

CHAPTER XXII

THE OPAL

THE OPAL IN ASTRO-PHILOSOPHY: PETRUS ARLENSIS DESCRIBES THE OPAL: PLINY'S POETICAL OPINION: THE PAEDEROS CHILD BEAUTIFUL AS LOVE: THE ORPHAN: ROMAN SENATOR AND HIS OPAL: OPHTHALMIOS THE EYE STONE: OPINION OF MEDIAEVAL WRITERS: THE BAY TREE: ALBERTUS MAGNUS AND THE OPALS THAT SPARKLED IN DARKNESS: THE ZODIACAL SIGN OF ROYALTY AND THE OPAL: KERAUNIOS OR THE THUNDER STONE: THE BEAUTY STONE: THE STONE OF HOPE, ACHIEVEMENT AND LOVE: THE LARGE HUNGARIAN OPAL: AUSTRALIAN OPAL FIELDS: SIR DAVID BREWSTER'S THEORY OF COLOURS IN OPALS: DR. G. F. H. SMITH'S EXPLANATION: SENSITIVENESS OF THE OPAL: SUPERSTITION AGAINST OPAL: THE PLAGUE AT VENICE: THE "BURNING OF TROY": THE CRIMEAN WAR: SCOTT'S ANNE OF GEIERSTEIN: COMBINATIONS OF DIAMONDS AND OPALS: DESTRUCTION OF THE VANITIES AT FLORENCE: STORY OF THE OPAL OF ALFONZO XII OF SPAIN: A CHOLERA STONE FATAL TO THE KING AND TO ALL WHO RECEIVED IT FROM HIM ACCORDING TO ASTROLOGICAL SCIENCE: THE BARON'S OPAL OF FORTUNE.

OPAL

"Everyone knows how capriciously the colours of a fine opal vary from day to day and how rare the lights are which fully bring them out."

RUSKIN.

The word "opal" is derived from the Latin OPALUS, and is identified with the Sanscrit UPALA, a precious stone. It appears under the forms opale, opall, opalle, opalis, ophal.

This beautiful inimitable gem is a hydrous silica, and is allied to the non-metallic minerals of the agate family from which, however, it differs in brilliancy, lustre and degree of hardness. It is sensitive to the action of strong chemicals and does not present, like other minerals, crystalline form. As a gem of the Sun it exhibits flows of fire like the sun at mid-summer—as a gem of Venus its delicate beauty radiates her colourful charms, and as a gem of Uranus its refusal to submit to the all-embracing law of mineral structure harmonizes with the iconoclastic character of that planet according to astro-philosophy. Ancient and modern poets unite in singing the praises of the opal. Onomacritus, known as the religious poet of the ancient Greeks, over 2,400 years ago wrote that "the delicate colour and tenderness of the opal reminded him of a loving and beautiful child." Joshua Sylvester (16th century) writes of "the opal-coloured morn," and the poet Campbell of a time when "the opal morn just flushed the sky," thus echoing William Drummond of Hawthornden's:

*"Aurora . . . with her opal light
Night's horrors checketh, putting stars to flight."*

Emerson writes of the "opal-coloured days," and

Poe with true poetic fancy sees even the air opal tinted:

*"A wroath that twined each starry form around
And all the opal'd air in colour bound."*

Shakespeare in "Twelfth Night" links the mind of the Duke with the opal (written "opall" in early editions). Boetius, Cardanus and a host of writers pay their tributes to the "orphan" of the Greeks, and Petrus Arlensis writes: "The various colours in the opal tend greatly to the delectation of the sight; nay, more, they have the greatest efficacy in cheering the heart, and the inward parts especially rejoice the eyes of the beholders. One in particular came into my hands in which such beauty, loveliness and grace shone forth that it could truly boast that it forcibly drew all other gems to itself, while it surprised, astonished and held captive without escape or intermission the hearts of all who beheld it. It was of the size of a filbert and clasped in the claws of a golden eagle wrought with wonderful art; and had such vivid and various colours that all the beauties of the heavens might be viewed within it. Grace went out from it, majesty shot forth from its almost divine splendour. It sent forth such bright and piercing rays that it struck terror into all beholders. In a word it bestowed upon the wearer the qualities granted by Nature to itself, for by an invisible dart it penetrated the souls and dazzled the eyes of all who saw it: appalled all hearts, however bold and courageous: in fine, it filled with trembling the bodies of the bystanders and forced them by a fatal impulse to love, honour and worship it. I have seen, I have

felt, I call God to witness: of a truth such a stone is to be valued at an inestimable amount."

Turning back again, we read Pliny's poetical opinion that "the opal is made up of the glories of the most precious gems which make description so difficult. For amongst them is the gentler fire of the ruby, the rich purple of the amethyst, the sea-green of the emerald, glittering together in union indescribable. Others by the intensity of their hues equal all the painter's colours, others the flame of burning brimstone or of fire quickened by oil." In admiration the Romans called the gem Cupid-Paederos, child beautiful as love, and it was also known as Orphanus, the orphan, because of its isolated glory. Leonardus wrote that it partook of all the virtues of those stones whose colours it showed, and Porta said that it not only drove away despondency but malignant affections also. So highly valued was the stone in the ancient world that the Roman Senator Nonius, who wore an opal ring worth 20,000 sesterces, preferred to be exiled by Marcus Antonius, who wished to purchase it to present to the Egyptian Queen Kleopatra, to giving it up. This famous ring was some few years back discovered in the tomb of the firm-willed senator of old Rome.

Opal was called OPTHALMIOS or Eye Stone in the Middle Ages, and in the time of Queen Elizabeth it was written ophal and opall. Our "Rare" Ben Jonson writes of an opal "wrapped in a bay leaf in my left fist to charm their eyes with." The opal—ophthalmis lapis—was famous as an eyestone, taking precedence over the emerald and all gems credited

with such virtue. It was advised by mediaeval writers that it be wrapped in a bay leaf to sharpen the sight of the owner and to blunt that of others with whom he came in contact: hence also its reputed virtue of bestowing the gift of invisibility which earned it the name "Patronus furum," the patron of thieves.

The Bay tree is identified in astro-philosophy as a tree of the Sun and the zodiacal Leo (House of the Sun), and is an ancient recognized charm against evil forces, thunder, lightning and the afflictions of Saturn which is the heavenly symbol of darkness, as the Sun is the heavenly symbol of light. Albertus Magnus, regarding the opal as a symbol of the loveliness of light, says that "at one time, but not in our age, it sparkled in the dark." The zodiacal Leo or Lion is the ancient recognized sign of royalty and old writers say that kingly government was established on the earth in the Leonine age. Alluding to the great translucent opal in the Crown of the Holy Roman Empire, Albertus said that it safeguarded the honour of the kings. The stone was always considered to protect the wearer from cholera, kidney troubles, and similar diseases, to soothe the heart, the eyes and the nerves, and to protect from the lightning stroke. The belief in its power to ward off lightning was universal in the ancient world when amongst the people it was believed to have fallen from the heavens during thunder storms—hence its old name, KER-AUNIOS, Thunder Stone, amongst the Greeks, and CERAUNIUM amongst the Romans. The opal was essentially the stone of beauty, which

coveted gift it bestowed upon the wearer who, however, must have entered earth life with the Sun in Leo (approximately between July 24th and August 24th), Libra (September 24th to October 24th) or Aquarius (January 21st to February 19th). It favoured children, the theatre, amusements, friendships, and the feelings. Held between the eyes it gave proper direction to the thoughts. Held in the left hand and gazed upon it favoured the desires. It is the stone of hope and achievement and has been truly described as the "gem of the gods." Above all, it is a stone of love, but if the lover be false its influence is reversed, and the opal proves a sorry gem for faithless lovers. Mr. Emanuel comments on the two fine opals which were amongst the imperial jewels of France, one of which was set in the clasp of the royal cloak. The opal, astrologically considered, is one of the fortunate gems for France. A beautiful uncut opal discovered at Czernovitza in Hungary has been valued at over £50,000 sterling; this specimen, in length 5 inches by 2½ and weighing 3,000 carats, was placed in the Museum of Natural History at Vienna. The mines at Czernovitza are known to have been worked over 500 years ago, and at a more remote period they no doubt supplied the ancient world. There is little doubt, however, that the wonderful opals from Australia's fields have eclipsed anything yet found. The White Cliffs, the Lightning Ridge, and the newer field out North West are responsible for some of the most beautiful gems that have ever been unearthed. A kangaroo hunter accidentally discovered the White Cliffs field

in New South Wales over 40 years ago whilst following the trail of a kangaroo. Rich "blacks" were discovered later in the iron sandstone of Lightning Ridge (New South Wales) and the new fields North West of Tarcoola are yielding white and light varieties. Opal country is dry and dreary and the diggers deserve all they find. Sir David Brewster's theory of the colour blends which flash from an opal is that "the stone is internally traversed with undulating fissures of microscopic minuteness upon which refraction and decomposition of light takes place. The variations in the nature of these minute cavities cause the appearance of the opal to vary considerably, and the different effects of colour thus produced are technically known as the pattern of the gem." Haüy held that colour in the opal is caused by thin films of air which fill the interior cavities. Dr. G. F. Herbert Smith writes "that the colouration is not due to ordinary absorption but to the action of cracks in the stone. This is shown by the fact that the transmitted light is complementary to the reflected light; the blue opal, for instance, is a yellow when held up so that light has passed through it. . . . Opal differs," he says, "from the rest of the principal gem stones in being not a crystalline body but a solidified jelly, and it depends for its attractiveness upon the characteristic play of colour known, in consequence, as opalescence which arises from a peculiarity in the structure. Opal is mainly silica (SiO_2) in composition, but it contains in addition an amount of water, thereby differing slightly in refractivity from the original substance. The structure not being quite

homogeneous, each crack has the same action upon light as a soap-film and gives rise to precisely similar phenomena: the thinner and more uniform the cracks, the greater the splendour of the chromatic display, the particular tint depending upon the direction in which the stone is viewed. The cracks in certain opals are not filled up, and therefore contain air." The opal is a very sensitive gem and should not be put near strong acids nor greasy substances. The heat of the body improves its lustre for the opal is essentially a stone to be worn, but it is unsafe to put these gems near liquids or to submit them to fire.

"Truth is as impossible to be soiled by any outward touch as the sun-beam."

MILTON.

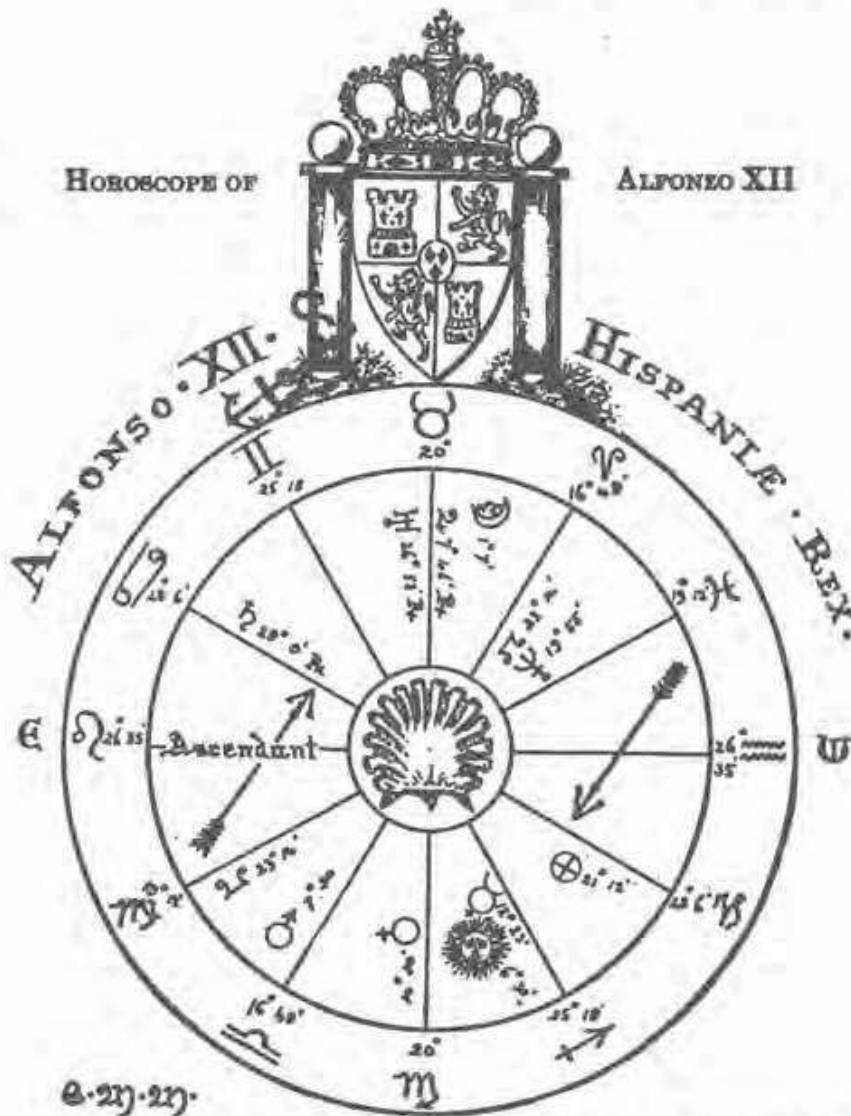
Perhaps against no other gem has the bigotry of superstitious ignorance so prevailed as against the wonderful opal. The reason for it dates no further back apparently than the 14th century. It was at this time that the dreaded "Black Death" was carrying off thousands of people in Europe. The year 1348, an astrological Martial sub-cycle, saw Venice assailed by destructive earthquakes, tidal-waves and the Plague. The epidemic in a few months carried off two-fifths of the population of the city, sparing neither rich nor poor, young nor old. It is said that at this time the opal was a favourite gem with Italian jewellers, being much used in their work. It is further said that opals worn by those stricken became suddenly brilliant and that the lustre entirely departed with the death of the wearer. Story further tells that the opal then became an

object of dread and was associated with the death of the victim. On the astrological side it might be considered that the city of Venice comes under the watery Cancer, and can not, therefore, claim the opal as its jewel. But, admitting that under special and rare conditions certain diseases can influence the opal if worn on the body, the truth of the Venice story can be reasonably doubted. Another theory of the origin of the superstition is traced to the rigorous order of Jerome Savonarola for the destruction of the vanities in the year 1497. This remarkable ascetic caused great bonfires to be lighted in various parts of the city of Florence, the largest in the Piazza Signoria. Into these bonfires were thrown works of art and beauty, pictures, statues, jewels and beautiful raiment. The fanatical spirit so gained ground owing to the impassioned preaching of Savonarola that women threw into the flames their costliest jewels, authors their books, students their manuscripts and poets their love songs. It is assumed that the opal, the gem and symbol of the beauties of Venus came under the ban and history relates that the most direct onslaughts were made on the pictures and statues of the goddess. Astrologers show that the year 1497 was dominated by the planet of war and destruction, Mars, and it is deplorable that so many wonderful works were sacrificed during that unhappy period. The artist F. W. W. Topham, R. I., has illustrated this event in his well-known painting "Renouncing the Vanities by Order of Savonarola," which picture now hangs in the Art Gallery of New South Wales. There is also a

story which tells that during the Crimean War the gem was popular with the English army and navy and that it was found in quantities on the bodies of the slain. Sir Walter Scott's romantic story "Anne of Geierstein," was a powerful influence in advancing the superstition against the opal, although Sir Walter alluded to the Mexican Opal known as Girasol and not to the better known precious opal. Even whilst these superstitions were growing, to dream of an opal was regarded as an indication of great possessions, of the favour of ladies and people of influence, and—if the stone be dark—of sudden happenings of a beneficial nature. Another modern superstition says that it is not fortunate to set opals and diamonds together in jewels. Quabalistically, opals and diamonds are set down as particularly harmonious stones which, in combination, have a fortunate and positive-negative influence. Astrologically the diamond is attached to the zodiacal signs Aries, Leo and Libra, and the opal to Leo, Libra and Aquarius, and astrology is absolutely the special guide to talismanic construction. The fine fiery opal known as the "Burning of Troy" given by Napoleon to Josephine, is sometimes quoted as evidence of the evil power of opals. It rather provides peculiar testimony in favour of old talismanic lore. This opal was lost and has never since been found—opals would be regarded as unfavourable for Josephine. Passing over trivial superstitions containing neither truth nor interest, we may conclude this section with the story of the Grand Opal of Spain which is said to have brought disaster to the Royal House:

When Alfonso XII of Spain was a wanderer he was deeply attracted by, and fell in love with the Comtesse de Castiglione, then a reigning beauty. Immediately Alfonso became King the Comtesse hastened to greet him with the fond desire to become his queen. However, when she found that he had set her aside and married the Princess Mercedes her anger knew no bounds. Resolving on revenge, she sent Alfonso "in memory of the old friendship" a wedding present of a magnificent opal set in a filagree ring of gold—a style of mounting in great favour with the jewellers of Spain. The delicacy of the jewel so attracted Queen Mercedes that she asked the King to grace her finger with it. A few months afterwards she died of a mysterious illness and Alfonso gave the ring so admired by her to Queen Christina, his grandmother, whose death shortly followed. The King then presented the ring to his sister the Infanta Maria del Pilar, who was in turn carried off by the same mysterious illness. A few weeks afterwards the King's sister-in-law, the youngest daughter of the Duc and Duchesse de Montpensier, who had asked the King for the ring also died. The King then placed it on his own finger and in a little time the same illness which had affected his wife and kindred ended his troubled earth-life. After these calamities Queen Christina attached the ring to a chain of gold and set it about the neck of the patron saint of Madrid, the Virgin of Aludena. Ancient philosophy would have depreciated the wearing or giving of an opal by Alfonso XII of Spain. At this time it must be

remembered that cholera was raging throughout Spain—over 100,000 people died of it during the summer and autumn of 1885. It attacked all



Astrologically the opal would be accounted unfortunate for this King. classes from the palace of the King to the hut of the peasant, some accounts giving the death estimate at 50% of the population. It would be as obviously ridiculous to hold the opal responsible for this scourge

as it was to do so in the case of the previously noted plague at Venice. All that may be said is that in this case the opal was not a talisman of good for King Alfonso XII of Spain and to those who received it from his hand, and that in the philosophy of sympathetic attraction and apathetic repulsion man, stones, metals and all natural objects come under the same law. We may wonder why the King gave this opal from one of his relatives to another, but the reputation of the opal as a charm against cholera (noted in the previous chapter) must have reached the King who, in the intensity of his worry, used a charm which according to the ancients would act in his hands fatally instead of beneficially.

In the month of October, 1908, a French Baron sitting in the stalls of the London Pavilion during Mr. and Mrs. Marriott's thought-reading exhibition, handed an opal of uncommon form to Mr. Marriott. Mrs. Marriott seated on the stage with bandaged eyes gave an accurate description of it, saying further that it was a stone of fortune to the owner who was about to become the possessor of over half a million of money. The Baron, who resided in London for the past 18 years, when interviewed by a representative of the "Evening News" on the following day, communicated the fact that a few days before, he had, through the death of a relative in Mexico become heir to property worth over £500,000, yielding an income of £25,000 per annum. The Baron who cherished the opal as his sympathetic luck stone, told the newspaper man that:

"It is an uncut stone which has been in the possession

of my family since the twelfth century. We have always had the tradition that it will bring good fortune to any direct descendant of the family in the male line who holds it.

"A curious stipulation, however, of the tradition is that the person who has it must possess qualities which have a sympathetic attraction to the stone in order that its beneficent effect may be felt. On a flat surface of the opal is a word in old Spanish, now only dimly seen, which means in English 'good luck.'

"I have treasured the gem as an heirloom, but have thought little of the tradition until lately, when a member of the cadet branch of the family died and left me the immense fortune I have mentioned to you. I can hardly realize all that it means to me as yet. Up to now my income has not been much more than £500, and to suddenly find £25,000 a year at one's disposal is a little staggering.

"There have been one or two previous instances where my ancestors while holding the opal have experienced exceptionally good luck, but, personally, I have not ever paid much regard to the old tradition. You may imagine, however, that the gem will be most carefully preserved by me."

THE GREAT AUSTRALIAN OPAL

CHAPTER XXIII

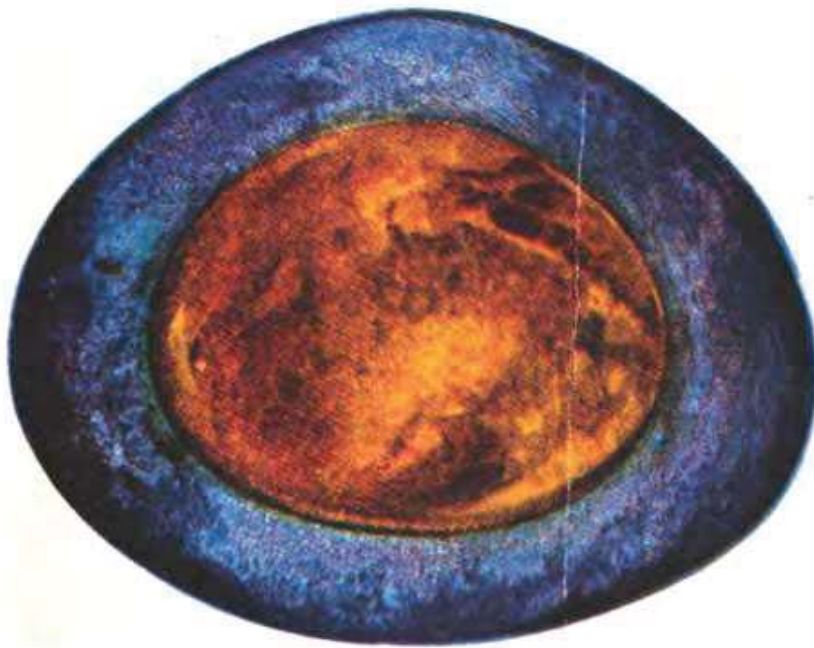
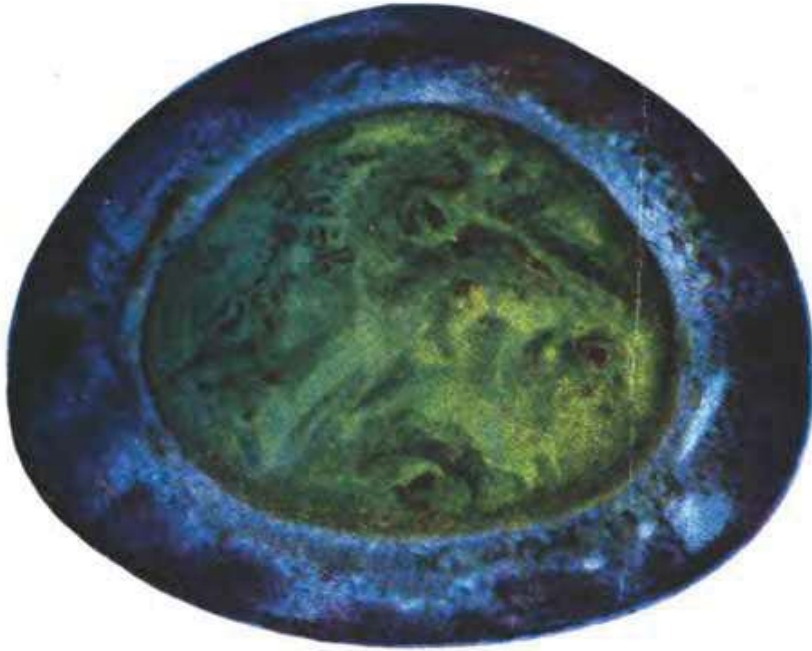
THE FLAME QUEEN

*"But who can paint
Like Nature? Can imagination boast
Amid its gay creation hues like hers?"*

THOMSON.

The Flame Queen, the rarest stone yet won from the barren sun-baked opal fields of Lightning Ridge, New South Wales, near the borders of Queensland, Australia—takes its place amongst the famous gems of the world.

It is a large oval-shaped stone measuring 2.8 inches by 2.3 inches and weighing 253 carats. In structure and colour phenomena it is unique—the centre slightly in relief whilst the surrounding border stands out boldly as a frame to a picture. Looking directly on to the stone the inspiration of the name becomes manifest. The centre, a deep flame, burns scarlet, and two slight depressions almost parallel to each other give the impression of fire mountains in eruptive action, the lower of which flings two triangular shafts towards the enclosing green frame. Viewed from another angle the burning centre yields as if by magic to a field of cool yet vivid emerald, and the frame to a royal blue. Another angle shows a bronze centre touched with points of darker hue



Other Aspects of the Great Opal "The Flame Queen"

Kelsey I. Newman Collection

See also Frontispiece

within a frame of changing blue and amethyst. The stone is chameleon-like, bewildering in its living beauty.

This stone is the choicest gem in the Kelsey I. Newman collection of rare opals and precious stones. On the 6th of March, 1916, Mr. Allan Harris of Brisbane submitted the gem to the Queensland Geological Survey. In the course of his report Mr. B. Dunstan, the chief Government Geologist, mentions that the back of the stone "is impressed with what appears to be a fossil plant called GINKO, which occurs in the Jurassic rocks of Queensland but not in association with any opal deposits. The stone is a wonderful specimen and much the largest gem of its class that has ever come under my notice." This beautiful opal—unlike some other famous gems mentioned in this book—is said to have brought good fortune to all who have been associated with it.

CHAPTER XXIV

VARIOUS KINDS OF OPAL

CACHOLONG, THE OPAL OF FRIENDSHIP: FLOAT STONE, THE LOVERS' OPAL: GIRASOL, THE FIRE OPAL: HYALITE, THE EYE OPAL: HYDROPHANE, THE MAGIC OPAL: MENILITE, THE LIVER OPAL: OPAL JASPER: ROSE OPAL: SEMI-OPAL, THE FOREST OPAL: TABASHEER: MARCO POLO'S ACCOUNT OF THE EXPEDITION OF THE GREAT KAAH: THE OPAL OF INVULNERABILITY AND REMOVER OF DREAD: THE MARVEL OF TRANSFORMATION.

*"Grey years ago a man lived in the east,
Who did possess a ring of worth immense,
From a beloved hand. Opal the stone,
Which flashed a hundred bright and beautiful hues,
And had the secret power to make beloved
Of God and man the blessed and fortunate
Who wore it in this faith and confidence."*

"NATHAN THE WISE," LESSING.

CACHOLONG. An opaque white or bluish-white variety of opal which obtains its name from the river Cach in Bokhara, according to some authorities and from the Tartars according to others. The Easterns set a high value on the stone which glistens with the opalescent gleam of Mother of Pearl. It is associated with chalcedony and being of a porous nature sticks to the tongue when touched by it. The Cacholong is a stone of pure friendship, sincerity and truth.

FLOAT STONE. A porous opal of a fibrous type which floats on water. It occurs in concretionary masses and is esteemed as a stone over which the most sacred promises may be made. Lovers join hands over a Float Stone floating on a vessel of water and pledge their troth with the utmost solemnity, misfortune being bound to dog the footsteps of the faithless one.

GIRASOL. The Girasol is the Mexican Fire Opal which reflects hyacinth and yellow colours. Good specimens are attractive and fairly popular. This is the opal indicated in Scott's "Anne of Geierstein."

HYALITE. The name is derived from the Greek word for glass, and the stone—a transparent glass-like opal—has been called Muller's Glass by Dr. A. G. Werner who is said to have discovered it. It is very like clear gum arabic and is probably one of the esteemed eye stones of the old writers.

HYDROPHANE. This variety of opal is very porous and beautifully translucent and opalescent after being left for a little time in water. It is otherwise of an opaque white or yellow and not very attractive. In the United States it has been termed Magic Stone.

MENILITE. This variety is found in slate not far from the French capital. It is termed also Liver Opal and is said to have talismanic action on that organ. It is a concretionary opal, brown or liver-coloured.

OPAL JASPER. Opal Jasper is a jasper-like

resinous, dark red, ferruginous variety of opal, identified as the opal of beautiful wisdom.

ROSE OPAL. A beautiful rose-coloured opal found at Quincy in France. This is the opal of the baby Cupid and is termed the Opal of Childhood.

SEMI-OPAL. A silicified wood-opal of waxy lustre, transparent to opaque. It is found in various colours—white, brown, grey, red, blue, green. It has the appearance of petrified wood. It is a tree-growing charm and is no doubt the Forest Opal.

TABASHEER. Corrupted from Tabixir, is a siliceous aggregation found in the joints of certain bamboo known in the Malay as the Mali Mali, Rotan jer' nauf (blood of the dragon Rattan) and Buluh Kasap (rough bamboo). In appearance it is generally like clear gum arabic, although sometimes opaque, and is the sap transformed by evaporation. Under reflective light it is a kind of blue and under transmitted light it is either light yellow or amber-red. It is extremely absorptive. In Marco Polo's account of the expedition of the Great Kaan against Chipangu, we are told that "when the people of the Kaan had landed on the great Island they stormed a tower belonging to some of the islanders who refused to surrender. Resistance being overcome, the Kaan's soldiers cut off the heads of all the garrison except eight. On these eight they found it impossible to inflict any wound. Now this was by virtue of certain stones which they had in their arms inserted between the skin and flesh with such skill as not to show at all externally. And the charm and

virtue of the stones were such that those who wore them would never perish by steel. So when the Kaan's generals heard this they ordered that the prisoners be beaten to death with clubs. After their death the stones were extracted from their bodies and were greatly prized." Friar Odoric says that these Stones of Invulnerability were Tabashir specimens which were used by the natives of the Indian Islands where their virtue was esteemed. According to Avicenna the Tabashir was a powerful eye stone and remover of past fears, present dreads and future anxieties.

PSEUDOMORPHIC OPAL. Opalized shells, bones, etc., are found in quantities in opal country. These specimens are unique and of much curious interest. A number of shells from the new fields 150 miles North West of Tarcoola (on the East-West Railway, over 250 miles from Port Augusta) were submitted to the author. In these the silica slowly and progressively took the place of the primary substance until it was completely opalized, the old form of the material being only retained. It is remarkable to contemplate the change of conditions which placed the former substance so completely at the mercy of the consuming opal. Such transformation is continual in Nature, manifesting variously in the mineral world, proving that eternal progress is eternal change. It was the observation of similar material phenomena that led ancient scientists to the conclusion that transformations could be accomplished by the skill, knowledge and wisdom of sincere and gifted men who undaunted

by superficial criticism persevered, and the triumphs of the chemist served to indicate how much more could be done by those brave enough to prove the immortality of man by reducing the unknown to terms of the known.

The word PSEUDOMORPH is derived from the Greek PSEUDO and MORPHES, disguising one's form.