# WHERE HUGE WARSHIPS CAN BE REPAIRED.

## *DRYDOCKS AND WETDOCKS DIFFER—HOW FORMER ARE CONSTRUCTED.*

Several things have recently set people thinking about drydocks. One is the approaching completion of a magnificent specimen at the Portsmouth, (N. H.) Navy Yard. Another is necessity for repairs to Russian and Japanese warships resulting from the present war in the East.

Wetdocks, it will be remembered, are huge inclosures into which merchant vessels are introduced while loading and unloading, to escape the effects of great tidal rises and falls. At Liverpool, Havre, Hamburg and some other foreign ports the semi-diurnal change of sea level often amounts to 15 or 20 feet. A ship cannot conveniently discharge or take on a cargo if she is lifted and lowered in that fashion. It is necessary for her to go into a basin with water tight gates, where she can maintain more uniform relations with the adjacent quay walls. A drydock is a basin with gates of different design, and serving another purpose. When a vessel is confined there the water is pumped out so that workmen may examine, clean or patch her hull.

In several ways the construction of this kind of dock is a more difficult and complicated undertaking. The inner sides are not vertical, but sloping to conform roughly to the shape of a ship, and are broken up into steps or altars for the benefit of those employed there. Again, it is important that the bottom and sides must be practically impervious to water. The excavation must extend 25 or 30—sometimes even 40—feet below high water mark, and unless the right precautions are observed, leaks will develop which will embarrass operations inside the dock and perhaps threaten the permanence of the basin itself. Some docks have been hewn out of solid rock, others have been built of timber, stone or brick, while concrete is now used liberally in constructing both floors and walls. Occasionally the character of the soil will create serious engineering difficulties. Quicksand under one of the docks at the Brooklyn Navy Yard a few years ago made much mischief, but the trouble was finally averted.

As the biggest merchant vessels are larger than the biggest warships, the former really require the more spacious accommodations, especially in the matter of length. Thus the Deutschland is 686 feet long, the Celtic and Cedric 700, the Oceanic 705, the Kaiser Wilhelm II 706½ and the Baltic 725. Hence there are docks from 750 to 800 feet long just for the accommodation of such ships. On the other hand, the class of armored cruisers of which the Tennessee is a type will be only 502 feet long, or two feet more than British vessels of the King Alfred class. Probably the limit is reached by the Terrible, which is 520 feet in length, while the vast majority of cruisers are much shorter. Russia's Bayan measures 445 feet in length, the Rossia 480 and the Askold 426 feet, while the Variag was a trifle shorter. When it comes to battleships, a still further reduction in length is observed, though the width is proportionately greater. The Retvizan is 375 feet long, and the Czarewitch 388. The Missouri is scarcely 400 feet long. Those enormous vessels the Connecticut and Minnesota, which are to have a displacement of 16,000 tons each, will not be over 450 feet long, while the British battleships of the King Edward VII class, displacing 16,350 tons, are only 425 feet in length. It is interesting to note that the beam of these last mentioned vessels (78 feet) is almost one-fifth of the length, whereas that of the King Alfred (cruiser) is one-seventh, and the beam of the Kaiser Wilhelm II (72 feet) is about one-tenth of her length.

In order to prevent accidents in docking, and also to allow room for the workmen, the dock must be larger than the vessel she accommodates. Much curiosity has been evinced lately regarding the drydock at Port Arthur, originally built by the Chinese, but afterward slightly enlarged by the Russians. In a work published by the Bureau of Naval Intelligence at Washington in 1900 the length of this dock at the top is put at 452 feet and that on the blocks at 370 feet. At the most favorable state of the "spring" tide there is 32 feet of water on her sill, but in the harbor outside the dock there is said to be only three and one-half fathoms of water at low tide. Every fortnight there should be a period of about two hours when the tide would add nine feet to this, making about thirty feet of water in a narrow channel. At other times the rise would probably not be over six or seven feet, giving only 27 or 28 feet in the channel at high tide. As the Retvizan was designed to draw 25 feet and the Czarewitch and Poltava 26, there might be trouble in getting them to the dock, if they were sufficiently waterlogged to sink two or three feet more. In any case it would be a ticklish task.

Another question which would arise relates to the width of the entrance. This is put at 72 feet in the work of reference just mentioned, though the width given by Russian and French map makers is 78 feet. Until this uncertainty is cleared up it must remain doubtful whether the entrance to the Port Arthur docks is wide enough for the battleships recently injured. The beam of the Retvizan is 72 feet 2 inches and that of the Czarewitch 75 feet. At Vladivostok Russia has a first class dock, 550 feet long, 90 feet wide and giving full 30 feet on the sill, besides a smaller one (of the floating type) only 300 feet long, with two small basins.

Japan is very much better off. At Nagasaki alone she has three drydocks, of which two will accommodate her biggest warships. At Yokosuka there are two measuring 502½ and 518¼ feet, respectively, in length, or amply large enough for any present naval needs. Besides, she has the following: At Kobe one drydock measuring 525 feet; at Uraga Bay, one of 500 feet and two smaller ones; at Kure, a large but shallow one; at Tokio, one measuring 381 feet, and at Osaka, one 250 feet long.

Among the larger American naval docks are those in Brooklyn and on Puget Sound. The largest of four or five at the former station is 668 feet in length at the top and 624 feet on the floor, while its breadth is 105 feet at the top and 70 at the bottom. There is 29 feet of water on the sill at mean high tide. The Puget Sound dock is 625 feet long and 130 feet wide at the top, and has 30 feet of water on the sill under the most favorable circumstances.

The dock at Portsmouth, N. H., which is now nearly ready for service, is one of four authorized a few years ago. The three others are situated at Charlestown (near Boston), League Island (near Philadelphia), and Mare Island (near San Francisco). According to "The Granite Monthly" these are 750 feet long and 150 feet wide at the top and have 30 feet of water at the entrance. For the new steamship dock 20,500 cubic yards of granite and 43,000 barrels of cement were required. In handling most of this material a travelling crane was used. This is a bridgelike structure, the ends of which rest on railways at the side of the excavation, and which can be moved lengthwise over it. Heavy weights which are suspended from the crane can also be moved laterally over the dock. When the work is entirely finished the crane is removed.

The operation of docking a vessel, especially a heavy one, is an exceedingly delicate one. When she is finally in place she is expected to rest upon sets of wooden blocks under her keel. In order that she may not be injured by an unequal distribution of the weight, these must be arranged in such a way that when she is supported only in this way the burden is divided evenly. It is usual, therefore, for the officer in charge—in the United States Navy he is a constructor—to make a "docking plan" in advance, which is designed with special reference to the particular ship that is to be docked. The blocks are adjusted accordingly, both in respect to spacing and height, while the dock is empty and dry. The Oregon weighs over ten thousand tons, and is 348 feet long. Some of the newer battleships are larger and heavier. Manifestly an arrangement that would do for the Oregon would not suit them or big cruisers like the Tennessee. Another critical question relates to the depth of water on the sill. If this is only twenty-five feet and the ship has a draught of twenty-seven she must be lightened temporarily by depositing guns or stores on land. Constructor Baxter, now at the Brooklyn yard, has taken ships in when there was only two inches to spare between the keel and the sill. A man must know exactly what he is about at such times, and even then the anxiety is enough to turn his hair gray.

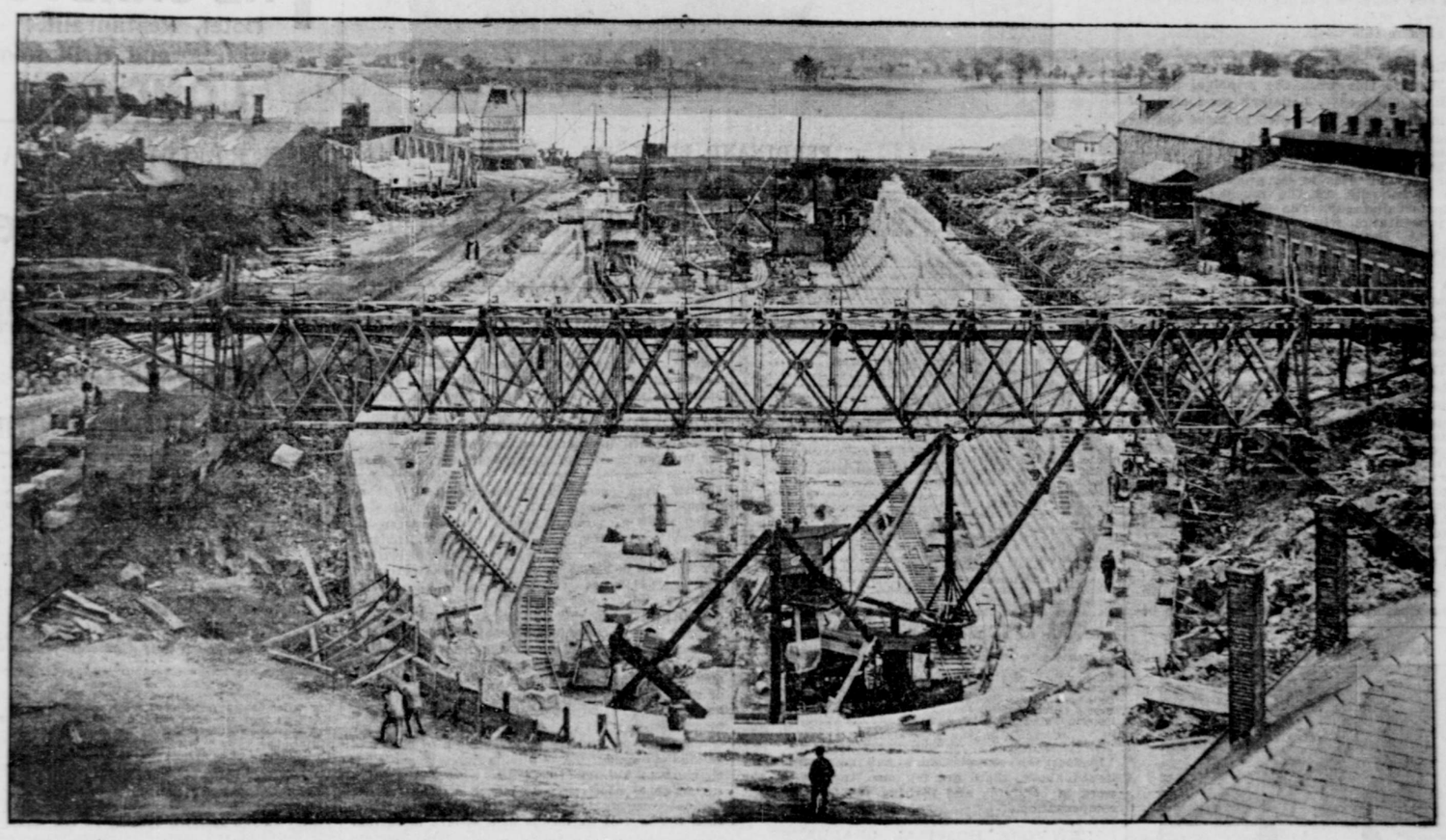
All of the preliminaries having been attended to, and water having been let in again to the dock, it is necessary to watch the state of the tide. With vessels of moderate size and draught, this precaution is less important than with heavier ships. The stout, lens shaped caisson which serves as a gate having been removed, the vessel is gently pushed and pulled by tugs to the entrance. Lines are carried forward from the bow of the ship to a capstan at the head of the dock. Other lines are run out to other capstans on the sides of the inclosure. By regulating the strain on these, the ship can be brought to her proper position when the keel blocks are completely submerged and out of sight. Permanent and temporary marks on the inner edge of the coping serve as guides to the eye during this proceeding. Efforts are sometimes made to bring the ship to within a fraction of an inch of the calculated position. In order to keep her exactly upright, spars, or "shores," of the proper length are introduced at intervals between the walls of the dock and the sides of the vessel, in nearly horizontal positions. If their dimensions and place have been rightly planned, they will press only in a gentle fashion against the hull. Indeed, if the vessel is herself on an even keel only a little bracing will be needed to keep her there. But if the adjustment is imperfect the shores may punch holes in her sides.

When the constructor is satisfied that the vessel is exactly where he wants to have her, the caisson is swung into place at the entrance, and the pumps are started. In an hour or two the dock is dry and the business of inspection, cleaning, painting or repair, for which these measures were taken, can begin.

The type of dock to which reference has thus far been made is absolutely permanent in position. Such inclosures are excavated from the earth or rock, and their bottoms and sides always remain stationary. Another class of drydock, employed both for the merchant marine and naval vessels, is arranged differently. The floating drydock is essentially a series of hollow tanks or pontoons, so combined as to constitute a continuous platform. By letting in water the latter can be lowered to the necessary depth—say twenty or thirty feet. The ship is hauled into position over it, and pumps then exhaust the water from the tanks. The latter slowly rise until the upper surface of the platform is a few feet above the level of the harbor. At the sides of the dock, and constituting a part of it, are light superstructures to cover the machinery and assist in subsequent operations. But the general system of keel blocks and shores with a floating dock is the same as with the other kind. Floating docks may be constructed hundreds or thousands of miles from the place where they are to be used and towed to their scene of action. When they enter into actual service, though, they are carefully anchored.

One of the most recent and largest products of this class was built in England in 1896-'97 for Havana. Subsequently the United States paid Spain a handsome sum for it, and it was taken to another point in the West Indies. This is composed of five sections, or pontoons, and has a length of 450 feet. It can hoist a 10,000-ton ship out of water in two and a half hours. At Stettin, Germany, is another floating dock, which for a time was rated as the second best in the world. It is 510 feet long and 110 feet wide, and can handle a vessel of 11,000 tons. England has one at Bermuda, which is said to be able to hoist 16,500 tons, which is a trifle more than the weight of her heaviest battleships. The biggest in this country, if not in the world, was built near Baltimore, and in the autumn of 1901 it was towed around to Algiers, opposite New-Orleans, on the Mississippi River. The full length of the platform is 525 feet. Its breadth is 120, and it is composed of five sections. Only three are needed to give the necessary lifting power, the others being added merely to give stability to the structure. One of the sections is 240 feet long. The pumps of this dock are designed to lift 18,000 tons, which is more than the weight of any battleship under construction or even authorized anywhere in the world.

A floating dock recently built for use in South Brooklyn is big enough to handle an Atlantic liner. The pumps are driven by electric motors, for which current is obtained from the great Edison station close at hand.



VIEW OF THE GREAT NEW DRYDOCK AT THE PORTSMOUTH (N. H.) NAVY YARD, TAKEN DURING CONSTRUCTION.

(Reproduced from the Granite Monthly by courtesy of the publishers.)

# *GOVERNORS ONCE WAIFS.*

## *Letters, Now City's, Tell of Work of Children's Aid Society.*

A collection of letters from leading citizens of this and other States makes up the contents of a scrapbook recently prepared by the Rev. C. L. Brace, secretary of the Children's Aid Society, of this city. Each of these letters is a testimonial to the work done by the society, for every one of the writers was once a waif on the streets of this city, and owes his present position to being placed in a good home by this organization. These letters are taken from the old annual reports of the society.

The writers are representatives of nearly every profession, men in public office and leaders in the financial world. All tell the same story of a hopeless home life or no home at all, of a few months spent under the influence of the Children's Aid Society, and then of the uplift of a good home into which they were placed by the officers of the society.

Many a boy got this first start at the Brace Farm School, established in 1894 by Mrs. Joseph M. White at Kensico Station, Westchester County. Here the street boys, ragged and dirty, are sent by the society, cleaned, given an entire new outfit of clothes, and put at the light, healthful work of the farm. In a little time the restless, undisciplined boy absorbs the refining atmosphere of his new environment, and acquires his first ideas of honesty and industry. After this preliminary training the boy is usually placed in the home of a farmer, where kind treatment and healthful home life is assured, and an honest citizen results from material that too often goes to swell the criminal classes.

One of the most striking testimonials in the scrapbook is that contained in a series of letters from Alaska of John G. Brady, now serving his second term as chief executive of the Territory. The first letter was written in 1871, when Mr. Brady was in Yale. His first recollections, he said, were of being left in charge of an aunt, who abandoned him after a little time to the streets, where he lived as a vagrant, picking up scanty meals about the docks and sleeping in dark stairways or old boxes and hogsheads about the wharves. He tells of climbing to the roofs of houses in the night and stealing the lead from the chimneys and selling it in the junk shops to get money to buy a ticket for the old Chatham Theatre.

Finally he fell in with an officer of the Children's Aid Society and was induced to go to Randall's Island, where he remained for two years. In 1859 an agent of the society sent him to the home of an Indiana lawyer, who owned a large farm near the town where he lived. He was treated as one of the family, had work on the farm in the summer and was sent to the village school in the winter. Later he taught school for several terms and finally decided to enter the ministry.

Taking the $300 he had saved from his wages he prepared himself for college and entered Yale, and at length, by his own efforts and the aid of his friends, completed his education, and in 1878 went to Alaska. There he got into mercantile business, and soon became third owner and manager of the Sitka Trading Company. When, by an act of Congress in 1884, Alaska was organized into a civil and judicial district he was made one of the four commissioners provided for by the act, and from then rapidly rose in the administrative circles of the Territory till he became its head. All this is told in the letters written from time to time by Mr. Brady to the officers of the society, to which he gives the credit for his present position.

Clement S. Edwards was taken as a street boy twenty-two years ago to Albert Lea, Minn., then a new born village, which has since become a busy little city. Two years ago Mr. Edwards wrote to the agent of the Children's Aid Society that sent him to Minnesota, telling him of his successful career in college, his admission to the bar and election to the office of City Attorney. He organized a military company and served through the war with Spain, and at its close was appointed to the staff of the Governor, with the rank of major.

Another letter is from Andrew H. Burke, written in 1891, when he was Governor of North Dakota. He tells of a visit to the East and his old school on Randall's Island, where he was placed by the Children's Aid Society for a little time before he, too, was sent to the West and given a home.

James A. Gray, elected to Congress from Ohio in 1895, is another writer. Another is Edward A. Morgan, editor and proprietor of "The Daily Journal," of Fairmount, Ind. These are only a few of the successful journalists, lawyers, educators and politicians who have contributed to this scrapbook. Nor are the leaders of affairs the only ones who have written letters of interest. Many less pretentious notes tell of quiet, respectable and comfortable careers, made possible by the start given in former years by the society to whose merits they now testify.

# HOW FAR IS A NEEDY CHURCH JUSTIFIED IN CARRYING ON A BUSINESS IN ORDER TO SUPPORT ITSELF?

## *THE QUESTION HERE DISCUSSED BY MANY CLERGYMEN.*

To what extent is a church justified in supporting itself by carrying on a business?

This is a question which is presenting itself today to the clergy and trustees of certain churches in New-York, which are fighting against the "uptown" tendency, that irresistible force which draws the well-to-do families of a congregation away from the neighborhood of the church which they have attended for many years, because of the encroachment of business houses where once all were residences.

"Shall the church be transplanted further uptown or shall it remain and maintain the good work among the poorer class of people who now surround it?" is the way the problem presents itself.

Christianity says: "Remain where your influence is most needed." Common sense asks: "If you remain, where will the funds necessary for your support come from? The people of large means have moved away. Only the people of small means remain, and they cannot give enough to support you."

"Now, most of the churches which have to face this dilemma at present are occupying building sites which have been made extremely valuable by that very encroachment of business which has driven their wealthier communicants away.

Why not solve the difficulty by erecting on the church site a many storied business structure, reserving one or two floors for church purposes and renting the other floors for business purposes or for living apartments? many ask.

An Italian Roman Catholic priest in Orange, N. J., runs a junkshop in connection with his place of worship in order to increase its meagre income, but Father Lavelle, rector of St. Patrick's Cathedral, in this city, says such enterprise lowers the dignity of the church.

The Rev. Dr. J. Lewis Parks, rector of Calvary Episcopal Church, who has not tried the scheme, declares that "It would be most undesirable for a church to be in business, for it would necessarily detract from the reverence"; yet the Rev. Peter A. Goldsmith, of the First Church of Salem, Mass., who has tried it, takes an absolutely contrary view. So does the Rev. Dr. Henson, of Tremont Temple, Boston, who has also tried the experiment.

W. T. Stead, the London newspaper proprietor, asserts that every church should manage a theatre and a saloon, and it is reported that William K. Vanderbilt once gave two ministers who came to him soliciting a big subscription a businesslike lecture on the advisability of churches making themselves self-supporting.

In view of these facts, The Tribune has gathered some interviews upon this interesting question from clergymen who view it from different aspects.

One of the very oldest, if not the oldest, of all Protestant churches in America is the First Church of Salem, Mass. (Unitarian), which will celebrate its 275th anniversary next August. Its pastor, the Rev. Peter A. Goldsmith, said:

"Shortly after 1826 this church established stores in its basement, which were let at good figures for business purposes. This was considered at the time as revolutionary in some quarters and in others bad taste and even sacrilegious; but the church corporation thought differently, and specified that its reason for so doing was to establish a fund to perpetuate the church forever.

"As a financial proposition this move has proved a success. The present property is worth $115,000, with a parish house valued at $10,000. The property has been so well conducted that, while there is a debt on it yet, the income is sufficient to pay interest and taxes and leave a considerable amount toward supporting the church.

"The building occupies a prominent position in the city of Salem, at Essex and Washington sts., and is a desirable piece of property. The building itself is a plain red brick structure of no special school of architecture. It is three stories in height, and the church proper is located above the stores on the ground floor.

"The religious thought and feeling are as deep in our church as elsewhere, and the combining of business and religious departments in the church has had no deterrent effect upon our belief. I really fail to see what is the material difference in a church being located beside business property, with a perpendicular wall separating the same, or having the auditorium located above the places of business, with a horizontal wall separating the same. Such cases as instanced in the former reference is exhibited in all cities in the country. In our individual case we are simply located above the business places, and not beside. There is no difference, as a matter of fact.

"But I will say this much—I do not know of a church located anywhere that is used so purely for religious and unvarying spiritual functions as our own. Our church is used for nothing else, with the exception of the business places underneath. Only religious services are held above. As an example, take Tremont Temple, Boston. Not only is it used as a church for religious services, but is as well used for everything else. It can be hired for social functions. Our church cannot. We have no theatricals in our church building. We have no dances. We give no suppers or whist parties or anything of the sort. Our interior is not desecrated in any manner. At our parish house, in Lynde-st., we hold our social functions of this nature, but not in the church. I consider this statement to be self-explanatory, and that we do not suffer a retrograde movement because of the arrangement of our church property."

The Rev. Dr. P. S. Henson is enthusiastic over the success which has followed the policy of Tremont Temple, in Boston, where he is now stationed. This church is in Tremont-st., near School-st., in practically the business centre of the Hub, and the building is partly filled with stores, offices and public halls for secular purposes. Dr. Henson said:

"I think the best thing a church can do is to locate under similar circumstances to ours. The effect is most stimulating to the congregation. It places them in touch with the outside world, and the effect is not in the slightest deleterious to their religious belief or their intensity of faith.

"Personally—and I have the congregation with me—I rejoice to be in the hum of traffic of the city. I believe the place to set the trap is where the rats run. I do not believe that religion should get into a cold storage warehouse. The present arrangement of Tremont Temple is most admirable. The deadest place on earth I can imagine is the dark and secluded ecclesiastical mausoleum, which is most forbidding to the average human being. Religion should spread joy and happiness about instead of gloom.

"Of course, we are in debt. Most enterprises are. However, our resources can more than meet the interest on our bonded indebtedness, and, in addition to this, we are able to pay a substantial sum into the fund. We hope by and by to have the sinking fund in such condition as to blot out the entire debt at one swoop."

Tremont Temple presents a busy aspect in business hours. The stores are well patronized, social affairs are held in the halls, and it is well known as the meeting place of conventions, etc. Dr. Henson has a private office at the temple. The building is of the most approved construction, and all its appointments are thoroughly up to date.

The Rev. Dr. Donald Sage Mackay, of the Reformed Collegiate Church, at Forty-eighth-st. and Fifth-ave., said:

"I object to using the church property for business, though, of course, I have no objection to the church investing its funds so as to yield a good income. But the church should not go into business. First, because there are not enough men in the church to give the time to that. Second—It puts the church in a false position. It antagonizes the business world. This is why I do not like church fairs. Third—It most of all destroys liberality. If freewill offerings cannot support a church it would better close up."

Said the Rev. Dr. W. R. Huntington, rector of Grace Protestant Episcopal Church:

"The suggestion that church corporations possessed of valuable sites ought to erect office or apartment buildings on them, thereby securing rents out of which to pay the cost of a public worship maintenance somewhere under the roof, strikes me as almost too foolish for discussion. When the Christian religion shall have sunk to the level of a popular lectureship, so sordid a policy may be found necessary, but not before.

"Stately and beautiful churches serve as 'witnesses to the unseen,' and are a breakwater against the ever encroaching inflow of materialism. Such buildings as St. Paul's, London, and Trinity, New-York, merely by standing where they do have a sobering influence upon the city's life, feed the spiritual imagination of hundreds of thousands, and simply as object lessons pay for themselves over and over again.

"The value of really good church architecture cannot be reckoned in dollars and cents, and any city which holds otherwise stamps itself as semi-civilized or worse."

The Rev. Dr. J. Lewis Parks, rector of Calvary Episcopal Church, said that in the first place he could not foresee the possibility of a proposition to erect an office or apartment building on the site of Calvary Church being made. "There is no necessity now for such a thing to be thought of," he declared. "If there were such a necessity, that would be a different matter. But it would be most undesirable for a church to be in business, for it would necessarily detract from the reverence. And so, too, from the point of view of business, it would be very undesirable to have any business so close to a church. Grace Church and Trinity Church, and, I should say, Calvary Church also, stand as great object lessons."

The Rev. Dr. William R. Richards, pastor of the Brick Presbyterian Church, thought it a question chiefly of expediency and adjustment. Against any proposition, however, for a church to own and occupy an office or apartment building, renting the space not needed for its own work, there should be urged the confusion of impression that would result. "One reason," declared Dr. Richards, "for having a church building at all is that you may have distinct impressions, helpful to worship, and not interfered with by anything incongruous to that worship. Now, if your church building is merely an adjunct to a business establishment, it would be more difficult to keep these impressions clear. Furthermore, in the very act of dedicating a valuable property like that of Trinity Church simply to the worship of God, the costliness is one thing that makes it impressive. Everybody who walks up Wall-st. and sees the spire of Trinity Church is likely to remember that there are people in the world who think it worth while to set apart land of such immense value for purely religious purposes.

"But, on the other hand, there might easily be conditions where it would not be so important that impressions of this sort be maintained, but where it would be of immense importance that practical facilities for religious worship be secured without tying up large amounts of property. In certain parts of the city the need of institutional work and other costly accessories of worship might make it so desirable to secure a revenue from the church's real estate that this consideration would outweigh the other."

"I would not greatly deplore the removal of a church situated like my own," declared the Rev. Thomas R. Slicer, pastor of All Souls' Unitarian Church, at Twenty-first-st. and Fourth-ave., "though I should deplore the removal of Trinity Church, for instance, from its present site. If I had to choose between building a cathedral and an institutional church I should choose the latter. If the proposition were made to me to raze All Souls' Church, build a very simple edifice in a good location, an edifice suitable for worship, and put the money left from the sale of our present site into active social work, I would favor it. We are now three miles from the geographical centre of our parish. But I would be very little disposed to entertain a proposition for us to raze our church, erect a big office or apartment building on the site, and use part of that building for worship, renting the rest. In general, turning a church property into an asset by business methods is a bad thing, because no mere business plant serves the purposes of religion. The atmosphere of worship can't be brought into an office building. The office building makes no appeal to the reverential part of man's nature. But Christianity means not only the bringing of the individual to God, but the readjustment on a better basis of the conditions of the world, and this socializing purpose of religion is of vast importance. There are things that only worship can do, and I should be very sorry to see a change that would leave out the æsthetic side of worship; but at the same time there are uses of a church that are not served by worship.

"After all, a real purpose of worship is to get the energy to bring souls into the kingdom, and with this in view the worship must not be neglected for the activities of what is called the institutional church, which runs the risk of becoming too mechanical."

When the business building plan was broached to the Rev. F. R. Morse, assistant pastor of the Calvary Baptist Church, in Fifty-seventh-st., near Sixth-ave., he called attention to the efforts of the church to raise a large endowment fund, the sum now in hand being about $100,000. Pressed to say whether he would adopt that plan if it were necessary to choose between that and removal to a cheaper site, he gave an emphatic affirmative. Dr. Morse thought that the old Tabernacle, at Thirty-fourth-st. and Sixth-ave., should have erected an office building, using part of it for worship, if it had to do that or move away.

That a church should stand at that corner is the view of the Rev. Dr. William S. Rainsford, rector of St. George's Episcopal Church, in Stuyvesant Square, also. Speaking recently before the Young Women's Christian Association of this city, Dr. Rainsford said: "That is the greatest church site in the country, with all the hotels and theatres about. Have people in the hotels and boarding houses no souls? Where do we want the Gospel of God preached if not in these places?" Dr. Morse referred to the Tremont Temple, in Boston, which, having property worth some $500,000, occupied part of its building for worship, renting the rest as offices. A good rental is yielded and the society carries out its desire to preserve and perpetuate the property, besides providing, in the business centre of Boston, a great place for religious gatherings.

"It is the same old question," declared the Rev. Arthur Jamieson, the pastor of the Eighteenth Street Methodist Episcopal Church. "Why not sell this and give the money to the poor?" Mysticism is the very essence of Christianity. Suppose we did tear down a church and erect an office or apartment building on its site. Would not we be trying to sanctify an act of vandalism if we used for charity the additional income thus obtained? Trinity Church, with its sentiment and its historical associations, represents the best in our common Christianity. The Episcopal Church has done a great thing by refusing to sell its buildings. Methodism has been too ready to give them up, and so has Presbyterianism. No; unless more money is given, Protestantism on Manhattan Island will have a doubtful to-morrow. There should be much more money given the churches by both the rich and the middle classes."

The Rev. Dr. David H. Greer, former rector of St. Bartholomew's, recently consecrated Bishop-Coadjutor of New-York, declined to comment on the proposition in detail. "Quote me as saying merely that the most effective way for a church to win support is to do its own work thoroughly; then it will deserve support." St. Bartholomew's maintains an elaborate system of institutional work, its building, in East Forty-second-st. costing $70,000 a year.

"I might rent the top floor of my house for business purposes," declared the Rev. Dr. Ernest M. Stires, rector of St. Thomas's Church, "but by so doing I would destroy the beauty and privacy of my family life. The sanctity that that family life now has is worth much more to me than the additional income I would obtain. As in a church, so with the people affected by the church, you must not do anything to destroy the spiritual idea. The architecture of a church building, the churchyard and many similar things connected with worship give certain very tangible spiritual benefits to the people, and by letting business eliminate any of those benefits far more would be lost than any financial gain could make up for. Sentiment is the strongest thing in existence. Love, patriotism and other feelings that are dear to us are, viewed in certain aspects, sentiments. Religion itself, when you look at it in a certain light, is a sentiment. As things are to-day, the arguments against the suggestion of an office building church are far weightier than anything that could be said in its favor.

"Let us assume a church that is 'hard up.' Suppose that in order to get money it should let fruit venders occupy space at its church doors. Would it not be a case parallel to the one in the Bible when our Lord found the money changers in the temple?"

The Rev. Dr. S. Pereira Mendes, rabbi of the orthodox Jewish congregation of Shearith Israel, No. 100 Central Park West, said:

"As for combining business with religion by having offices on top of halls of worship, I think that would take away from the dignity of worship, and religion is a thing of such stupendous importance that its dignity should be conserved at all costs. Perhaps the church to which such a plan was submitted might have a burying ground. Certainly I would not approve of digging up the dead unless their resting place could no longer be kept sufficiently sacred because of the encroachments of the neighborhood. But if a number of churches are so poor they can't continue to maintain synagogues, they should combine, rather than worship upstairs, let us say, in a building, while business, with all its deceits and feats is going on downstairs.

"The tendency to-day is to get too much humanitarianism. I think the aim of all churches in all their work, whether within the walls of the church or in work outside, should be meant and directed to religionize men and women, to develop a sense of the responsibility of the individual to God alone. Judaism, especially orthodox Judaism, stands not merely for humanitarianism, but for humanitarianism plus God, and the sensible reformed Jews also take this view."

"In our denomination we need more churches, not fewer," declared Father Lavelle, rector of St. Patrick's Roman Catholic Cathedral. Neither could he see any danger in too much so-called institutional work. "We are working for the good of the people all we can," he asserted. "Besides," he added, "we combine worship with our philanthropy, as in our schools, for instance."

Asked what he thought of the Italian priest of Orange, N. J., who ran a junk shop in connection with his church, Father Lavelle declared it lowered the dignity of the Church to engage in business. Asked whether he would favor conducting a theatre in connection with a Roman Catholic church, he asserted that in the first place the Church would not know how to do it. He would not approve a plan for a Roman Catholic priest acting as censor, in case any theatre manager should request it, but if a plan were proposed for a representative board of censors, not necessarily of priests exclusively, he would favor it.

On the general topic of a self-supporting church he said: "Have the people support the church. Even if what most of them give is very little, they will, giving something, feel that some little part of the church is their own. That is better than endowments, better than owning property, better than large gifts. It is the only way I would like to see Catholic churches maintained. It is not likely that we would meet such a thing as a proposition to erect an office building and worship in it. That, I think, would be suggested only in case the neighborhood of a church wholly changed, for our churches are contiguous to each other, and if one church had to stop holding services there would be people left in the locality, and they could go to a new church, fairly near. So, too, people in that hypothetical office building would not like to have a church in the same building. Nor would we like to have offices in the same building as our church. The problem for us would be different than it would be for other denominations, for we hold so many services. At St. Patrick's, for instance, it is most difficult to have any repairs or alterations made, because the building is used so much. Still, sometimes we can't have the building for worship alone. That is likely to be true at the start, particularly. In Washington-st. to-day our Maronite chapel is above some stores."

On the general subject of the Church and business, the Rev. Dr. J. Ross Stevenson, pastor of the Fifth Avenue Presbyterian Church, said: "If a man does his religious work well it takes his whole time, but even if he had the time to spare I should not approve his using the name of a church to help along a business, though this is a thing men have sometimes tried, using the name of a church to promote their business enterprises. You must not make capital out of religion. It would no more be right for a minister to use his ecclesiastical status to help a business than for a layman to enter a church with the purpose of being cared for materially. At the same time, it is undoubtedly true that if a man is in good standing in a church his business is helped."

## *UPHELD BY SOME WHO TRIED IT; CONDEMNED BY OTHERS.*

Asked if he thought there was any value in Mr. Stead's suggestion that the churches manage theatres, Dr. Stevenson replied: "You might as well ask the Church to run stock exchanges and elevate them. As for churches running saloons, that was tried in Chicago. You never can elevate the theatre, anyway, until you elevate men and women. If there were a demand for a better drama there are lots of persons who are managing theatres who would be glad to meet that demand. The Church could do no particular good in trying to take the place of such managers. The main point, however, is that the Church has all she can attend to in her legitimate business."

Of the office building plan, Dr. Stevenson said: "It would depend on the situation of the church, where its congregation lived, what the need of the neighborhood was and what other churches were near by." He thought that though there might be reasons of sentiment that would count against any proposition to tear down a church, reluctance because of a feeling that the building was on consecrated ground would not be felt in most Protestant societies. As regarded his own church, Dr. Stevenson said that, assuming that the proposition were seriously made at the present time, one reason against adopting it would be that a tall office building on the site would not now be a safe investment, though it might be fifteen or twenty years hence.

"As a general proposition I should not object to the office building plan," asserted the Rev. Dr. Rufus P. Johnston, of the Fifth Avenue Baptist Church, at No. 6 West Forty-sixth-st. "That is, it would be feasible. It might be questionable, however, whether such a step would be wise, for it seems to me that a church occupying a valuable piece of ground solely as a church, is in itself a strong sermon, showing that after all there are some ideas and sentiments other than commercial. But if it were shown that the adoption of such an office building plan were necessary for a church to do its work, I should not hesitate for a minute.

"There probably will always be churches in this part of the city, because there always will be people living in the neighborhood. There is even a strong tendency to build churches downtown, an appreciation of the fact that the downtown districts are still full of persons who need churches."

## ANTISEPTICS USED WITH FOOD.

A matter of practical science to which legislation must be directed much more seriously than has yet been done was brought before the congress of medicine recently held at Madrid. Dr. Brouardel, of Paris, spoke strongly of the dangers arising from the addition of antiseptics to wine, beer, cider, milk, syrups, butter, fish, preserved fruits and other commodities which are in daily use as food. It is well known that salicylic acid, salicylate of soda, sulphites, borax, boric acid, formalin and a variety of other chemicals are employed to make the substance in question "keep," the pretence being that they are used in such small quantities as to be innocuous. To this allegation Dr. Brouardel opposed two indisputable facts, determined by analysis and experience—first, that the preservatives employed are used in far larger quantities than the users admit, and, secondly, that the continued consumption of alimentary substances containing these antiseptic materials, even in very small proportions, becomes gravely detrimental to the human organism, amounting in the long run to slow poisoning. Man's constitution has not been made for the daily elimination of minute doses of poison. In this insidious form of mischief may lie some of the blame for our physical degeneracy. Apparently the evil is of such sort that international measures may be necessary to check it. Treatment of food in this manner should not be called adulteration, but poisoning pure and simple.—(The London Telegraph.