the population at fifty million, it amounts to \$50,000,-000,000, or an average of \$1,000 for each American citizen. The items, which make up this total, are as follows:-

	Millions
	of dollars
Ratiwaye	5,22
Tarms	
Cattle	
Manufacturers	
Houses	
Furniture	
Forests, miner, canals	
Bullion	
Shipping	
Public works, etc	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
•	. 40 7

Total The national debt, amounting to \$1,650,-000,000, should not be deducted from the above, since most of it is held by Americans, and the same may be said of municipal or other local debts. The rapid increase in the wealth of the American republic is due in no small measure to the vast immigration of Europeans. The increase of wealth in the ten years ending 1880 would be sufficient to buy up the whole Austrian empire, or to pay for the aggregate value of Italy, Holland and Belgium. Nevertheless the average of wealth is less in the United States than in the British Empire, as shown thus:-

habitant. Wealth. United States....\$49,770,000,000 \$ 900 United Kingdon . . . 44,100,000,000

France 37,200,000,000 1,045
While population has only trembled, the growth of the agricultural interests has been five fold; and, whether we regard the value of crops or of cattle, the ratio per inhabitant is almost double what it was 40 years ago. Manufactures have increased five fold in value within thirty years, and the consumption of raw cotton rising from 14 to 18 pounds per inhabitant. The shipping interest has declined to the point where it stood in 1830: the number of tons per inhabitant having in a short time and without pain, Putnam's been for each of the decennial years from Painless Corn Extractor has already been used 1830 to 1880 respectively, 9, 13, 15, 17, 11, 9. by thousands, and each person who has given

COMMENTS AND CLIPPINGS

Wilhelmina Rousseau, known to all Philsiciphia as a beggar, accumulated about \$15,000 in five years, and has returned to Belginu with her fortune.

Buitish soldiers in Egypt are to wear a uniform which includes three primary colorsbests of untanned buff vellow leather, blue trousers, and scarlet red jackets.

Few English state:men ever visit Ireland, notwithstanding in a fact that Irish affairs for the last century have occupied a great portion of their thoughts. Lord Beaconsfield was never there, and Mr. Gudstone visited it the first time only a lew years ago. Four fashionable London theatres the Roy-

alty, Prince of Wales, Strand and Criterion, are ordered closed by the Lord Chamberlain, who considers them fire traps. The first will be extensively altered, the next two wholly rebuilt, and the latter abandoned.

Even the ledians are becoming prohibitionists out West. Some of the red men at the Pine Ridge agency, Dakota, have asked the agent to post notices offering \$50 reward for evidence by which any person is convicted of furnishing liquor to Indians under the law, and the savages will themselves pay the

Naturalists in Pittsburgh are discussing the reasoning powers of enimals, the subject, being suggested by the suicide of a dog. leg was broken, and it whined pircously for several days. Finally, in an apparent fit of desperation, it limped out to the bridge and jumped into the river. Those who witnessed the act believe that it was premeditated Euicide.

A. B. Camp a miner at San Benite Cal. less his family in New England, years ago, and went West to seek his fortune. Having prospered, he sent for his wife. He was in the mine when she arrived, and there she followed kim, getting an affectionate reception. They started to leave the mine, he going in advance, when a part of the tunnel caved in, and she was killed.

Antoine Gerin-Lajoie, who recently died at Ottawo, will be long remembered by his countrymen in Canada, for he wrote their natiqual song. " Le Canadien Errant." There is hardly a man, woman, or child in Canada who does not know the simple long by heart, and it can be heard almost any evening among the Canadians of New England factory towns and in the French settlements of the iar West. N. Y. Sun.

Parisian society is considerably Augileized. The cafes are taking the names of taverns and bars. The aristocracy give their children English names, and it is considered the right thing to have none but English servants and speak to them in English. Dinner is served in the English style. On some tables even English dry sherry has made its appearance. The Prince of Wales is the modern French exquisite's model of manners and elegance.

FOUR YEARS WITH LUNATICS.

AN AGED GARDENER'S ACCOUNT OF HIS CONFINE-MENT IN THE MINEOLA ASYLUM.

Austin McNamara, who for four years has been confined in the Queen's County Asylum for the Incane, and who was discharged on Menday by Justice Barnard on the ground that he was wholly rational, has returned to his former residence at Laure! Hill, near the entranco of Calvary Cemetery, where he lived when he was gardener for the cometery under the appointment of Archbishop Hughes. suffering from bruises apon his treast and ankles, injuries which he avers he received in the asylum. One of the keepers, he says, jumped on his chest one day with all his force, and then they strapped him about the legs with a heavy strap, and beat him so hard about the hips that he will never be able to use his legs ne well as before. While in the asylum, he yet cannot produce a perfect seed. of which Dr. O'Kane Murray is the gifted he well as before. While in the asylum, he knowing now what kind of element author. It contains the lives, briefly sketched, says, he was kept in filthy surroundings, and Knowing now what kind of element author. It contains the lives, briefly sketched, says, he was kept in filthy surroundings, and known and produce and mush. The was led upon small potatoes and mush. building, he cave, is 102 years old; and was formerly a gaol. While he was in the asylum he wrote many letters of complaint, but they were all intercepted, and he received but one letter in the four years. That one, which told him of the death of a sister in Liverpool, he avers, was kept for three months by Dr. Rogers before it was delivered.

As to the two men who were killed in the asylum while he was there, he says that they were murdered by a lunatic, who wrenched a lid off a closet and struck a man from College Point upon the head with it. In spite of this assault, both were locked up in the same room that night, and during the night the murderous innatic choked the patient from College Point to death, and a few nights afterward killed another patient, who was from Flushing, in the same way. McNamara says that he shaved the face of the first corpse, and is ready to swear to the manner of his death. Santord, a son-in-law of Dr. Rogers, was cognizant of the facts, and McNamara said that he heard Dr. Rogers say to Sanford: "Don't tell any one of this." Mc-Namara, however, told Dr. Ordronaux of it, and cave that he added : "This is more of a slaughter house than anything else." The douth of these two men, he says, was never investigated, and for telling the secret he was confined in a room for about a year.

McNamara affirmed other instances of cruelty and indifference to patients when at the point of death. He says that the men who are employed as keepers are ignorant emigrants taken fresh from Castle Garden because they are chesp. He says that many deaths occurred in the asylum that should have been investigated by a Coroner. McNamara, who is about 65 years old, seems

to be wholly sane. His eyes are clear and frunk in expression. Summing up his experience in the asylum, he said :- " What I suffered during those four years no one will ever know besides God Almighty and myself." He explained that he secured warrants for the arrest of some persons who assaulted him in 1878, and pending their prosecution he was taken sick. When he recovered he was entrapped into going to Jamaica, and was committed upon certificates signed by Drs. Wood and Hendrickson. He insists that the only question asked of him before his commitment was whether he was a Republican or a Democrat. When he started away in the custody of two men, he was told that he was being taken to Hunter's Point. Instead of that, he was landed in the asylum. McNamara thinks that he would have died in the asylum had not McNeill, a young man recently sent there while same, escaped and enlisted a lawyer in his behalf. - N.Y. Sun.

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