

offerings were made to the manes of that chieftain. The room beyond the altar seems to have been a funeral chamber. The concrete floor was painted red; in spots the color is still bright. Opposite the doorway there is an *estrade*, half the width of the room, which is narrow, and two or three yards long. The walls are perpendicular to a height of three meters, then slant inward, forming a triangular arch, the total height of the room being about six meters. Throughout the ruins the same shaped roof is used, in some cases without any capping stone. This room has its walls covered with paintings, from floor to apex of roof. Red, blue, green, and yellow are the colors that form the pictures, but the outlines are drawn with a dark brown paint (bister); another color is also used, that I may, perhaps, call maroon, to paint boats and other objects that represent wood, for among the paintings are large boats; in one of them people painted blue are fighting with others painted yellowish-brown, and these last are apparently quite overcome by the men painted blue. Our future studies will doubtless give us a clew to all this.

High Buildings in Cities.

The burning of the St. George's Flats, in New York City, April 7, was but one more strong proof that it is indeed high time we had some comprehensive legislation governing the whole matter of high buildings in cities. Were it not that such structures are almost invariably claimed to be absolutely fireproof, there is no doubt but their erection, to be used as dwellings, would have been prohibited ere this. But here we have a representative structure of this kind entirely burned out, except the walls, like a tinder box, or as though the whole affair was a furnace, in which the interior partitions, furniture, etc., formed the charge, and the walls were the shell. It presented an imposing appearance, was seven stories high from the sidewalk and eight stories high in the rear; the front was of stone, ornamented with terra cotta; the spacious entrance hall had polished marble columns, while the stairways in front were of stone, and the halls tiled—the apartments renting at from \$1,300 to \$1,800 a year—but there was a rear dumb-waiter and air shafts of wood, with wooden stairs, floor beams, and flimsy partitions; so the destruction of the building was very rapid, notwithstanding the best efforts of the fire department. The question naturally arises, How many of our so-called fireproof structures are of this character?

The law now provides for the thickness of walls, according to the height it is proposed to build, and the building department can enforce the erection of fire escapes, but there is no limit to the height to which structures for either business purposes or dwellings may be carried. A bill is before the Legislature limiting the height of dwelling houses "intended to be used for more than one family" to eighty feet, and in streets less than sixty feet in width making the limit seventy feet; but much more than this is needed. With many it is by no means clear but that such high buildings should be absolutely prohibited, except in special locations, apart from other buildings, for they so much shut out the light and air as to greatly lessen the comfort and healthfulness of adjoining houses. This may be thought a hardship, in a city like New York, where the value of land affords such an incentive for piling story upon story, but there can be no question that the law should prevent the erection of such buildings unless they can be made fireproof in fact as well as in name. And to do this, with all the combustible material it is customary to use in the luxurious furnishing of such apartments, calls for a most specific enactment, with a thoroughness of inspection which householders have been slow to see the necessity of, and at least some builders will try in every way to shirk. Such regulations, in so far as they would increase the expense of putting up these great structures, and thus limiting their number, would be doubly satisfactory. Some legislation in the same line is also needed for tall factories, employing many hands, while there are here and there office buildings, likewise, altered over perhaps to accommodate more tenants, which are not only highly dangerous to surrounding property, but quite likely at any time to furnish a human holocaust, although their owners have nominally complied with all the requirements it is at present in the power of the building department to enforce. Let us have the law before its need is further emphasized by the loss of human life in some of these unsafe structures.

Turpentine in Infectious Diseases.

The *Med. Record* tell us that H. Vilandt writes in the *Ugeskrift for Læger*, concerning the value of the oil of turpentine in the treatment and prophylaxis of diphtheria and the exanthematous diseases. He states that he has never seen any of these diseases spread from a sick child to other members of the family when this remedy was employed. In many of his cases no isolation could be attempted, as the mother was the only female in the family, and was obliged to take care of both the sick and the well, continually passing back and forth from one to the other. His method was to pour from twenty to forty drops of a mixture of equal parts of turpentine and carbolic acid into a kettle of water, which was kept simmering over a slow fire, so that the air of the sick room was constantly impregnated with the odor of these two substances. He claims also that by this means a favorable influence is exerted upon the exudation in diphtheria, although it is by no means curative of the disease, and should never be relied upon to the exclusion of other remedies.

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DR. AUGUSTUS LE PLONGEON'S LATEST AND MOST REMARKABLE DISCOVERIES IN YUCATAN.

Among those who have made valuable additions to our means of studying the character and institutions of a once great but now almost unknown American people, Dr. Augustus Le Plongeon has performed conspicuous service. For some ten years he has been, at his own expense, pursuing a series of investigations among the buried cities of Yucatan. We give a record to-day of his latest and most important discoveries there, written for us by a member of his family participating with him in these explorations. Dr. Le Plongeon believes that the Maya civilization was contemporaneous with, if not anterior to, that of the most ancient Egyptian, and he certainly brings to the support of his conclusions some very remarkable facts; as presented by him they show the apparent similarity of the architecture, the language, the religion, and many of the customs of the Mayas with those of the Egyptians, so far as we can judge of either by such monuments as they have left in broken and buried statues, in the ruins of what were once extensive cities, and in the almost undecipherable hieroglyphics common to both people.

To reason, from such ground, to the possible connection in early days of the dwellers in the Nile Valley with those on the south of the Gulf of Mexico, is to open a wide door for speculation, and suggests at once the Platonic story of the sinking of the great and populous territory of Atlantis, which is said at one time to have bridged the distance between the Eastern and Western hemispheres. But there have been instances, in the prosecution of scientific investigation, where hypotheses that seemed more violent than this suggested connection of the Mayas and the Egyptians have been successfully demonstrated.

The pictures we give are the photographs themselves cut upon wood, untouched by draughtsman's pencil. The views presented are therefore, as nearly as possible, the actual reflections of the wonderful objects themselves. The Egyptian characteristics of these remains will be evident at a glance. In following numbers of the SCIENTIFIC AMERICAN we shall soon give additional illustrations. Dr. Le Plongeon has sent us a number of beautiful photographs of remarkable interest, which are now in the hands of our engravers for reproduction.

PROTESTS FROM MANUFACTURERS.

The unwise legislation against patents lately attempted in the House of Representatives has aroused a feeling of alarm among manufacturers in different parts of the country, and they are sending to the Senate some very strong protests against the passage of any ill-advised measure. It is as yet uncertain what action the Senate will take. It is known that some of the Senators are strongly opposed to any tampering with the patent laws or to the enactment of any scheme for the depreciation of patent property. But it is feared the majority in the Senate may, like that in the House, be disposed to do real mischief. A hopeful sign however is that the sending in of remonstrances has had the effect in the Senate to postpone action upon the patent bills; and the presentation of additional protests, will unquestionably have much influence in extending the postponement, and perhaps finally defeat the bills. We therefore urge the friends of home industry everywhere to continue their efforts to put a stop to these measures. They should send individual protests; call meetings of suitable corporations and societies to pass resolutions; ask their several State legislatures to do the same; request the editors of local newspapers to discuss the subject editorially; send marked copies to all Senators and Representatives. In short, use every possible exertion, without loss of time, to enlighten the members of Congress and influence their action as far as possible against the commission of these legislative errors.

It must not be forgotten that two very obnoxious bills, those of Mr. Calkins, 3,925, to compel owners of patents to pay counsel fees to the lawyers of infringers, and of Mr. Vance, 3,934, to allow anybody who chooses to infringe until he gets notice, and after that to deprive the patentee of the control of his patent, have passed the House by overwhelming majorities, and are now before the Senate for concurrence.

The bill introduced by Senator Voorhees, which practically gives to anybody who wants it the free right to use any patent, and openly robs the holder of a patent of the exclusive right of manufacture, is now before the Senate, and its passage will be strongly advocated. The House bill of Mr. Anderson, 3,617, reducing the lifetime of patents from 17 years to 5 years, has not yet passed, but very likely will go through. The adoption of any one of these bills by both branches of Congress would have disastrous effects upon all manufacturing properties and industries. These, to the enormous extent of eight-tenths of the gross capital employed, are, according to Senator Platt, of Connecticut, based directly or indirectly upon patents.

If any editor wishes for first-rate data on which to write interesting articles concerning American inventions and manufactures, we would refer him to the recent speech upon the Reorganization of the Patent Office, by Senator Platt, given in full in SCIENTIFIC AMERICAN SUPPLEMENT, No. 432. In this remarkable document will be found a most valuable array of facts and figures, beginning with the early history of the country and brought down to current dates.

The Jarvis Engineering Company, of Boston, has a large capital employed in the manufacture of various patented devices, such as furnaces, steam engines, injectors,