NEW CLUB A MODEL

Metropolitan's Building Receives Much Praise.

COMPLETE IN EVERY DETAIL

Structure Designed by New York Architects and Constructed by Local Contractors a Pleasing Addition to Beautiful Buildings of This City—Description of Interior.

Members of the Metropolitan Club who spent St. Patrick's Day in their new home are much pleased with the comforts and appointments of the building at Seventeenth and H streets. Indeed, this building is everywhere recognized as a model clubhouse, whether it is judged from its sightly exterior or from the general arrangement and ornate finish and furnishing of its interior.

The building was designed by Hines & La Farge, of New York, who made a special study of the best clubhouses of the country before evolving the plans of the home of Washington's most exclusive "Society," as it is called in the incorporation papers. Richardson & Burgess, the well-known firm of Washington contractors, constructed the building, and their work, as well as that of the architects, has been much admired during the brief period the clubhouse has been under general inspection.

House Is Five Stories High.

The building is five stories high, with basement. The exterior is simple, but imposing. The material is stone, with considerable detail worked out in the plain lines of the walls, bay windows, and other parts of the design. So that, while the building might be called severely plain, it has a distinctive character which speaks of great architectural taste and richness.

On the interior every convenience that an exclusive club of rich men could wish has been furnished. The building stands 112 feet on H street and 90 feet on Seventeenth street. The main entrance is on H street. This leads into a large central hall with mosaic floor and richly decorated ceiling, opening in turn upon the principal rooms of the first floor. The feature of this floor is the billiard-room, extending two-thirds of the width of the house on Seventeenth street. The walls and ceiling are of dark wood, the furniture very heavy and upholstered in black leather.

Has Fine Morning Room.

Opening from the billiard-room, in the corner of the building, is the morning-room. A feature of the hall and rooms of the first floor are three handsome fireplaces, done in wood to the ceiling, in keeping with the wall paneling.

From the entrance hall a wide stairway leads to a landing on the second floor. The steps are of mahogany, while the sides are of Siena marble. On the second floor the parlor is the conspicuous feature. This room, 33 by 84 feet in size, extends along the entire Seventeenth street side of the building. It is finished in French walnut. On this floor are the lounging-room, in curly birch; a central hall, reading and writing rooms, the buffet, and an open terrace. The third floor contains the library, reading-room, chessroom, two cardrooms, and the room for the board of governors.

Show Room on Fourth Floor.

On the fourth floor is found the show room of the whole house, the main dining-room. Like the parlor, it extends the length of the Seventeenth street side, but is two stories high. The ceiling is vaulted.

On this floor there is as complete a culinary outfit as can be found in the largest hotels. Excepting two private dining-rooms, the rest of the floor is designed as one great kitchen. It is not one room, but divided into serving-room, kitchen, scullery, chef's room, butcher shop, cold storage room, linen and silver room, and other adjuncts. The fifth floor is used for storage purposes.

The basement contains three wine cellars, separate white and colored servants' quarters, the boiler-room, and dynamo-room. All supplies are received from the alley in the rear. A service elevator near the rear entrance is used to promptly distribute these as they are received. There is also a passenger elevator opening from the hall.

FINDS SUN HAS ORBIT.

Goes Around It, Says Astronomer, Once in 25,726,682 Years.

Bethlehem, Pa., March 21.—Charles H. Bytel, an instructor at Nazareth Hall, Nazareth, and an astronomer of note, has come forward with an astronomical hypothesis that is already attracting attention of astronomers and observatories in many parts of the world. Prof. Bytel's declaration is contrary to the long-established contention that the sun is motionless. He declares he has established the fact that the sun has a true orbital motion. He has arrived at this conclusion after many months of hard labor and research, and combines his deductions under the caption of "Precession of the equinoxes."

According to Prof. Bytel's hypothesis, the precession of equinoxes is not caused by the moon, sun, and planets' attraction on the equatorial protuberances of the earth's surface, but it is directly due to the "original impulse" imparted by the sun's proper motion.

His achievement lies in the fact that he has discovered the laws and rules by which it can be proved that our luminary has a true orbital motion from east to west of .13792415016855387 6 seconds of arc per day, while our planet's revolution around the sun is from west to east.

The new laws and rules apply to all the planets and their satellites, and the theory admits of an exact mathematical demonstration. With the aid of these laws he has computed the sun's daily angular velocity and the period of revolution which is almost 9,396,469 days, or 25,726,682 solar years.

Prof. Bytel is a lineal descendant of Henrich Bytel, who was a noted missionary, and has been a school teacher and professor of music for forty-five years. Rev. Dr. Lyman Abbott is a former German pupil of his. Prof. Bytel is sixty-two years old.

Girl Telegraphers in India.

Acting upon the recommendation of the telegraph committee, the Indian government has just authorized the employment of women operators.

The candidates must be between eighteen and thirty years of age, and they must be unmarried or widows. They must undergo a training of twelve months in the telegraph training classes, during which time, says Harper's Weekly, they will receive $6.65 a month, the same allowance that is drawn by male learners. Selected candidates on leaving the training classes will be on probation for one year. Upon appointment they will receive salaries varying from $10 to $26.65, which are very large upon the scale of living expenses in India. There will be pensions, with no liability to transfer; but resignation will be compulsory in the event of marriage.

NEW HOME OF METROPOLITAN CLUB.

Photo by Harris-Ewing.

Designed by Hines & La Farge, of New York, and constructed by Richardson & Burgess, of this city.

ASIA MINOR FORESTS

Their Depletion Results in Crop Failure at Smyrna.

VALUABLE TIMBER DESTROYED

Shepherds Wasteful in Cutting Wood for Building Huts and Keeping Fires—Sawmills Lacking, and Railroads Wanting to Develop the Lumber Industry.

Consul Ernest L. Harris, writing from Smyrna, gives some interesting facts regarding the forests of Asia Minor, the uses of wood in that country, and the effects of the depletion of the wood ranges.

The trees of which the forests of Asia Minor are composed are the fir, pine, cypress, cedar, juniper, birch, chestnut, oak, plane, poplar, linden, beech, elm, ash, and willow. The old forests have disappeared and the tendency of nature to prepare the soil for a second growth is being continually defeated. As no industry has ever laid claims upon the forests of Asia Minor, their disappearance can be attributed only to the demand for firewood.

Fir and pine forests now exist in this country only on the high plateaus or mountain ranges, such as the Paphlagonian mountain range, which is located toward the shores of the Black Sea. In this region the rainfall is greater each year than in the vilayet of Smyrna. Beech, plane, and elm trees also thrive in this section, in the valleys and plains. In Armenia there are large forests of red beech, walnut, oak, and chestnut. There are said to be forests of large beeech trees in the country back of Trebizond, at some distance from the coast, and in the Ak Dagh Mountains near Amasia. It is also said that there are forests of tall pines not far from Angora. Between Smyrna and Konia there are no forests of importance. The Tmolus range is covered with fir and pine scrub, and the same is true, more or less, of the Salbaccus range at Denizli. It is nothing but thicket or undergrowth, as far as I have seen, and is used chiefly in burning charcoal.

Other Varieties of Trees.

The willow tree, which grows well in some parts of the country, especially near Angora, is to some degree protected from the inhabitants on account of the shade it affords in summer and because it grows rapidly and is supposed to act as a preventive against fever. The whiplike branches are often woven into beehives. The poplar is frequently found in large groves scattered about the countryside, and is used chiefly in constructing houses in the Turkish villages.

The oriental plane tree is found all over Asia Minor, but seldom in groves. They usually stand alone along the roadways and serve the traveler as half-way stations, where he finds some protection from the summer sun and a fountain. These trees also add considerable to the scenery of the country. They grow to be several hundred years old, and often attain such size that shepherds have been known to cut huts in the trunks of the standing trees, and their vitality is so great that they continue to live for years thereafter.

The plane is also a favorite shade tree. Smyrna has none, but Constantinople and the little valleys leading away from the Bosphorus, as well as most cities and villages in the interior, have large numbers of them. The Turks are fond of having them in front of their cafes and in the yards of their mosques.

Cypress a Stately Tree.

The oriental cypress is a stately tree, which grows to exceptional size in Turkey, and especially along the coast of Asia Minor. It is revered by the people and is planted in groves in every Turkish cemetery. These trees are an ornament to the country, and no Turkish landscape is complete without them. In the old cemetery of Smyrna the grove is several hundred years old, and an ancient stately cypress keeps watch over the tomb of Polycarp.

In various parts of this vilayet a certain kind of scrub oak flourishes, upon the leaves of which the gall wasp lays its eggs. These eggs become secreted in the cells of the plant, and after a time form excrescences the size of a berry, called gallnuts, from which a winged insect finally makes its way out and escapes. The nuts are green and white in color, and some 3,000 to 4,000 sacks are shipped to England, Germany, and Austria every year. Some gallnuts are exported to America for the purpose of making ink, but only small quantities are shipped from the port of Smyrna. In 1907 the value of the shipments to the United States was only $4,380.

Waste in Use of Timber.

In the opinion of experts the quality of the timber in Asia Minor is good. The state reserves to itself the control of the forests at all times, but there does not appear to be any system of forestry in this country, with the exception of a few experiment stations laid out near some of the railways which lead into Asia Minor. The peasants are permitted to chop and burn freely. A government permit is necessary only in case timber is to be exported.

The owner of some forests near the headwaters of the Boli Su River, who holds a permit to export timber, has given me a description of the manner of obtaining lumber in that region. Along most of the rivers which flow into the Black Sea there are many primitive sawmills, only a few of which are equipped with steam engines. The logs are dragged down the mountain side by horses and oxen, and rafted down the Boli Su to the mills, where they are sawed into lumber for shipment to Constantinople or other parts of Turkey. Lumber is transported on the Black Sea usually in sailing vessels.

Peculiar wandering tribes, who in winter house themselves and their flocks in timber huts, have done considerable harm to the forests of Asia Minor, especially in the vilayet of Smyrna. In order to obtain the necessary logs, or poles, for building their huts, they help themselves to any unprotected timber in the neighborhood. Shepherds attending flocks are also wasteful of timber, building fires of whatever trees are at hand.

Effects of Forest Depletion.

The disappearance of the forests in this country, especially in the vilayet of Smyrna, has been marked by greater degrees of heat and cold. The date palm has practically become extinct in these parts. In the winter and spring there are usually floods, which are destructive to life, property, and crops. In the summer there is not sufficient moisture in the soil of many districts, for the reason that the rain passes away at once down woodless ravines, without being absorbed by the ground.

As a result large tracts have become sterile. Creeks and brooks which formerly retained considerable water, even in the heat of summer, are now completely dried up a few weeks after the spring rains. These same creeks and brooks are becoming deeper each year by the process of floods, so that not only is the surface of the country greatly disfigured, but no bridges can be built strong enough to withstand the annual rush of waters. It thus becomes impossible to get the crops and fruits to market at the proper time.

Crop failures and famine in Asia Minor may therefore be traced to the lack of forests. The past year serves as a good example. The rains of January, 1907, were the heaviest known in this vilayet during several seasons. The floods everywhere in the Hermus and Meander valleys were greater than for forty years. Cold weather set in soon afterward, and for three weeks the thermometer stood at 5 degrees Fahrenheit above zero. The unpicked orange crop, ripe at that time, was destroyed, and the effects are being felt this season by a great shortage in oranges. Nearly every pepper tree in this vilayet was killed.

There is a grain famine throughout Asia Minor, and wheat and barley, ordinarily products of export from this vilayet, are not now allowed to be sent out of the country. In other words, a country which usually produces not only sufficient grain for its own use, but large quantities for export, is now compelled to purchase these products in the markets of other countries.

GERMANY'S GREAT GROWTH.

Berlin Has Outdistanced Chicago. Points of Superiority.

We think Chicago a miracle; but since 1870, observes a writer in the Atlantic Monthly, Berlin has grown relatively and absolutely faster than Chicago, the Greater Berlin having to-day a population of over 3,000,000. Thirty years ago the population of Leipzig was less than 150,000; to-day it is more than half a million. Hamburg then had almost precisely the same population as Boston; to-day, although Boston's growth his been so great, Hamburg, with more than 800,000 people, is larger than Boston; the growth of her commerce has been vastly greater, and her docks and port facilities are incomparably finer—models commended to Boston for imitation at this very moment by an expert commission. The Hamburg-American Line and the North German Lloyd are the largest steamship companies in the world, larger than any English companies, the former having more than 150 ocean steamers in its service. The great railway stations are the finest in Europe, incomparably superior to those in the great English cities. The finest of them all as yet, the new union station now building at Leipzig, will cost $25,000,000.

The University of Berlin is planning a special department devoted to the wise and beautiful laying out of cities, with provision for making the lectures available to the directing municipal officials of Germany. In industrial and technical education, from top to bottom, Germany's achievements are far ahead of England, as she is in so much ahead of us. It is by science that she has pushed her way to industrial supremacy in so many fields; that she has captured the chemical industries of Europe, and in so large degree the electrical industries, and that she is distancing or crowding England and ourselves in the markets of the world.

For His Health.

From Judy.

"Ever been in Siberia?" asked the reporter.

"Er—yes," answered the distinguished refugee; "I took a knouting there one summer."

BANISH FIRE TRAPS

Too Much Combustible Material in Buildings.

SHOULD BE LIMITED BY LAW

Hugh T. Wreaks, of National Fire Protection Association, Declares that Inflammable Substances Used in Construction Invite Fire—Points Out How Difficulty Is to Be Met.

The recent tragedy in Cleveland, in which one of the suburbs was plunged into heart-rending horror and grief by the burning of the schoolhouse and the death of 150 or more little children, has accentuated ideas held by architects, builders, and fire insurance men regarding the use of too much combustible material in the construction of large buildings.

In an addreess delivered recently by Hugh T. Wreaks, of the National Fire Protection Association, the subject is discussed with great vigor and suggestiveness. In part, Mr. Wreaks said:

"Fire danger is not a danger from flames, as is commonly supposed, but from heat. It is also true that every known substance will lose its strength or disintegrate under some degree of heat, the only difference being that some substances will carry flame readily and others will not, and that it takes much higher flame to affect some materials than others.

How to Prevent Fires.

"This then brings us to the relative importance of preventing intense heat in case of fire, by limiting the amount of inflammable material in a given building, proportionate to the way in which this building is divided off into areas separated from each other and from outside exposure by proper cut-offs and equipped with sprinklers and other extinguishing devices and also constructed from a fire resistant point of view. Or, in other words, it would seem that public safety required more limitation of combustible material permitted in any given type of building, according to the capacity of the building to resist fire and retard the spread of fire from one section to another, and that this limitation, on account of public safety, should be recognized by law.

"This would make a law amalogous to the building law, limiting the carrying capacity of each floor according to its strength, and, as a measure of public safety, it would certainly prove of value in retarding the spread of fire and in preventing conflagrations.

"An application of such a law would, in the speaker's opinion, unquestionably have made the recent Parker Building fire in New York more possible of handling and controlling.

Retardants Are Necessary.

"To complete the so-called fireproof building all openings must be protected by retardants, which are self-closing in case of fire, such as fireproof doors, windows, and shutters, and equipped with extinguishing devices, such as automatic sprinklers, fire hose, and chemical extinguishers; also such signaling devices as may sound proper alarms either locally or to fire headquarters, or both, in case of fire. And similar extinguishing and signaling apparatus would be even more necessary in nonfire-resistant buildings. And on these latter the addition of noninflammable, or better yet, noncombustible roofs, would seem to be of interest as important protection against fires from other buildings. We would then have the following devices:

"a. Fire doors;
"b. Fire shutters;
"c. Wire glass windows;
"d. Automatic sprinklers;
"e. Fire hose, cotton, rubber lines;
"f. Fire hose, linen;
"g. Chemical extinguishers;
"h. Noninflammable or noncombustible roofs.

"With the end in view of lessening the fire hazard," continued Mr. Wreaks, "two questions naturally present themselves:

"1. Using of such material in the building proper as shall make same fire resisting or fireproof.

"2. The use of fire retardant, extinguishing, and signaling devices either to supplement noninflammable construction or to lessen the hazard due to ordinary construction, so called (nonfireproof).

"In the early days of this country wood construction, owing to cheapness of supply, was largely prevalent, except in the better class of buildings, which had one or more walls of brick; large and frequent conflagrations being prevented owing to limited heights of buildings and frequent open spaces; the big fires in New York, Boston, and Chicago being exceptions to this rule.

Use of Iron in Buildings.

"The first attempt at noninflammable construction was in the use of cast and wrought iron for columns, girders, floor beams, and even fronts, without any attempt to protect iron from heat of possible fire, so that owing to buckling and distortion and absolute collapse of iron construction, under influence of severe heat, this form of construction was hardly much of an advance over wooden buildings, especially so when these buildings were filled with inflammable material, as shown in disastrous results due to severe fires in buildings of this type.

"The next step, and that which obtains in much of the best protection of to-day, consisted of iron frame construction, in which all metal structural members were covered with some material which would withstand heat, and floors and ceilings and walls being built of brick, terra cotta, concrete, or other material which was capable of resisting severe heat without suffering any material damage.

"In this connection it might not be amiss to give a brief description of the characteristics of various material used in building, as same relates to their fire-resistant qualities and the effect of fire on them.

"Starting off with wood, we find that its ready inflammability limits its use, except in the case of very large dimension timbers, widely spaced in so-called mill construction, which, by the way, possesses many points of practical advantage.

Resort to Other Material.

"Other materials used in building construction may be classed as noninflammable, but have different values in respect to damage at high temperature and sudden cooling. In fires of any severity the temperature will vary from 1,500 degrees to 3,000 degrees Fahrenheit; air currents causing alternate heating and cooling, which sometimes lasts for hours, and any material which has survived this test of endurance is liable to be subjected to sudden streams of cold water from fire hose, with consequent cooling and contractive action.

"Stone shows poor quality of resistance when much exposed to the above conditions, cracking or splitting apart or being calcined on the surface. Among ordinary building stones, sandstone is least affected, granite splits and flies apart, marble and limestone calcine and disintegrate.

"Brick is a highly satisfactory material under above conditions, although varying in hardness according to the degree of firing it has been subjected to in the kiln; but this point is not serious, as soft brick would be of little use in most construction work. It is also affected by different kinds of clay used in its construction. Enameled brick will resist enormous heat, and is, therefore, a splendid material for facing where ornamental finish is desired.

"One feature about bricks is their use in bulk; that is to say, in walls from twelve inches to twenty inches thick, this making a very effective fire stop.

"Iron and steel, which may be considered as the building material of the present and the future, at least in all but ordinary-size buildings, although able to withstand considerable high temperature without melting, will lose their strength at a comparatively low temperature, while also possessing the bad features of high conductivity and considerable expansion under heat, the two latter features working together to the disadvantage of this material where exposed to severe heat.

Iron Melts at 2,000 Degrees.

"In figures, cast iron will melt between 2,000 to 2,300 degrees Fahrenheit, and steel between 2,370 and 2,500 degrees. At a temperature of about 1,200 degrees, maintained from about thirty minutes to one hour, both metals will show serious impairment in strength. At a temperature of 1,000 degrees a bar of iron ten feet long will expand in length about four-fifths of an inch.

"Terra Cotta is clay baked in shape of hollow blocks, frequently made in molds, and is used principally for ornamental work or a protecting medium of iron or metal against heat, or for both of these purposes; also used in floor arches. It is made in two varieties, the dense or hard and the porous type. It has little strength structurally, but has a high resistance power to heat and a very low conductivity, and when properly applied forms an almost indestructible material and is of great value for protecting structural steel work in buildings.

"Of late years concrete has been largely used, both for fireproofing in place of terra cotta and for structural work in place of masonry, brick, iron, and steel; and is asserted, on the one hand to be the most fireproof substance that can be used, and on the other hand to possess no practical value as a fire retardent. Between these extremes its true value unquestionably lies.

"Concrete is a good fire resistant, and, while inferior to terra cotta when exposed to long, severe heats as a fire resistant, this fact would appear to be compensated for by absence of joints, which are a weak point in terra cotta. Of the various types of concrete, cinder concrete suffers least from severe heat, but its value in this respect as a protection for steel and iron is somewhat offset by the apparent destructive action of cinders in concrete on steel and iron with which it comes in contact."

RAPID GROWTH OF WASHINGTON BANKS

Continued from Page One.

considerable business is carried on with commercial paper. Stocks and bonds form a part of this collateral, and in other cases notes bear the names of responsible indorsers. National banks do not loan upon real estate or mortgages, this branch of business being carried on by trust companies, savings banks, and building and loan associations.

Mixing of Banking Lines.

The trust companies and most of the savings banks of Washington carry on commercial banking, their houses being located where they naturally command a volume of such deposits. On bona fide savings the savings banks pay 3 per cent interest. The trust companies pay 2 per cent on check deposits, the latest one formed paying 3 per cent. On long-time loans a larger interest is paid, and trust companies invest money for their patrons in various forms of dividend and interest paying investments.

The trust companies as a rule carry on a savings department similar to a savings bank, and most of them have a special safe deposit department, a feature which has been adopted by some of the national banks, to the extent of furnishing special lockers for stocks, bonds, and negotiable paper.

Tends to a Common Type.

In Washington, as in all parts of the country in the large commercial cities, the banking business tends to a common type, of many departments, and a variety of functions which would not have been dreamed of at an earlier day. The complexities of modern business have forced upon financial institutions many things which would once have been regarded as dangerous innovations. It probably costs twice or three times as much to carry on a bank now as it did in 1850. The volume of business is greater, accounting has changed, and while it is now easier, with the card index, the adding machine, the loose-leafed ledger, the multiple file, it is also more costly. Old, dingy, and sometimes dirty bank buildings have given place to marble palaces, clean, white, blazing with electricity on a dark day, and fitted out with every conceivable means of comfort for patrons and visitors. The modern bank is not only a safe place for the deposit of money, but it is a convenient and luxurious office for the transaction of business. Its lobby is a busy scene during business hours, where business men meet and converse, exchange the news of the day, greet acquaintances, and feel the pulse of the commercial world.

Use of Monolithic Concrete.

In the use of monolithic concrete there is no rule by which it may be determined at what time it is entirely safe to remove the timber which supports the mass while it is setting, but an authority on the subjects says: To formulate a comprehensive rule covering these variable conditions may be difficult, but it is easy to demand that concrete not frozen shall be set sufficiently hard so that if tested by driving a twenty-penny wire spike into it with an ordinary carpenter's hammer the spike shall double up after penetrating approximately one inch; and if the concrete is not sufficiently good to withstand this test after having had ample time to set, it is not good enough to remain and do business in a structure that may be deemed safe.

BRICKS AND MORTAR.

Say! hain't you all tired of mortar and bricks?
Wouldn't you like to go where nobody kicks?
Gosh! hain't you all tired of being so proper?
Don't you want to go whar they don't ker a copper?

They say fishin' is fine in the Bingville crick.
I want to go there so bad—it most makes me sick.
They say Bill Hepburn kotched a five-pound trout,
And all winter long he wuz mussin his gout.

They say Hank Dewberry's wife mixed a mustard plaster,
Put it on Hank's muscle, so's he cud draw fish in faster.
"Cy" Hoskins' girl baked a bull lot of cream pies.
Ham Wilson hopes Cy'll choke on 'em if he tells fish lies.

I'm fixin' up the flower beds with rake and spade,
Jist as proper an' good as a man kin be made.
I'm jist heid in with bricks and mortar,
And I can't help but feel I hadn't oughter.

I'd like to be prambulatin' along Bingville pike,
Fishin' rod, an bait, an' Mrs. Hoff's son "Ike."
I'll bet I'd be singin' "Comin' Thro' the Rye."
Ike 'ud wink an' say, "Tryin' to get your throat dry?"

Bingville sun jist shinin' o'er the hill.
Miss Hawkins' bees a-hummin' fit to kill,
Birds a-callin' from them Bingville trees,
Gosh! I wish I hadn't rheumatiz in both my knees.

Bingville birds swingin' in the old cherry tree.
Bingville frogs a-croakin', comfo'tin' as kin be.
Just the sweetest music, all done by "ear."
I'd be willin' to work, if I cud loaf this time of year.

I guess, like Bud Hinckley, I hain't right in my head.
Ouch! There goes that rheumatiz; I'd better go to bed.
I hope I'll go to dreamin' I'm on the Bingville pike,
Just a-whistlin' an' a singin' an' doin' as I like.

ALLIE SHARPE BALCH.
1326 Euclid street.