One of the most sophisticated crafts in which the Italian Renaissance expressed its ideal of beauty was the art of cutting and engraving rock crystal. Both in technique and in style it has much in common with gem-engraving. In a gem, a portrait or some other subject is carved in relief or in intaglio in the stone. In a crystal a more elaborate design is cut in intaglio into the transparent and hard substance. In both we have the same process of forcing a strictly expressive line upon a hard material.

The nature of rock crystal, however, presents unusual problems for the artist. The most immaterial of the hard stones, this medium is also the most challenging because of its transparency. Neither color nor mass plays any part. Crystal can be heavy and thick as a block of stone, iridescent if irregularly broken, mat if properly cut, and can be reduced to a sheet as thin and as brilliant as glass. In this unique medium light is the chief factor, a light through which a plastic effect can be achieved and a luminous mass created. Moreover, the hard and brilliant surface is an invitation to the artist to draw a sharp design with his diamond point just as the engraver does with his burin on a copper plate. In cutting a vase out of lapis lazuli, agate, or porphyry the artist usually seeks to achieve an effect of monumental proportions. With rock crystal he is more free. He can create the most fantastic forms and entrust to the polished surface of the vessel all the whimsical flights of his imagination.

Although the tradition of stonecutting had been followed since Roman times in the making of seals and vessels of rock crystal, gem-engraving during the Renaissance had origins which were definitely humanistic in character, produced by the classicistic trends of the fifteenth century. It was in Florence, where Lorenzo de’ Medici included in his collection many ancient cameos (among them the famous carnelian of Apollo and Marsyas), that the desire to recreate the ancient craft was born.

Renaissance gem-engraving must be associated with the activities of the medalists and of the imitators of ancient coins. Significantly enough, most of the famous gem-engravers of the Renaissance, like Valerio Belli, Matteo del Nassaro, and Giovanni de’ Bernardi da Castelbolognese, were at the same time medal- or coin-makers. The method of cutting a metal die in the negative for striking a coin and of carving a hard stone were often the same in the sixteenth century. Vasari puts it clearly when he explains that the dies could be carved with wheels “just as intaglio work is done in crystals, jaspers, chalcedonies, and other oriental stones,” to make them, “like these stones, sharper.” In speaking of gem-engraving itself he also tells us that “those oriental stones are carved with wheels by means of emery, which cuts its way through any sort of hardness of any stone whatever.” And he adds that “as the craftsman proceeds he is always testing the intaglio which he is fashioning by means of wax
Detail of the crystal dish below, with scenes of the Seasons. Above, left, Winter warms himself by a fire, while Spring, right, enjoys her flowers; in the center two men cut wood in a wintry landscape. In the style of Valerio Belli (1460-1546). Bequest of Benjamin Altman, 1913

impressions, so that he can go on removing material where he thinks that it is necessary, till the final touches are given to the work.”

It has often been said that no true work of art can be created if the medium is not congenial to the aesthetic and spiritual aims of the creator. Certainly few mediums can be imagined that could have lent themselves better than crystal to the new formal ideals of the classicistic trends of the Renaissance in Italy, and this alone may to a large extent explain the rapid flourishing and the high quality of crystal-engraving at that time. While the origins of gem-engraving must be traced to the humanistic atmosphere of fifteenth-century Florence, the center of the new craft later shifted away from Tuscany. In the sixteenth century the best crystal cutting was done chiefly by North Italians and the two centers of their activity were Rome and Milan. Valerio Belli, Giovanni de’ Bernardi da Castelbolognese, Annibale Fontana, and the Sarachi brothers, the great masters of crystal engraving in the sixteenth century, whose work is shown here, were North Italian or Milanese.

A small plaque of rock crystal, signed VALERIUS F(ecit) introduces us immediately into a classicistic atmosphere. Although the subject represented is the Entry of Christ into Jerusalem this scene at first glance evokes the hieratic sequence, the heavy and realistic figures of a late imperial Roman relief. The Jewish people scattering olive branches before Christ remind us of Roman legionaries crowning their emperor with laurel in a triumphal procession. Many of these curly heads seem to derive from ancient coins or cameos. The architrave, with its inscription, BENEDECTUS QUI VENIT IN NOMINE DOMINI, has the monumentality of a marble slab.

This adaptation of the form of a Roman relief to a Christian subject is explained by the personality of the artist who cut this crystal. Valerio Belli, called Il Vicentino, from Vicenza, where he was born in 1460, is perhaps the most accomplished and the most famous of the engravers in crystal of the Renaissance. Patronized by famous humanists like Gian Giorgio Trissino, Pietro Bembo, and Cardinal Alessandro
Farnese, he came to Rome to work for Pope Clement VII as crystal-cutter and medalist. To this small provincial, Rome had to offer the great examples of the works of Raphael and Michelangelo and the monuments of its antiquity. Soon Valerio began to collect everything he could lay his hands on: objects of classical antiquity, plaster casts of both ancient and modern works, and drawings and pictures by the great masters of his time. Among the things he certainly most treasured was a book of sketches by Bramantino representing the reliefs of the Trajan column, which Vasari saw in his collection. We can easily imagine, from the style of the compositions he engraved on his crystal plaques, that he may often have been inspired by the drawings of this book, unfortunately lost.

After 1530, when he returned to Vicenza, his house became a sort of "antiquarium," much admired by his contemporaries.

If we compare our crystal plaque with other works by Valerio, we feel right away its strong connection with several crystal plaques he executed for the decoration of a casket for Pope Clement VII, today in the Pitti Gallery in Florence. One of the foremost examples of Valerio's work, this casket enjoyed an exceptional popularity as soon as it was finished, in 1532. Bronze plaquettes reproducing the compositions of the crystals were commonly found in the goldsmith's shops of the day, where they seem to have served as models. Valerio himself must have been aware of the success of his work, since he repeated the same crystal plaques, perhaps...
for some other casket, making them even more classical in style. It is reasonable to assume that our Entry into Jerusalem belongs to this last series, probably made in the thirties, which is today dispersed in various collections.

Composition and design do not seem to have been the greatest achievement of Valerio. But as the plaque of the Entry into Jerusalem shows, he was a remarkable craftsman and possessed the secret of his medium more than anybody else of his time. In carving the mat reverse of his plaque and following his model in wax he must have felt what a subtle plastic effect could be obtained by defining several planes of light. His ideal must have been to translate into terms of transparency the marble reliefs he had so long gazed on. The figures engraved in the crystal seem to be frozen into the light, which accentuates the contours of the bodies, creeps along the draperies, emphasizes the restrained gestures, and thus establishes the unity of the whole design. In contrast with the cold, antiquarian spirit of the scene, it is this feeling for light and atmosphere, this luminous plasticity, that delights the beholder and reveals the true renaissance soul of this little masterpiece.

The classicist style of Valerio Belli found a well-prepared ground for its expansion in North Italy. It will be enough to mention the Paduan bronze production, the statuettes by Antico, the prints by Zoan Andrea, the imitations of ancient coins, and the prints after ancient cameos by Enea Vico, to evoke that atmosphere of assiduous, literary classicism which leads from the fervor of the Quattrocento to the academism of the mature Renaissance. A large dish of rock crystal in the Altman collection seems to come out of this North Italian environment of the first half of the sixteenth century. Personifications of the seasons of the year and
Heracles fighting the centaur Nessus in defense of his wife, Deianira. Both plaques belonged to a casket decorated with exploits of Heracles. The Michael Friedsam Collection, 1931

corresponding country scenes, right out of Vergil's *Georgics*, such as the ploughing of the fields, the harvest, wine-pressing, and wood-gathering, decorate the border. In the center Neptune is represented in a medallion riding two dolphins through the waves.

The austere style of Valerio Belli, to whom this piece has been generally attributed, has dwindled here into a narrative and provincial expression. The little figures busy against the wide landscape, among the scattered and timid trees, follow each other on this frieze in a broken, linear sequence, as if the artist had wished to avoid the complexity of an organically rounded composition. The association evoked is that of frescoes on the walls of early Christian columbaria with landscapes of flatlands and water, full of putti or tiny men. Particularly interesting are the huge figures of the Seasons with their strangely disproportioned bodies and small heads, which recall ancient models seen through the deforming prism of vaguely Michelangelesque prototypes.

Among the masters in crystal of the next generation, who were chiefly active in the forties, Giovanni de' Bernardi da Castelbolognese rivals Valerio Belli in renown. Born near Ferrara in 1496 this artist worked for the most part in Rome and was at the Roman mint from 1534 to 1538, under the protection of Cardinal Ippolito de' Medici and Pope Clement VII. His work there even excited the envy of the great Benvenuto Cellini. Later he retired to Faenza, where he continued his activity, keeping always in contact with Rome, until his death in 1553. An eclectic by nature, Giovanni de' Bernardi shows in his crystal engravings a style which has traces of the work of Polidoro da Caravaggio and Pierino del Vaga as well as of Michelangelo's great models. His wonderful technique
The composition of this crystal there is an inscription, *EXPEDITIO AFRICANA*, which gives us a clue to the subject represented. It is the battle of Tunis, won by Charles V in 1535 in the course of his famous expedition against the Turks. The peculiar cartographic appearance of this scene is explained by the source that inspired the artist, a map of the harbors of Tunis and Goletta drawn by Jan Vermayen, who accompanied Charles V in the role of what we would call today a war correspondent.

Giovanni de' Bernardi was evidently proud of this work, since on April 21, 1544, he wrote to Cardinal Alessandro Farnese: “I am sending you the four large pieces of the casket and the Battle of Tunis, all of which will awaken the admiration of your Eminence.” The casket mentioned by Giovanni was one on which he had been working since 1543. It is today in the National Museum in Naples. The oval crystals inserted as decoration for the sides of the casket represent mythological scenes and are executed after designs by Perin del Vaga. It is not very

*Left, crystal ewer with stories of Apollo, by a follower of Annibale Fontana. Milanese, about 1580. Detail below, showing Apollo and Diana.*

Gift of J. Pierpont Morgan, 1917

as a goldsmith and gem-engraver helped him translate into crystal the compositions of these masters; but he lacked, it seems to us, that passionate understanding of the nature and of the possibilities of his medium which Valerio so completely possessed.

The signature IOANNES B. F. on an oval crystal plaque from the Morgan collection indicates Giovanni de' Bernardi as the engraver. The scene represented is a great battle of men and cavalry on the shore of a double harbor, with a fortified city in the distance. On the reverse of a silver medal of Charles V reproducing exactly
likely that the Battle of Tunis was intended for this casket, because of the difference of the subject matter, although the plaque is of exactly the same size as the other crystals. Possibly it belonged to an abandoned project or was just intended as a sample of the virtuosity of Giovanni, merely for the pleasure of the cardinal, who was a connoisseur.

In the Morgan plaque Giovanni de’ Bernardi treats his crystal in the manner of a goldsmith preparing the die for striking a medal. The transparent medium is approached as if it were an opaque surface; the possibilities of light are overlooked, and the whole composition is handled like an engraving that has been literally and rather pointlessly transferred to crystal. The artist has concentrated upon rendering an incredibly complex and minute composition. The crowd of rearing horses and Christian and Moslem warriors with their various shields, helmets, turbans, lances, and scimitars, centers about the figure of Charles V shown on horseback in the pose of the gallant general.

In the second part of the sixteenth century Milan became the center of gem-engraving in Italy. The personality of great artists like Leone Leoni, Jacopo da Trezzo, and Pellegrino Tibaldi created there an original style in which classicism and mannerism were interwoven in a most original expression. This was the style which from Milan, the link between Austria and Spain, spread all over the empire and became characteristic of the age of Philip II. Contacts with the Hapsburg empire and with the princes of Germany and Savoy were continuous. These princes were great collectors of cameos, gems, carved stones, and engraved crystals and commissioned many important pieces from the Milanese artists. It was a stimulating atmosphere, full of artistic and cultural exchange. Milan became famous for its gem-engravers, who produced wonderful crystals, amazing vessels in fantastic shapes and decorated with fanciful stories of birds, dragons, and harpies.

Two oval crystal plaques with stories of Hercules are examples of the work of a great Milanese master, Annibale Fontana. One of these plaques represents Hercules fighting Achelous, the river god, the other his combat with the centaur Nessus. The beholder is immediately impressed by the extraordinary beauty of these pieces. These elegant nudes, shown almost in profile in order to emphasize their linear quality, are traced with a nervous, sharp design on the brilliant surface of the crystal, polished on both sides. In each plaque two figures are joined together in a tense and twisted composition, silhouetted against an empty space, which is animated only by a dis-
crete vegetation, a trace of landscape in the distance, some reeds on the ground, and a few bent trees. The drooping branches of these curious trees seem to participate in the tension of the struggling bodies. Every detail reveals the hand of a remarkable mannerist artist.

Annibale Fontana, “of whom Milan can rightly be proud,” as his friend Lomazzo wrote, was really “rare and divine in cutting figures, landscapes, and perspectives and other fancies in rock crystals,” to use the words of a learned contemporary, Paolo Morigia. Among Fontana’s works in crystal, mentioned by Raffaele Borghini in his Riposo of 1584, was also a series of twelve crystals with stories of Hercules, intended for the decoration of a casket. They were made probably in the seventies. Two of these crystals are evidently our plaques, another is in the Museum of Vienna, and two more are in Baltimore, in the Walters Art Gallery.

Fontana, who was born in 1540, was also a sculptor of renown. His main work is part of the sculptural decoration of the church of Santa Maria di San Celso in Milan, where he worked between 1574 and 1587, the year of his death. In the marble statues and reliefs in this church his style reveals an original combination of Michelangelesque massiveness with an almost Venetian pictorial quality. The same characteristics appear in his major work in crystal, a casket decorated with grotesques and Biblical scenes, made for Albert V, Duke of Bavaria, which was in the Munich Residenz. One of the compositions decorating the casket, the crystal with the Sacrifice of Isaac, was most successful, for it was repeated not only on the foot of a silver cross in the treasury of the cathedral in Milan, but also in bronze plaquettes, one of which happens to be in the Metropolitan Museum.

We do not know the name of the author of the ewer on page 198, but the scenes from the legend of Apollo engraved all around its body reveal the hand of a follower of Annibale Fontana, one who was working very probably in the fifteen-eighties. The characteristic vegetation so discretely used in the Hercules plaques has here developed in a dominant ornamental motif. The mannered trees with their elongated

Crystal covered goblet from the Sarachi workshop. Bequest of George Blumenthal, 1941
Details of the goblet opposite, about actual size. Vitality, elegance, and wit mark the style of this product of the late Milanese Renaissance.
trunks and pine-like tops create a strange forest in which the tall figures of Apollo, Diana, and two shepherds move with affected gestures. The piece is rather coarsely executed, but its interest lies in the fact that it shows how the style of a great master like Fontana was reflected in the Milanese crystal production.

Two other vessels in our collection that have so far never been published are remarkable examples of the style of a great Milanese family of gem-cutters, the five Sarachi brothers. Their workshop was the leading one in Milan in the last quarter of the century, and their varied, imaginative production was outstanding in Milanese art of that time. They worked for Charles Emanuel, Duke of Savoy, for the Duke of Bavaria, and for the Emperor Rudolph II.

The first is a low, narrow, oval cup decorated with four groups of sea deities fighting with monsters in the waves. This motif, made popular by the engravings of Mantegna, was used throughout the whole century in innumerable versions in prints, pottery, furniture, and wall decoration. In our crystal it has been reinterpreted with remarkable vigor and in a very personal style. There is an unmistakable feeling for composition, a power of design in the sharp and curly line, and a freshness of imagination in these fantastic and feverish creatures dancing in the sea. The accentuated muscular structure of the bodies, the exaggerated, jumping gestures and the characteristic ugliness of the heads with protruding brows and flaming hair occur in other compositions identified with the work of the Sarachi brothers. Here the peculiarities of Milanese mannerism have found an individual expression in fancifulness and caprice that already announces the baroque.

The same playful imagination appears in a still more varied form in the second of our vessels. It is a high covered drinking glass of elegant fluted shape, divided by several bands of the most charming decoration. On these friezes a whole fanciful world is disclosed. Marine creatures, winged sea serpents, water birds, and an amusing whiskered seal are fighting, playing, or loving under swags of fruit hanging from bowknots and ribbons. On the band above the foot of the glass a marsh is represented. Long-necked birds have alighted here and there among the delicate stems of the canes, and insects fly about in the air.

The grotesques of this glass with their sea monsters, tritons, and nereids recall the decoration of a number of bronze objects produced in North Italy in the first half of the sixteenth century. Still there is an elegance and a sensitivity in the way motifs are treated, distributed in airy friezes, which speak for the mature Renaissance. This capricious, imaginative style, full of mannerist influences, has its closest counterpart in Milan in the drawings of the great decorator of the city in the seventies, Pellegrino Tibaldi.

A spirit of sophisticated, highly intellectual and international civilization seems to be embodied in this elegant crystal vessel. We may see in it a concrete expression of a suspended moment of transition, at the threshold of the baroque, before the Milanese crystal-engravers had brought their craft to the workshops of Bohemia. The tradition we have followed from its roots in the austere classicism of the fifteenth century is here indeed culminating in an outburst of the most capricious fancifulness.