

## THE WORLD'S FAIR.

## Display in the Mining Building.

I had thought that cloudland and meadowland, the stars above, the flowers below, hold all that was brightest and best in God's blessed world. But oh! the riches and the beauties that are hidden away in the womb of the mother earth! The two days that I have spent in the Mining Building have been a visit to a land of glory of whose grandeur I had never dreamed. I feel as though I have come from nature's paint shop. I have seen whence come the reds, that, I fancy, are used to dye the rose's cheeks, I have seen huge lumps of the paleness that whitens the lily's brow. The bright green of the grasses, the deep green of the leaves, the violets purple, the blue and the pink of the daintiest heath flower I know whence it all comes. I have seen crystals and diamonds, garnets and sapphires, jasper and chalcedony, opals and amethysts, rubies and amber, emeralds and agates in glorious profusion. Gold and silver, iron and aluminum, lead and platinum, copper and zinc, slabs of onyx, and moss agates, petrified trees, coal and coal fossils—and every other imaginable thing that is found on the bosom of the earth. I doubt if any branch of the Fair is as complete as this. Everything in the line of machinery used in mining—from a miner's lamp up to a miniature coal mine in actual operation, may be seen. I cannot give a complete description of any particular part, but must content myself with describing a few of the most striking features.

Mexico was the first exhibit that I visited. That quaint, warm land has always been associated in my mind with an idea of elegance, ease and beauty, of flowers and soft songs. Consequently I expected to meet with a richness in her mining display to be equalled only by the bright blues and warm reds of her mineralogical specimens and the soft opaline tints of her stony marbles. Nor was I disappointed. Mexico has the richest, the most extensive and the most varied exhibit in the Department of Mines. No other country comes to the Fair with a new marble the most beautiful the world has ever seen. Discovered scarcely a year ago, it is destined to become as noted an article in interior and monumental decoration as world-famed Mexican onyx now is. It presents the appearance of numbers of little moss rosebuds imbedded in limestone. The rosebuds are simply beautiful garnets imbedded in limestone. But carbonate of lime and garnets are not the only minerals in this marble. Vasuvianite and wallastonite are each present, the first occurring in the rich sulphur, the second in traces of light blue, producing thus a most beautiful combination. Great difficulty was at first experienced in polishing this marble. The substance and treatment required to dress the limestone would not finish the garnets, and those required to finish the garnets would not glaze the limestone? A union of the polished substance was tried and a satisfactory finish was given the beautiful Rose Garnet Marble. The onyx displayed is the most beautiful.

Did you ever know that the so-called Mexican onyx is not in reality an onyx? In the gallery of the Mining Building there is a display of real onyx from Lower California. It is very beautiful, but cannot compare with the so-called Mexican onyx. This last only resembles onyx and has consequently been so-called. In reality Mexican onyx is a marble. In the days when Artec civilization filled Mexico's valleys and dotted her hills with temples to its deities, the architects and artists found in this material their chief agent for structure and decoration. The temples were called "Teocals." The Indians corrupted this term to "Lecali" and applied it

to the material used in constructing their Teocals. Christian civilization seized on it for altar and baptismal font. In the days of Cortez, this was the use to which it was put whenever it could be obtained. I saw some samples of it that were streaked and veined with luminous red, brilliant green in a semi-transparent ivory tinted body. And the silver! Silver in all conditions, in all stages of purity! None of it so interested me, however, as a species called ruby silver. The men who work the mine from which this silver comes are covered from head to foot as though they had smeared themselves with raspberries. This mine, I was told, is situated near Durango, Mexico. The display of opals is notably interesting. The rare and gleaming variety with a play of colors like the yellow and red of flames is to be seen. This, I think, is commonly called fire-opal. These opals are gathered by the Indians, who in a day polish between 20 and 80 of them. The process is very simple. A rapidly revolving wheel does the work and the brilliancy and size of the stone determines its value. Mexico displays almost every variety of useful minerals, from gold and mercury down to coal and salt, from jewels and silver down to fire-clay and petroleum.

Cape Colony makes a beautiful display of diamonds and erodolite. This last is the name the mineralogist has pasted to it, but in good plain English we call it "tiger eye." And, by the way, let me say here that you cannot make a satisfactory tour of the building without the aid of a dictionary. The men who had the task of naming the minerals picked out the hardest words the dictionary has and coined many others of several degrees greater hardness. Just think of passing by a little case about 6 ft. long by 2 ft. wide and having to read such a collection of words as the following: Malachite, Magniferous, Apatite, Witherite, Paryta, Chirngorm, Argentiferous carbonate of Lead, Stibnite, Obsidian Bombs, Casseberite, Chessy lite, Cerussite, Amnhibole, etc. Quite a crowd are usually gathered about the Cape Colony exhibit during the hours when they are washing and polishing diamonds. A complete set of machinery is working drawing up the ugly looking, yet valuable, mud. Before the visitors' eyes the mud is washed, and the pebbles containing the gems are thrown out upon a table. Then a man goes over them carefully, occasionally meeting with a dull pebble resembling a piece of glass which he carefully sets aside. This is then cut and polished.

The United States is not behind the rest of the world in her display in this building. Each State has its own exhibit. These vary in interest, wealth and utility. A crowd is always attracted to Montana's display to see the silver statue of Justice for which Ada Rehan posed. The statue is in the middle of the exhibit. Justice holds a pair of scales in her left hand and stands upon a sphere of silver. She is in the act of advancing. The head is erect, calm and dignified. You look at the statue but hardly appreciate the fact that about \$70,000 worth of silver is in it.

Colorado and California each display a magnificent collection of mineral specimens and no small quantity of native gems. They show the various conditions in which gold is found. A beautiful variety of cloudy onyx is to be seen in California's display. In tint it is much like the pale blue smoke that arises from some hunter's cabin, that you so frequently see in pictures. The chief feature of Wyoming's display is a natural soda used in making glass. South Dakota brings forth a rich showing of petrified woods, while Montana claims to have produced more copper during the past year than all the rest of the United States put together. Michigan certainly makes the finest display of this

metal, its mines and methods of obtaining it. Indeed, this seems to be the glory of Michigan's mining display. There are sectional models of noted mines and complete models of others, showing the methods of supporting, roofing, hoisting, etc. Copper bars as red as iron in the fire and immense pieces of copper ore may be seen. Two of these last are especially noteworthy. One of them weighs 8,500 pounds, the other 6,200. From her pictured rocks she has sent bright colored sands. In one case the most beautiful crystals tinged with all shades of green are displayed. Pennsylvania makes a magnificent showing of her coals, clays and oils. A diminutive coal mine, and all machinery connected with it, is working, and elucidates the manner of assorting, cleaning and shipping Anthracite coal. This is the chief feature of her display. Her exhibit of petroleum is the best made. Somebody has called North Carolina the Paradise of the Mineralogist. Judging from the variety and beauty of her display, she is second to none. She shows specimens of her gold in abundance. I do not think any other State has such a variety of native gems. Copper, tin, iron, mica of a most beautiful quality are in profusion. One object that interested me very much was a box composed of some 1,766 pieces of native woods. These woods are of about six varieties. In the centre of the lid was to be seen a plant called "Shortia," which, I learned, was peculiar to the mountains of North Carolina. The only other spot on the face of the Globe where it might possibly be found is Japan. A very instructive feature in the Oregon display is the "Hydraulic Placer Mining." The simplicity of the method for getting the gold dust recommends itself. On the side of the hill a channel is built—rather a wooden trough. In this trough at every few feet a cross section is built. A pump is set so as to wash away the sand and gravel from the sides of the hill into the trough. A sufficient inclination is given to the trough so that the stream may carry along with it the sand and gravel. The gold dust being quite heavy, falls to the bottom, and is caught by the cross sections. That which escapes the first cross section is in all probability caught by the second and so on. The sand and gravel being themselves eventually caught, are washed and re-washed until every particle of gold they contain is set free. Ontario makes a splendid show of her nickel ore.

New South Wales, after Mexico, has the most extensive display, one feature of which is a magnificent display of tin and alluvial gold. A nugget of gold in quartz is shown that is worth about \$6,000. It is irregular in shape and its largest measurement is about 6 inches by 8 inches, weighing 844.78 oz. It contains 813 0978 virgin gold. It is known as the "Maipland Bar." I was much interested in the size of this nugget and wondered what was the value of the largest nugget that had ever been found. My curiosity was satisfied when I reached the gallery of the Mining Building. I there came upon a case in which were displayed facsimiles of the world noted nuggets. There were about twenty in all. Each has been named. The largest is a huge looking fellow about 18 inches long. It is known as the "Welcome." It weighed some 2,166 oz. and was worth \$41,883. Just think of stumbling over a rock worth that much money! In the gallery the collection of rocks from Ward's Science Museum, Rochester, N. Y., is to be seen. This collection, I think, is the largest in the world. Its full extent is not appreciated because for some reason or other it had been divided. One part appears at the northwest the other at the southeast end of the gallery. Rocks of all kinds

are assorted and displayed. They may be seen in every conceivable shape, smooth as ivory or twisted up like a Concha shell. They come from all parts of the earth—from mountain peaks and deepest mines and caverns, from the shores of Iceland and the Sahara's plain. Even starland has been taxed for specimens, as the display of meteoric rocks can testify. An industrious collector of crystals, A. B. Crim, Middletown, N. Y., makes a most charming display. He places before the world a case of dewdrops. Fascinated by the beauty of the common quartz crystal, he has gathered some 14,000 of these glistening bits. He displays them to advantage in an octagonal case and by a card therein informs you that not one has been polished. Their brightness is nature's gift. In a little tube about nine inches long he keeps the smaller ones. They are about the size of a pin head. Some are much smaller. One thousand are in that tube. They range in size from this up to a good large hen's egg. The beauty of this mass of gleaming treasures—this case of dew drops that will never fade—will be appreciated only by looking on them and noting the fact that each of these 14,000 crystals is flawless—without fleck, without scratch. I cannot conclude without noting the magnificent display of amber to be seen in the German mining exhibit in the gallery. I think I have looked on every object in this building and I may assert that Germany is the only one making a display of this substance. The exhibit is arranged in most orderly manner, every shape and condition of the gum is to be seen. They show it raw and melted, oily and clear. Pieces as large as your two fists that were evidently of one exudation were exposed. The generality of this display is of a wine yellow tint. Many pieces are shown whereon insects and twigs, leaves and tiny pebbles are encased. In every instance they are in a most perfect state of preservation.—*Indianapolis Catholic Record.*

## The Instincts of Birds.

It is certain that all creatures on the desert show remarkable intelligence, and how they acquire their information is decidedly a puzzle. Suppose, for example alfalfa seed is sown. The place may not have a bird about the day before the seed is put in, but next day a cloud of them will descend upon the spot and faithfully eat every seed. They do their work thoroughly and with praiseworthy industry. Poisoned wheat will check the entire removal of the seed, but the sparrow is never deterred by death, though there are some who affirm a few dead sparrows will have a chastening influence upon the rest. The sparrows with whom I have had personal relations despise death.

A MAN MADE HAPPY.—GENERAL MEN—For five years I had been a great sufferer with Dyspepsia; the pain in the pit of my stomach was almost unbearable and life only seemed a drag to me. When I would go to sleep I would have horrible dreams, and my life became very miserable, as there was no rest neither day or night. But with the use of only two bottles of Northrop & Lyman's VEGETABLE DISCOVERY this unhappy state has all been changed and I am a well man. I can assure you, my case was a bad one, and I send you this that it may be the means of convincing others of the wonderful curative qualities possessed by this medicine, that are especially adapted for the cure of Dyspepsia. A lady customer of mine had the Dyspepsia very bad; she could scarcely eat anything, and was troubled with pains similar to those I suffered with; and she cured herself with two bottles of Northrop & Lyman's VEGETABLE DISCOVERY. I wish you success with your medicine, as I am fully convinced that it will do all you claim for it. Signed, MELVILLE B. MARSH, Abercorn, P. Q. General Merchant.

Leaves are light, and useless, and idle, and wavering, and changeable, and even dance; yet God has made them part of the oak; in so doing He has given us a lesson not to deny the stout heartedness within because we see the lightness without.