

were first called Christians, a few years after his ascension, Acts ix. 19—27. xiv. 26. xv. 35. Gal. ii. 11.

The church here continued famous for sundry ages, and here one of the patriarchs had his seat: here the famed Chrysostom, in the end of the 4th century, preached with amazing applause and success. This city was thrice almost destroyed by earthquakes in the 4th century, and was oft in the 5th. In A. D. 518, the Persians took it, burnt the city, and put all the inhabitants to the sword. The emperor Justinian rebuilt it more beautiful and regular than ever; but the Persians quickly retook it, and demolished its walls. In A. D. 583, 60,000, of its inhabitants perished in an earthquake. It was speedily rebuilt, but the Saracens took it, A. D. 637 since which Christianity has there made but a very poor appearance. Nicephorus, the Greek emperor, retook it, A. D. 966. Not long after, the Saracens, or Seljukian Turks, seized on it. In 1098, the crusades wrested it from them: but 1188, they retook, and utterly demolished it. At present it is scarce any thing else than a heap of ruins.

PHILOSOPHICAL REFLECTIONS.

From a London Magazine.

TIN.

Rude and chaotic as the soil may seem
T' incurious or untutor'd rains;
Useless and vain as mountains seem to rise;
Yet Science shows, nor hills, nor vales, in vain
By God are meant, but toem with treasure vast:
Potent and wise in all that he has made,
And in the varied distribution kind:
To ev'ry clime its characteristic good.
Exhaustless mineral stores to this fair isle,
Kindly e'erred'd to work its greatest bliss.

This metal has been very long known, as is evident from the mention of it by Moses in the book of Numbers, and by Homer in his Iliad.

Like those we have already noticed, it is found in various parts of the world, in Asia, S. America, and Europe, particularly the latter. The counties of Cornwall and Devon in our own favoured Isle have long been distinguished for their abounding in it. Every lover of his country has abundant cause for gratitude that its bowels should be so richly stored with mineral treasure, not merely as a matter of convenience, but as affording so powerful an inducement to commercial intercourse with other nations. Many are of opinion that our metallic riches, and our stores of this metal in particular, have been the occasion of many memorable visits, which, although many of them have been followed by hostile and lamentable consequences, have nevertheless contributed to the diffusion of knowledge and promotion of civilization; in short, that our possession of this metal indirectly led to the introduction of christianity itself amongst us. Happy merchandize, if for the metallic ore we received in return the richer and sublimer ore of divine truth from the exhaustless mines of the scriptures of truth! Learned references in support of such an opinion would be unavailing to many of our juvenile readers.

Few metals that are so common are so little understood. Tin utensils, as they are called, meet us in every direction, yet we occasionally discourse with individuals, with momentary sur-

prise, who are not even aware that the principal substance of which such utensils are made is iron, the tin serving but as a covering to the stronger metal. What are called plates of tin are plates of iron coated with tin. The iron is first formed into thin plates, the plates are then thoroughly scoured with sand, and plunged for twenty-four hours in a mixture of water and sulphuric acid, of water and bran, and they are afterwards dried, rubbed with grease to prevent rust, and immersed in melted tin, which not only completely covers the plate but penetrates the whole substance.

The principal characteristics of this metal are, that it is white, has little elasticity, & is the lightest of metals. It is not very ductile, but so malleable that it may be beaten thinner than paper; yet such is its tenacity, that a wire of 1-10th of an inch will support a weight of 19 lbs and a half. It is moreover distinguished by its smell when rubbed, and for its snapping noise when suddenly bent. The characteristic peculiarities of the metals, notwithstanding their general features of resemblance, are very interesting; since, while they show the wisdom of the Almighty, who cannot have distinguished them by needless properties, they also serve to teach us humility, seeing they possess so many qualities, of whose use we know nothing.

There are two kinds of tin;—block tin and grain tin, of which the latter is the more pure, but the former is the great article of commerce, and is so called from its being made into blocks of 320lbs. weight. It is taken to the Assayer's office, duly stamped with the arms of the Duke of Cornwall, and is then saleable: hence arises a fruitful source of revenue to that duchy.

But we proceed to notice its oxides. We have already had occasion to remark, that the rusting of metals, ordinarily viewed with indifference or regret, is a subject worthy of profound attention and grateful notice, inasmuch as it is among the infinitely wise arrangements of the Great Creator not yet half understood by man. Each metal has its distinct rusts or oxides: these oxides are formed in peculiar and prescribed circumstances, and, in proportion as they are understood, they are found to subservise important purposes. Only two oxides of this metal have been as yet discovered, the yellow and the white: the former is employed in polishing fine steel wares and the superior kinds of glass; the latter is used in the manufacture of an enamel, to which almost any colour may be given by the assistance of other metallic oxides.

Another remarkable property of metals is, that with various compounds they form important salts. The most remarkable salts of tin are the muriate, the nitromuriac, and the sulphate. Combinations of tin with chlorine and sulphur are also noticed by chemists. The union of 100 parts of tin with 55 of sulphur has been called mosaic gold, and is used to give a fine colour to bronze. "I suspect," says Mr. Parke, "that the change produced in tin by this process gave rise to the idea of the transmutation of metals. If the alchemists were acquainted with this compound substance, no wonder that they should indulge the hope of being able to form gold."

The uses of tin are very important and various. We have already glanced at its utility as a covering for sheets of iron in the manufacture of neat, portable, and convenient utensils for domestic purposes. It is of immense consequence

to dyers. It is used to form their boilers, to give brightness to red and scarlet colours, and to precipitate the gross matter of other dyes. This metal is also used in the composition of various substances, as bell-metal, bronze, and brass for cannon. The ancients used it in their copper coins.

To how many other uses it is applicable is only known to Him who formed it and gave it its distinguishing properties. May this brief review of them assist the youthful reader in forming the invaluable habit of beholding and adoring the Creator in all his works.

MISCELLANEOUS.

EXPOSTULATION WITH YOUTH—You, my young friends, are entering upon life, with buoyant hopes; picturing to yourselves the full enjoyment of earthly happiness. Considering life to be but one continued scene of sunshine, without one intervening cloud to dim your vision. Your hearts beat lightly, and the lively sparkling gaiety of the eye speaks the thoughts that are passing within:

The world does present itself to your view in all its fascinating and alluring, yet deluding aspects; but if you love your own souls, if you love your present peace and happiness, and your eternal well-being, trust not the gay deceiver. Remember the language of one poet—

"How vain are all things here below,
How false, and yet how fair;
Each pleasure hath its poison too,
And every sweet a snare!"

and the expostulating lines of another—

"How long to streams of false delight,
Will ye in crowds repair?
How long your strength and substance waste,
On trifles light as air?"

You will find the pleasures of the world, unsatisfying in their nature—fleeting in their duration, like the morning cloud and the early dew, which soon passeth away—and all ending in disappointment!

O ye poor votaries of pleasure, who have drunk deep of the cup of this world's pleasures—who have entered into all its gaieties, and endless round of amusements, in the pursuit of happiness; say, have you ever found it there? No! in the midst of these scenes, has your heart never been sad, even whilst the placid smile was upon your cheek, and the glow of animation upon your countenance; and whilst you appeared to your companions, to be really happy? Yes; these things may amuse you for a little moment, but the heart gets cloyed with them, and they soon lose the power to please; and you are then left the same unsatiated creatures that you were before.

The fancied good which the world yields, exists only in your own over-heated imaginations. The world, as a potion, cannot yield you happiness when in health—cannot soothe your mind on the bed of afflictions—cannot dissipate fears, and excite consolation and joy, in the prospect of dissolution—cannot support you, when your flesh and heart faints and fail—neither can it open up to your view, a glorious prospect of immortality beyond death and the grave. The world then, as a portion is a curse, instead of being a blessing. Why then would you seek it as the chief good—as the source of your greatest happiness, when the end of all