eye. More than six hundred crystals of snow flakes have been examined.

The more slowly evaporation takes place, the more perfect are the crystals. If you dissolve a quantity of alum, or blue vitriol in water nearly as strong as you can make the solution, and then set it in a quiet place, there will soon begin to form regular crystals, but few in number. After a time turn these crystals over, or put them into a new solution, and you will have large and elegant crystals formed. It is on this principle that the alum basket is formed.

There are many curious things in nature and art, which receive their explanations from the laws of crystallization already explained. Iron is one of those substances which assumes a different form from crystallization. Wrought iron is tough and fibrous when first made, but when it has been subject to blows or constant vibrations, it changes its fibrous to a crystalline form, and becomes brittle. Hence it is not considered safe to fire a cannon more than six thousand times, because the structure of the metal becomes changed by firing. Rail-car axles become britttle from the same cause. An anvil has been known to fly to pieces on the same principle.

Another curious fact nearly allied to the principle just stated is, that some bodies, which are not crystalline, will assume a regular form while still in a solid state. Glass will, by long continued heat become crystalline while yet solid. Brass will become brittle by repeated heating and cooling. Hence brass wire will be tough at first, but afterwards become brittle and useless. Sugar candy which at first was transparent will after a time become opaque and crystalline.

Sometimes we may separate different salts from each other by crystallization. Take a little copperas, dissolve it in water in a cup, then a little blue vitriol dissolved in the same cup. Put the cup where the salts will crystallize, and the copperas and blue vitriol will be in separate crystals. It is on this principle that different minerals crystallize in the same rock.

The freezing of water is the result of crystallization. When water is perfectly still, it will remain several degrees lower in a liquid state than when agitated, but if in this condition it be suddenly disturbed it will instantly shoot into crystals. We once knew a small mill-pond to be frozen up in this way. The miller hoisted his gate on a very cold morning. The water commenced to run and set the wheel in motion, but in a few minutes the water ceased to flow and on examination the whole pond was in the condition usually called slosh. The agitation of the water had changed it to a crystalline mass.

Bodies change their specific gravity by crystallization. Thus water is expanded about one-ninth its volume when changed to ice. It bursts our pumps and aqueducts and rends rocks asunder. A British officer a few years since, filled strong bomb shells with water at Quebec, and froze it and burst the shells. By virtue of this principle type metal is made of an alloy of lead and antimony, which expands in the mould, and leaves a sharp edge. On the other hand gold, silver, lead and copper shrink in the mould and leave a rough surface. Look at an old-fashioned Mexican or Peruvian dollar which has been cast in a mould, and you will see the difference.

Sometimes bodies assume a crystalline structure without having a regular external form. Granulated sugar, and statuary marble are examples. Sometimes they appear laminated as in isinglass, and sometimes fibrous as in soap-stone, and the mineral asbestos.

Such are some of the wonders of the world as seen in crystals. A great variety of substances is produced for the use of man by virtue of this principle. Every substance has a different form of crystallization so that any person can recognize their differences, Simplicity and wisdom are manifest in the construction of everything in nature, showing infinite skill in the Creator who fashioned these things after his own will.

"THE GOOD OLD TIMES."

The Rev. Hugh Stowell Brown, of Liverpool, recently delivered a Lecture in Dumfries, on this Subject; in the course of which he compared the present with past centuries of the worlds History. He said:—"Men did as wonderful intellectual feats 2,000 and 3,000 years ago as are done in the present time. If it be true that man was only an improved gorilla, we don't find that he allowed a greater resemblance to it then than now: for his own part, he believed there were more monkeys now than then, and possibly the gorilla might not so much represent the race from which we sprang as the destiny to which we are hastening. Abraham he believed to be as thorough-bred a gentleman as any in the nineteenth century; Jacob as good a man of business as they would find on the Liverpool Exchange; while Joseph was a statesman, and Moses a legislator, worth a great deal more in their time than all our lords, commons and town councils put together.

"We think we do all things on a grand scale, and a cockney will boast that the largest theatre in London will hold four thousand people; thirty thousand would have scarcely filled the Coliseum at Rome. St. Georges hall, Liverpool, is justly regarded as a very magnificent building, but it was only a reproduction of a very little bit of the baths of Diocletian, which were nearly a quarter of a mile square, the whole structure being a great deal larger than our houses of Parliament. Some moderns say if the people of the ancient times should revisit the earth, they would be very much astonished He had no doubt they would, but he would be very sorry if they did in case they only laughed at us. Possibly, our grandfathers who lived in that stupidest of all centuries, the eighteenth, would be astonished, but not the men of two thousand years ago.

"We thought we had made great progress in military science, but believed we were at a disadvantage compared with the ancients. In Rome alone there were 800,000 public baths, and it never had more than half the population of London. They had hot, cold and vapour baths, and something like our Turkish baths; and what was better still the people constantly used them. We boasted of our civil engineering, but it was questionable if it had advanced much since the time when the Romans built their aqueducts, which were carried