cushion of cloth of gold, embroidered with rubies, diamonds and pearls. Around three sides of the cushion is a low rail supported by miniature columns and standing some eight inches high; it is of gold studded with clusters of rubies, and the whole throne is covered with plates of gold. In one cabinet is shown the state cradle of many sultans, which stand low on its rockers like those still in use in the East. The two ends rise a foot above the mattress, and are connected at the top by a bar running lengthwise as a support for a curtain. The whole is of solid gold, crusted on the outside with pearls, diamonds, rubies and turquoises. It would not be possible to describe in detail the contents of these rooms. "There are," says Mr. Dwight, "antique arms and armor, heavy with gold and jewels, there are innumerable horse-trappings and saddles, covered with plates of gold and studded with emeralds, rubies, topazes, diamonds and pearls; there are saddle-cloths embroidered with precious stones. Several sofa covers hang in the cabinets as background to the smaller articles; they are worth $150,000 apiece, and are of heavy cloth of gold embroidered with seed pearls." There are bird-cages of gold, some with clocks face downward, at the bottom; sacks of velvet embroidered with gold and pearls and diamonds; "samplers" of red velvet on which texts from the Koran are embroidered in diamonds; amber mouthpieces for pipes studded with diamonds and rubies; vases of crystal, agate and onyx, many enriched with jewels; inkstands and snuff-boxes innumerable, coffee-sets, tea-sets, knives, forks and spoons of solid gold, with jewels on their handles; an immense array of clocks; fans beyond counting; umbrellas of white silk, exquisitely embroidered with gold and having for handles, matchless sprays of coral a yard long; tea-sets of tortoise-shell as thin as paper. Mr. Dwight describes one toy—"a figure of a Sultan seated on his throne under a golden canopy ribbed with alternate rubies and emeralds, the whole structure being perhaps six inches high. The body of the figure is a single huge pearl; the lower extremities are carved from a blue turquoise, and the turban is a solid mass of diamonds." "After every conceivable use has been made of the jewels, the surplus unmounted stones are gathered by handfulls into crystal bowls," in one of which are three uncut emeralds, the largest the size of a man's fist, and the smallest as big as a hen's egg. During the late war the Government pledged some of its jewels to the banks for a loan of $80,000,000. The bankers removed to their own vaults precious stones of value sufficient to secure the loan fully, yet the contents of the three small boxes left no appreciable gap in the great accumulation. Such is the treasure-house of the bankrupt ruler of a ruined nation. The Commander of the Faithful, it may be added, has at his disposition, under certain circumstances, a still more remarkable accumulation of wealth. This is the "Treasure of Islam," the offering of gold and silver deposited by many successive generations of pilgrims to the three Holy Places—the Caaba at Mecca, the vaults of the Mosque of Soliman at Jerusalem and the crypt of the tomb of Ali at the gates of Bagdad. The funds thus collected are designed solely for the defense of Islam in its extremity, and their guardians would yield them for no other purpose. According to tradition a Persian emperor during the sixteenth century, undertook to obtain possession of the treasure of the Tomb of Ali, but the force he sent to despoil the shrine was miraculously hindered, the soldiers' legs being stiffened almost into stone, so that they could not approach the sanctuary, and the spirits of the air, controlled by Soliman, are fabled to have concealed the treasures at Jerusalem during the occupation by the Crusaders. A contemporary calculator has placed the rate of accumulation at $600,000 a year, and the total value of the funds at $600,000,000; but these figures are by less enthusiastic authorities regarded as largely beyond the truth, and it is added that on several occasions in modern times the Sultan has drawn upon the funds for war expenditures. Nevertheless the "Treasure of Islam" must amount to many millions of money. —*Exchange.*

IRIDUIM IN THE ARTS.

Iridium is a metal that has long been known as possessing the quality of hardness in a high degree, and has been extensively used for the "diamond" points of gold pens. It has, however, been an intractable metal, difficult to work, and for this reason has been but little used. It remained for Mr. John Holland, the well known gold penmaker, of Cincinnati, to discover a process by which the metal is made available for use in the arts. For upwards of eighteen years he conducted experiments with iridium, with a view to making it more readily available for use for pen points. He has succeeded in producing, in fact, a new metal, which has a bright metallic color similar to that of hardened steel; it takes a high polish, which does not tarnish or oxidize in the air; it does not dissolve in the strongest acids or alkalies; and it is harder than steel, agate, rock-crystal, and ruby. Iridium can be soldered to gold, silver, brass, copper, iron, steel and other metals. With these wonderful properties it can be adopted with great success for a multitude of mechanical uses and has already been applied to many with great success.

Iridium is found in considerable quantities in the platinum ores, in the forms of platiniridium, which is an alloy of platinum and iridium, and osmiridium or iridosmine, which is an alloy of osmium and iridium. The platiniridium occurs in grains, and sometimes in cubes with rounded edges. The iridosmine is usually found in the form of flat, irregular grains, and occasionally in hexagonal prisms. The geographical distribution of this metal is quite wide; it is found in California, Oregon, Russia, East India, Borneo, South America, Canada, and Australia, and in small quantities in France, Germany and Spain. As usually found, iridosmine, or the so-called native iridium, is associated with numerous rare metals, viz.: osmium, platinum, rhodium, ruthanium and palladium, and also with iron and copper. Iridium possesses a white lustre resembling that of steel. In the cold it is quite brittle, but at a white heat is somewhat malleable. It is one of the heaviest of metals, having a specific gravity of 22.38. When an alcoholic solution of the sulphate of iridium is exposed to sunlight, it deposits an impalpable black powder, which has the very peculiar property of setting fire to a piece of paper saturated with alcohol when brought into contact with the slighest trace of it.

The iridium melted by the Holland process is compact and crystalline; it is harder than the natural metal. The operation of sawing the metal is accomplished by means of a copper disc, making about 5,000 revolutions per minute, assisted by emery and water. When the metal is ground to a smooth