## THE NEW TEMPLE EMANUEL

The above is the name of the new Jewish synagogue recently dedicated situated on Fifth avenue and Forty-third street, New York city. Few buildings ever erected in this country, have attracted more attention, or are more entitled to admiration than this edifice. As a specimen of Moorish architecture, slightly modified to adapt the strueture to its destined use, it affords a grod study to professional architects and to all lovers of art. It occupies a lot one hundred and four feet on Fifth avenue, and one hundred and eighty-four feet on Forty-third street. It consists of a nave thirty-four feet wide, one hundred and sixty feet long, and seventy-two feet high, with transepts of about ninety feet in length, attached to whichare aisles about twenty feet wide, containing the galleries. In front, on elther side of the nave, rise $t w n$ towers detached above the aisle walls, but connected with the nave by two bridges on a line with its ceiling and with the choir gallery, as well as by open balconies running all around the front. These towers are to be about one hundred and serenty feet hiph, and are to terminate in stone cupolas, the surfaces of which are to be covered with relief ornaments. The building is built $o^{f}$ sandstone, out of the New Jersey, Cleveland, and New Brunswick quarries-each of these being used and a ranged with reference to its color. The entire cost of the structure and $\varrho$ round will amount to nearly a million dollars. The architects elected by the build. ing committee were Mr Lwopold Eidliız and Mr. Henry Feu rbach
The Evening Post gives a graphic description of the new emple and designates it as a " poem 10 stone
" All admirers of fine architecture will first be impressed with the façade Its fine proportions. varied color, and rich ornamentation are elements of beauty worthy of close study. The opeaings of the nave-the five entrance dors, the rose window and the transverse gallery near the apex-together with those of the tower crowned with open octagonal domes, are so many distinct iorms hapily grouped and tastefully treated The ornamentation throughout is honest, appro; ri ate, and rich. Foliated capitals, delicately sculpture $i$, and clust-red columns attached to the doors and windows, fretted spandrils and light pinnacles, rising like winarets from the buttresses of nave and transepts, supply imaginative points of great value in the matter of expression. The brigbt creamcolored pinnacles relieving against a blue sky and on the brown rubble, sparkling like so many jewels in their setting animate the entire front and forestall anything like monotony of outline. Various intaglio desigos, consisting of intricate mazes of lines peculiar to the $M$ orish system of decoration, fascinate the eye and enliven surfaces that would otherwise appear sombre. This ine combination of anple forms and ornamental devices, each in appropriate relationshıp for u*e and beauty, secures to this building an elegant and majestic ir, which more ostentatious structures of greacer magnitude fail tn convey. The secret of this effect does not lie in size or in richness of decoration, but in proportion, a quality of all others in architectural art the subtlest and must rarely en countered.

## USE OF COLOR.

Attractive as the exterior is, the interior far snrpasses it On entering the building we seem transported to another sphere. Here we enter on the realm of colur ; forms seem to have vanirhed or to resolve themselves into radiant splendor. Color as an architectural element appears to reign supreme we have that which the Orientals, the acknowledged masters of this element of art, most delighted in. The problem they bave solved through the skillful handling of ornament, and a consequent distribution of color, is the production of general effects $n$ t only pleasing in themselves, but also harmonizing with the constructive masses. The Jews in their Bible, and the Mohammedansio their Koran, prohibited from depicting animated forms, have been obliged to make the most of color on its own merits; color, consequently, is their princıpal decorative medium. Yellow or gold, blue, red, black, and white are their vehicles of art expression. All muddy compounds of hybrid tiats, miscalled color in many modern pictures, are comoletely ignored. The only figures they employ are delicate arabasques. and patterns arranged in a capricious but still regular manner, and which, adapted to the eye in conformity with its sensuous autitude challenge o criticism on the scure of their non-resemblance to known natural objects. Gorgeous havs, therefore, in true complementary union, cover the spacious walls of this eificy; the eye wanders over them attentive to their innumerable harmonies as the ear listens to the infinite harmonies of musical sounds. Draped arches, festooned with divers tints, support be panels decked with golden stars, while the stained glass windows, more like laminous interstices than anything else, pour in a flood of prismatic brilliancy to blend all together in soft and radiant light. The obscurities of the tritorium, the sanctuary, the organ-loft, and other spaces, lend an air of mysterg to the general tone, which is again enhanced by the dark reflections of the richly carved wood work. The general effect is one of subdued richne $s$, an effect in harmony with a spirit of adoration, and with that instinct which leads man to exalt worship by art.
"The use of color in this building will attract all eyes to it, and make it a misdel for mitation far and wide. Mr. Eidlitz has used color elvewhere, and notably in Sc. George's Church, but nowhere on the sawe grand and effetive scale as here Decorative motives generally consist of meaninujess imitations of Renaissance ornamencs, mouldines, pamels and t/acery bolstered up aith arificial shadowo, expressing no seniment and symbolizing no trath. C,lor, as here employed conforms to natural law, and is therefure a truth in itself.
None of its combinations suggests the intellectual perversity
associated with Renaissance symbols so conventionally ap plied to public and private edifices everywhere.'

## ventilation.

The Journal of the Franklin Institute, contains the first, or a part of the first of a second course of lectures on ventilation delivered by Lewis W. Leeds, before the Franklin Institute during the winter of 1867-'68. There seems to be such an itching for scientific laurels at the present time, that the mist common subjects, upon which all that is pertinent can be said plainly and briefly, are made the vehicles of profes sional display ad nauseam.
The subject of ventilation is an important one, and per baps is not appreciated as it should bo, or sufficiently pr vided for in either public or private edifices. Grant all that but does it follow, thit in order to cure the evil, long ha rangues upon the constitution of air, the physiology of respi ration, the ana+omy of the lungs, and the circulatory system, the diffusion of gases, and all the technical information in the remotest degree connected with the subject, should be aired in trying to convince people that unless they breath pure air their health will suffer? The first installment of these lectures treats of all the above-mentioned sabjects, and more too. How much is to follow before the real gist of the sub ject shall be reached, we are unable to say. Perhaps a dis cussion of the respiratory apparatus of fishes and reptiles with snme accounts of toads which have been jubedded in rocks for nobody knows how many centuries, without breath ing, and have emerged trom th-ir rocky prisons. "fresh as when in their pristine gouth, etc," and hopped a way without even thanking their deliverers. This might bo made appii cable to the subject of ventilation, as thus: The toad does not breath in the same way as man inhales the ambient air, consequently what is fun to them, would be dea'h t, you, my hearets Moreover, all the stories of living toads, imbedded in rocks and trees. are humbugs-except the trees were hollow and the rocks had holes in them-from which we conclud that man culd not breath without air, or live withou breathing. Quoderat demonstrandum.
How to get the pure air is the question ; a purely mechanical one. Hot air rises-cold air falls. The impure gases do the same thing ; therefore it is only necessary to provide for the escape of foul gases at the bottom of a room, provided it is heat-d with warm air, or at the top, if heated by radia iion; the pure air being admitted in the latter case through openings protected so that strong currants shall not be formed, and the exchange of air being ful'y provided for by passing the vitiated gases through heated flues, or drawing hem off by fans or other apparatus.
There is the whole thing in a nutshell and all the scien fifc discussion of things upon the earth or under the earth can't make it more sc ; so the Scientific American believe and we believe its practical readers will concur

## PATENTS AND CLAIMS

Issued by the United States Patent Office
for the week ending september 15, 1868.
Reported Offcially for the Scientifc American.
Patents are grante


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82,063. - Leather Stretgeing Machine.-W. R. Andrews,

 82,088.-Wagon Axle. C. D. Bachelder, Camden, Me

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 82,074-1'lane.-Valentin Bitsch, St. Louis, Mo.

 $82,075-F_{\text {arm }}$ Gate.-Charles S. Bonney, Penn Yan, N. Y $^{\text {rot }}$


 82,077.- Macti, Memphis. Mich. for Forming Eaves-trodetr.-John
 82,078.-Saw Sharpening Device.-P. M. Bristol, Luding.

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82,083. - Lobricating Material.-Calvin Carpenter, Jr.
 82,084.-Angolar Shaft Cotrling.-John M. Case, Wor-



 82.086. - Car Wheel and Frog.-W. H. Childe, Gaines-

 82 087.-Meastring Funnel.-Charles Chinnock, Brook-
 82,088.-Feed Bag.- Chárles Chinnock, Brooklyn, N. Y.


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