N. Boyadjian

The Heart



its History, its Symbolism, its Iconography and its Diseases.

Or Boyadjian, as seen by W. Mestach



Man's heart is reflected in his face. Meridians, longitudes and latitudes, divide the temples and the brow in indecipherable patterns. Our map to man's secret self, geography impossible to put into words, abysses summed up in one line. Everything is in the heart. But the heart is the face. The face reflects man's fate; it is the light of his gaze which, emerging from the darkness of his heart, returns to light up his face. Which stares fate full in the face. Fate, a heart, beating, beating, under the full light of lives unendingly sounded by the stethoscope of the heart, the light of the gaze. Let us put our heart against the hearts of the world and learn. The heart, the source of knowledge, the knowledge of the sources. In fathomless space and changing time, hearts are churning out the blood of origins.

Between the Balkans and Anatolia: the Sea of Marmora. And a tiny town: Rodostos. There, on September 7th 1917, a new heart, a tiny heart, joined in the rhythm of the Universe's pulsations. And a name: Noubar Boyadjian. At that time, the Turk was in ascendance. But later, in Salonika, in the midst of Greek culture, the young Noubar studied at the Lycée Français. It was in French that the Comtesse de Ségur, Alexandre Dumas, and the world's news in the local paper made his heart beat. Whilst, on the other hand, from the heights of Mount Ararat, the corn ground by his Armenian ancestors, in his great-grandfather's windmill, his grandfather's water-mill, and his father's mechanized mill, taught him that one bread comes from several harvests and that the flours must be mixed together.

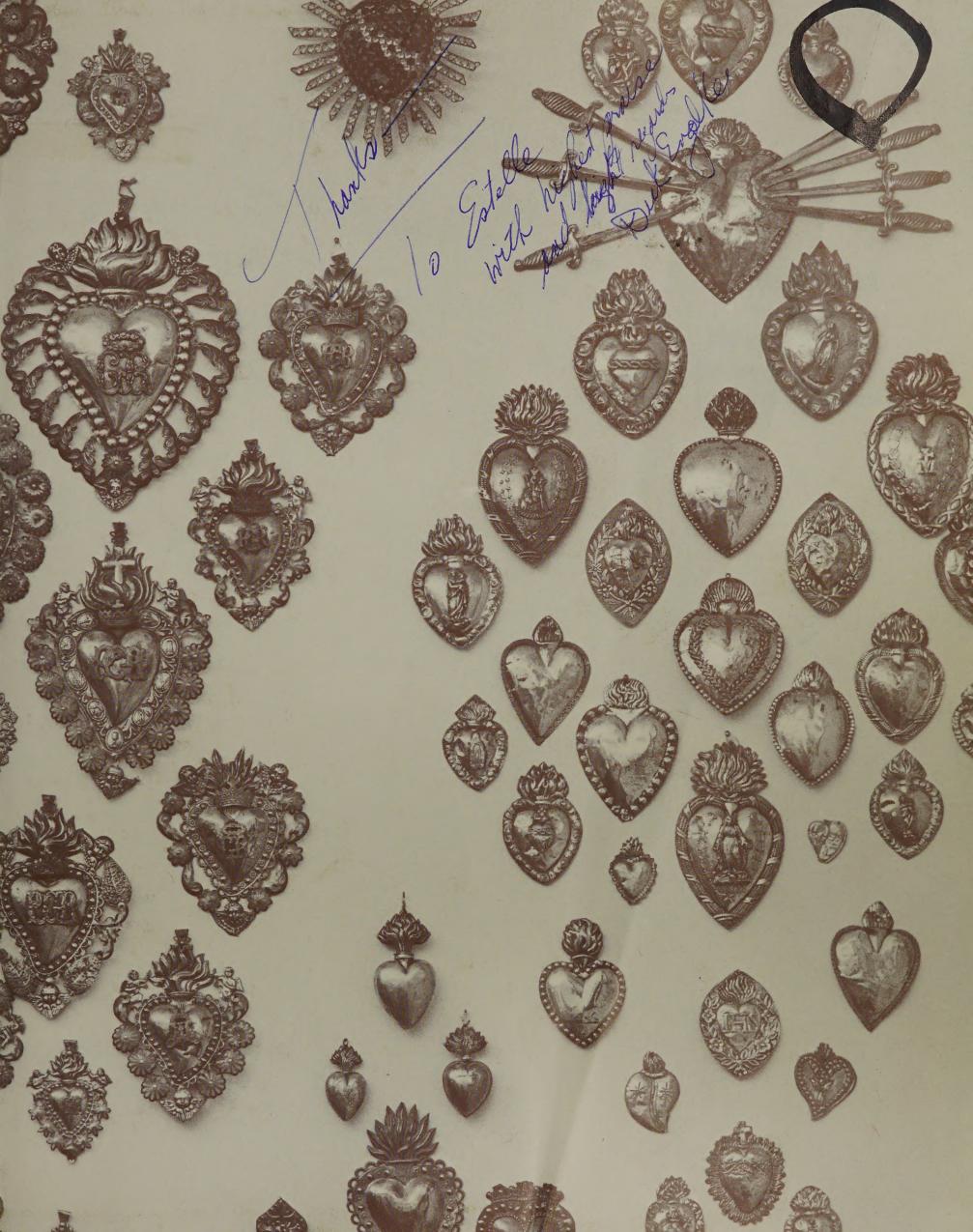
Today, in Brussels, Noubar Boyadjian is perhaps the only Belgian doctor to carry, on his penne - the penne of a student of the Université Libre de Bruxelles - fourteen gold stars - the number of his years of apprenticeship. He is a heart-specialist because, for him, the heart is the face of life. He looks full into the face of man's fate, which is called pain, fervour, love. He collects the signs of the Sacred and the Profane which portray the root of knowledge.

Sitting under his fig-tree in Belle-Ile-en-Mer, he stores up - from summer to summer - page by page, all that he knows of the pulsations of the Universe. He shares the bread from his harvests with Micheline. He has given her his heart and his name. She is a painter and signs her work: Micheline Boyadjian.

Everything is in the heart.

Luc Norin







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its symbolism,
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To my wife Micheline, with all my heart



Compliments of Miles Pharmaceuticals





Introduction

The history of the heart, told by a cardiologist, inspired by a collection of hearts - there you have the substance of this work.

It is a task of research which spreads over many years. Its witnesses, those few thousands of objects and pictures which form my collection. Since the beginning of Time, the heart has been the symbol of the most precious thing the Human Race possesses: Love.

It has always caught the imagination, influenced philosophical systems, and conjured up divers metaphors and images. When all is said, the history of love is nothing but the succession of meanings which are linked to the word 'heart'. No concept in Literature was ever more laden with the whole of Mankind's ambiguity. With the troubadour, heart means absence, in Lancelot, chastity; it means courage in Amadis, possession in Racine's plays.

In this work, I am attempting to offer a glimpse of the knowledge we possess. The study of symbolism throughout civilizations will perhaps allow us to discover why the heart, at the expense of all other organs, is regarded as the centre of Man, and has become for him the emblem of love, friendship, intelligence and courage.

For twenty years I have been forming a collection of the heart in all its shapes and all its portrayals. The idea of such a collection came to me in 1958, on the occasion of the Universal Exhibition in Brussels.

Already an enthusiast of popular art, I discovered, in the Hungarian Pavilion, a gingerbread heart decorated with coloured spun sugar, with a little mirror in its centre. Legend says that in this mirror, lovers swear to be faithful to each other. I obtained the heart, and soon, other hearts came and gathered around it.

I was to discover hearts of all materials, of all sizes, from all spheres, in all the countries of the world. The heart, an object of piety, of love, friendship, fidelity and courage, is the most widespread symbol in the Christian world. These objects, these engravings, antiquated - but how charming! - form a part of the cultural patrimony of our civilization.

Now, up to the present, with the exception of a Spanish cardiologist, Dr. Vega Diaz,



no-one had ever put them together. It is even possible that they are gradually disappearing without trace.

Putting aside the pleasure I feel when I look at them, I thought it would be interesting to assemble them and make the most complete inventory possible. Surrounded by all these objects and pictures wherein hearts are omnipresent, I am haunted by their history and their secret, of which I am perhaps the final trustee.

When, and why, was the heart considered to be the symbol of the highest of human qualities?

How far back does its graphic or plastic presentation go? I need great modesty and great audacity to answer these questions. I thought it would be useful to include the scientific history of the heart, and its diseases, from the most ancient times up to our day.

To seek to listen to the beating of the visible and invisible heart of the Universe: is that an inordinate ambition?



The Symbolism of the Heart in Worship, Faith, and Literature

Top: Agnus Dei, water colour and gold paper, 18th Century (height 19 cm).

Bottom: Piece of Needlework from a Convent, embroidered in gold and silver thread, Spain, 18th Century (height 31 cm).

When, one day, in the mists of Time, Man felt something beating in his chest, then the extraordinary, the marvellous, history of the heart had just been born. This organ, which puts rhythm into life, and only ceases with it, caught the imagination of the first human beings. In the original meaning of the term, 'heart' is a keyword in the universal spiritual vocabulary; it is found in all civilizations and all religions. It designates a human reality which is applied to both the material and the spiritual being. It represents the most intimate central point of the human person. It is from the heart that Man communicates with other people, and, above all, with the Divine Beings. As a symbol, the heart has the value of a prototype. René Guénon summarizes this fact well when he writes: 'At the heart of symbolism is found the symbolism of the heart'.

In ancient civilizations - Chinese, Sumerian, Hindu, Egyptian, Hebraic, Greek, Roman - the heart, whose morphology and function were practically unknown, was not considered an ordinary organ, but was described as the centre of the intellect, of courage, and of love. From the Christian era onwards, it became the universal emblem of sacred and profane love.

The first allusions to the heart which we find in Literature come in Sumerian poetry. Thus, in the epic of the descent of the goddess Ishtar into the Realm of the Dead, we read: 'Sing joyful melodies to her to calm her heart', 'Her heart is filled with clemency', 'Break not my heart with thy grief'.

This epic refers to divine hearts. For, before









Top: The Hearts of Jesus and Mary surrounded by Angels and Flowers, above an altar, Portugal, 19th Century (height 23 cm). Bottom: A Religious Work composed of pearls, France, 19th Century (height 25 cm).

speaking of his own heart, Man thinks of that of the gods. In another Sumerian poem (2500 B.C.), dedicated to King Etana, the author devotes his verses to the heart of Man: 'In vain hath my heart's blood been shed', 'Gilgamesh could feel his heart beating with pride'. The symbolism of the heart has been born.

The heart occupies indeed an important place in the religious literature of ancient India. This prayer, addressed to Indra and Varuna, bears witness to it: 'May this prayer enter into both your hearts'. The Hindu doctrine teaches of the existence of Tchakras which are corporeal centres, but also centres of meditation. The 'Tchakra' of the heart portrays the divine city of Brama-Pura. All emotion and intelligence are dependent on it. It is through the heart that man is united to God; 'The heart alone, through its secret inhalation and exhalation, allows Man, whilst remaining one with God, to be a living, thinking being'. The heart is the seat and the guardian of cosmic life. Certain religious esoterisms knew this, and have made of it a holy Symbol.

With the Chinese, the heart is the prince of organs, with the liver, the stomach, the lungs, and the kidneys. Together they constitute the five viscera of the Being's spiritual and intellectual life. The heart is the centre of the intellect, the kidneys that of sensuality, and the liver that of the humours.

Ancient Chinese medicine believed that the heart was the seat of intelligence and that it was provided with five or six openings called 'eyes'.

Below: The Weighing of the Heart, extract from an Egyptian Papyrus, Musées Royaux d'Art et d'Histoire in Brussels, Belgium.

Right-hand page: Reliquary Piece, Jesus, surrounded by gold paper, France, 18th Century (height 57 cm).



Thanks to these eyes, the heart can perceive reality, and give out currents. When Man is in good health, these openings are clean, and allow the flow to pass through. The doctor's task consisted in keeping the openings clear, or cleaning them out when necessary.

For the Egyptians, the heart was the central organ of the human being. They awarded it such importance that when the viscera of mummies were removed, they left the heart where it was. The Egyptians had a good knowledge of the heart as an anatomical organ. Its symbolical value springs from many inscriptions found in the tombs. Thus (in 1600 B.C.) runs the prayer of a Pharaoh: 'Oh heart, which I received from my mother, do not bear witness against me, do not

speak against me before the judges'. The Egyptians believed that after death, the heart, which represented conscience, would be weighed. On the other scale-pan was either the statue of Truth, or an ostrich feather. If the heart caused the scales to go down on its side, the dead man was judged to be an upright man, and was led towards Osiris. If the feather was heavier than the heart, the soul was cast down into the Nether Regions. There is a papyrus, which portrays the scene of the weighing, in the Musées Royaux d'Art et d'Histoire in Brussels. This document probably constitutes the oldest graphical presentation of the heart.

The Bible is rich in metaphors referring to the heart: 'Wine which rejoice the heart of Man'; 'These testimonies are the joy of my heart'; 'Let us raise our hearts and our hands towards God, who is in Heaven' (Sursum Corda); 'To serve the Lord with all one's heart'; 'Take that to heart'; 'Blessed are the pure in heart, for they shall see God'.

In Ancient Greek Civilization, the heart was also known under the name of Kardia; a definite psychological significance was attached to it, and it already had a clearly defined shape. For Homer, it was the seat of feelings and passions: 'And now, go whither thy impulse and thy heart impel thee'; 'My heart swells with rage'. In Aeschylus, we read: 'Before being forced into a marriage which would pierce my heart'; 'Thy heart is ardent for things which make the blood run cold'. In Euripides' Iphigenia in Aulis: 'I will carry thee in the depths of my heart'. The heart, for Aristophanes and Theocritus, is the source of love: 'But if thou truly





Facing: Persian-shaped Silver Box for Make-up, India (height 11 cm).
Below, left: Copper Box for Make-up, India, (height 10 cm).
Below, right: The same, open.
Right-hand page, top: Convent-made picture frames, of various origins, 19th Century.
Right-hand page, bottom: Church lamps in gilded brass, Belgium or France, 19th Century.



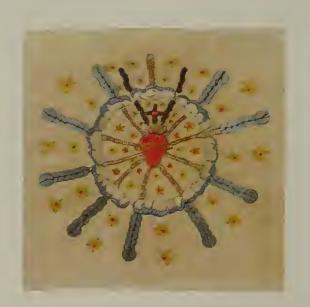






Right: Chalice-cover, in embroidery and spangles, 19th Century (height 17 cm).

Right-hand page: Silver sanctuary lamp, France, 19th Century (height 25 cm).



lovest me in the depths of thy heart'; 'Thou canst not love me with all thy heart'.

In the 5th Century B.C. a long debate began in Greece on the subject of where the soul was situated. The Greeks were incapable of forming a conception of anything spiritual without giving it a place in the body. Alcmeon of Crotona, one of Pythagoras' pupils, maintained that the soul was situated in the grey mass of the head. Hippocrates, the most famous of all Greek doctors, born in the Island of Cos in 460 B.C., also thought that intelligence was situated in the head, but his arguments are not convincing. As the doctors could not agree, the philosophers, who at that time occupied a very important position, were left to make the decision. Plato thought that the immortal soul was situated in the head. The mortal soul, which was responsible for intelligence and the feelings, was placed in the heart. Sensual desires came from the liver. Aristotle rejected this division. As far as he was concerned, there could only be one soul, which was situated in one place: it was in the heart, considered to be the centre of Man. It was a kind of inner fire which gave warmth and light. According to Aristotle, the brain was cold, and so could not give life. Thus the pre-eminence of the heart was established: the heart is everything, and everything is in the heart. All these theories obviously rest on philosophical speculations. Not one is based on anatomical or physiological facts.

In Roman civilization, which was more materialistic, the symbolism of the heart was not so frequently evoked. Nevertheless, the Hellenic

Culture influenced poets and writers, who imitated the Greek writers and made use of the word 'heart' in the same metaphorical sense. So, in Tacitus, we can read 'What tightens the bonds of friendship when people have an understanding, is, for hearts divided by hatred, only a goad of anger'. In Lucretius, certain texts give the heart as the centre of love: 'Casting love's gentle darts into all hearts'.











































The Heart in the Christian Era

Right: Prince Gabor Bethlen's Betrothal pendant, Hungary, 1626, (height 11 cm).
Right-hand page: Silver pendants with Byzantine patterns, Greek work, 19th Century.

With the Christian Era, the symbolism of the heart took on a new dimension which was to reach its height in the cult of the Sacred Heart of Jesus. Devotion to the heart of Jesus was born at Calvary when the soldier's spear pierced Christ's side. This wound, from which, as St. John describes it, came blood and water, is the Saviour's pierced heart shedding the last drop of its blood for the salvation of Man: 'From the wounded heart of Christ came the Church'.

For the first Christians, the symbol of Christ's kindness and love was the heart. Had He not said Himself: 'Learn of me, for I am meek and lowly of heart'.

But in the Middle Ages this cult of the Heart of Jesus disappeared rapidly. Father Hanon, in his History of the Devotion to the Sacred Heart, writes: 'We might dare to say, with very little exaggeration, that before 1290, devotion to the Sacred Heart was practically non-existent'. What was the cause of this decline? The causes are many and complex: first of all, the Church had to stand up to bloody persecutions, and then to Christological disputes. Next came the Barbarian invasions, which were hardly conducive to contemplation and the mystic life. But besides this, the entire intellectual and artistic life of these times was confined to the monasteries. Now, although the monks knew all about the religious significance of the heart, they mistrusted that organ; indeed, the heart had been taken over by sinners. It was involved with original sin. Knights and crusaders referred to the heart to justify their sexual exces-















S GERTRVDIS

ses. And so monks spoke of it as little as possible.

It is only from the 12th Century onwards that we find the first testimonies of devotion to the Sacred Heart. St. Bernard, the Abbot of Clairvaux, the founder of the great abbeys, writes: 'Through the heart's wound, I see its secret'. St. Bernard's influence spread to his disciples. Richard de Saint Victor proclaims: 'Nothing is kinder than the heart of Jesus'. The first apparition of the heart of Jesus goes back to this period: the vision of St. Lutgarde d'Aywiers (1182-1246). Christ appeared to her in human form. 'What asketh thou of me? he said to her. 'I wish for your heart', she replied, -'And I desire thy heart even more'. And the Lord exchanged the hearts.

In the 13th Century, devotion to the Sacred Heart of Jesus was very much alive in North Europe, particularly in Germany and in the Netherlands. Beside St. Lutgarde, we must mention Beatrice of Nazareth, who was brought up by the Béguines of Léau. She learned calligraphy with the Blessed Ida of Nivelles, and wrote her biography. We should also include the Mystics of Helfta in Saxony: this group constituted a centre of devotion and propagation of the cult of the Sacred Heart. Among these mystics, we ought to mention Gertrude de Hackeborn, her sister Mechtilde, Mechtilde de Magdebourg, and, above all, Gertrude the Great. This monastic community was well-known, but did not have a wide influence: it was rapidly eclipsed and the devotion to the Sacred Heart was forgotten.

The Franciscans' contribution lasted longer.

Left-hand page: 'Paradise', with a Heart surrounded by Angels, in wax, probably a mortuary souvenir, Sicily, 19th Century (height 27 cm).

Facing: Engraving showing St. Gertrude.

Below: Velvet banner decorated with two golden hearts with rays.

Belgium. 19th Century (height 125 cm).



St. Francis of Assisi, the Poor Little Saint, was at the root of this revival. He proclaimed: 'Let my heart be pierced, oh Jesus, by that blade which transfixed Thy heart'. St. Bonaventure speaks of the heart with intense Franciscan devotion. To him is attributed the *Vitis Mystica*, a little work on the Sacred Heart. Let us also mention, among the devotees of the Sacred Heart, Marguerite de Cortone, Angèle de Foligno...

In the 14th Century, the Dominicans stood guard over the spreading of devotion to the Sacred Heart. St. Albert the Great gave this cult an important stimulus: 'Through the blood from His heart and from His side, the Lord has watered the garden of His Church, for at the same time He caused to gush forth the sacrament of His heart'. 'He wished to be wounded in the heart so that we may never weary of gazing on His heart'. By the heart of Jesus, St. Albert in the first case means the heart of the flesh, when he speaks of the precious blood which flows from the wound, then he speaks of the heart in the spiritual sense. The Blessed Henri Suso exercised a fruitful influence on the development of this cult. St. Catherine of Sienna (1347-1380) had her great visions of the heart of Jesus in 1370.

Before leaving the Middle Ages, we must summarize the principal forms given at this period to the devotion of the Sacred Heart:

- 1) In the first place, prayer. Since the 13th Century we have possessed hundreds of prayers addressed to the Heart of Jesus;
- 2) The composition of poems and canticles as well as Mysteries;



S'. CATHERINE DE SIENNE. 😙 - Sº CATALINA DE SIENNA .



- 3) This devotion gradually reached the sphere of the public, and was interpreted by a preliminary outline of liturgical cults;
- 4) The actual image of the Sacred Heart was not very widespread in the Middle Ages. Its symbol was the Heart of Jesus with the wound on the right, surrounded by the crown of thorns and surmounted by flames. Later, this image became the Symbol which Paray-le-Monial was to make universally known. Another presentation was that of the crucified Christ with his five wounds, of which the most precious was the wound in the heart which was emphasized far more than the others.

It is impossible to speak of the symbolism of the heart without evoking St. Theresa of Avila. When she was quite young, she had the vision of an angel who pierced her heart through with a burning golden arrow. At the same time she suffered from a very serious illness which kept her in bed for months. She recovered from this illness and died much later in Alba de Tormes, a little town between Avila and Salamanca. Her heart is still kept in the convent she founded there. It is in a rock-crystal urn, in the form of a heart, decorated with gold and precious stones. The eye of the cardiologist, looking closely at this heart which has been preserved in alcohol since 1582 was overwhelmingly surprised to notice a split, a tear in the myocardium of the left ventricle, and after four centuries pronounced this audacious diagnosis: Theresa d'Avila could perhaps have died from a coronary thrombosis with rupture of the heart; the arrow which pierced her heart during her illBelow: Engraving showing St. Jean Eudes. Right-hand page: Adoration of the Heart of Mary, seated in Majesty. Painting of the French School, 18th (?) Century (height 62 cm).

ness was probably the manifestation of an attack of angina.

In the 15th and 16th Centuries, the cult of the Sacred Heart spread, but only very slowly. We have to wait until the 17th Century with Marguerite-Marie Alacoque to witness a veritable explosion of this cult.

Before speaking of Marguerite-Marie Alacoque, we must try to determine what things influenced that Saint. She must probably have known the life and works of St. Francis of Assisi. On the other hand, the Order of the Visitation to which Paray-le-Monial belongs, was created by St. Francis of Sales, the author of the Traité de l'amour de Dieu. The arms of this Order are made up of a heart pierced by two arrows and enclosed in a crown of thorns. Might we think that Marguerite-Marie Alacoque was equally influenced by St. Theresa d'Avila, who died in 1582 and was canonized in 1622? This extraordinary, contestant Saint had upset the whole of the free-and-easy ways of the monastic life of the 16th Century. Before Marguerite-Marie, in the 17th Century, St. Jean Eudes was the first to introduce the devotion to the hearts of Mary and Jesus in Le cœur admirable de la très Sainte Mère de Dieu. The heart of Jesus, he wrote, is the Sanctuary and the image of divine perfections.

But it is incontestably Marguerite-Marie who can claim the merit of having made the cult of the Sacred Heart of Jesus popular.

In her autobiography, Marguerite-Marie tells of her many visions. In the course of one of these









Engraved silver boxes, for betrothals or weddings, Germany or Scandinavia, 18th Century. One is dated 1766 (height 7 cm).

ecstasies, Jesus appeared to her, opened His heart to her again, and said: 'Here is that heart which has loved men so much', and He asked her to have a Feast Day established in honour of His heart. From then on, Marguerite-Marie had only one aim: to promote the devotion of the Sacred Heart.

She was appointed Novice Mistress, and communicated her enthusiasm to her pupils. On July 20th 1685, on the occasion of the Feast of St. Marguerite, the novices, to entertain their Mistress, put up a little altar on which was a pen-drawing of the Sacred Heart, (this picture is now kept in the convent of the Visitation in Tours). The precursor of this science of graphic publicity which is so important in the present-day world, Marguerite-Marie realized that an attractive concrete image of the heart would do more for the devotion to the Sacred Heart than all the literary abstractions. She got her pupils to make little hearts - painted, cut



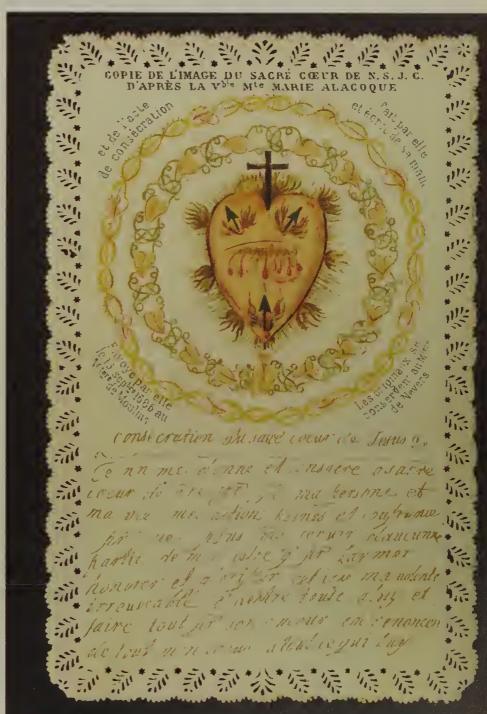
Left: Chalice-cover, worked in pearls, France or Belgium, 19th Century (height 18 cm).

Below: Copy of the picture of the Sacred Heart, after Marguerite-Marie Alacoque, France (height 16 cm).

out, and embroidered ones - and soon this custom spread to other convents. Little pictures of the Sacred Heart were printed, to be worn around the neck.

At the same time the Jesuits, with that sure instinct which is their very own, realized the importance of the cult of the Sacred Heart, and the impact which its symbol could have on the masses when used as an instrument of the Faith. The heart appeared to them to be an ideal emblem. So they put all their energy into spreading the cult.

The Popes were earnestly requested time and time again to institute a Feast of the Sacred Heart. In 1765, on the recommendation of the Congregation of Rites, Clement XIII advocated the institution of this Feast, whose universal character was proclaimed in 1928 by Pius XI. Very rapidly, the heart of Mary was associated with the devotion to the heart of Jesus, and in the 19th Century this double cult was enormously extended. The building of the Basilica of the Sacré-Cœur in Montmartre without doubt constitutes its climax. This huge edifice is not a masterpiece of architecture, but it has become one of the symbols of Paris -Paris, that uniquely wonderful city, where the sacred heart and the carnal heart beat together so fraternally.





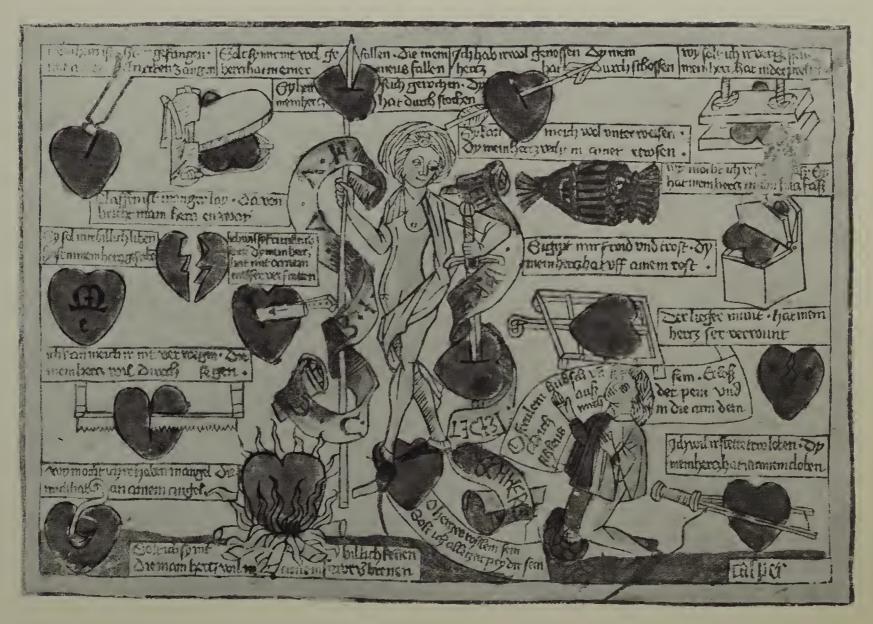
The Heart, symbol of Earthly Love



Left-hand page: Papier-mâché box for love-letters, Germany, (?)

18th Century (?) (height 20 cm).

Below: 'La Puissance de Vénus' (The Power of Venus), or, the Different Ways of ill-treating Man's Heart, German engraving by Maître Casper.



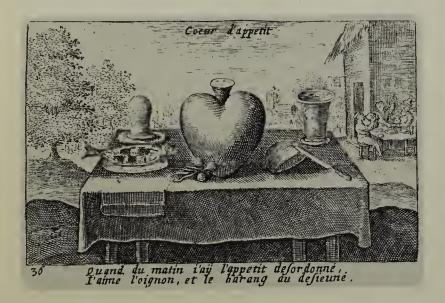
If at the end of the Middle Ages the heart became the symbol of sacred love, it also symbolized earthly love, carnal love. From the 11th Century onwards, love-songs grew in great numbers, first of all in Germany. At this time, the quest of love was the prerogative of women. It was not until later in the century of Romanticism that man sang of his languishing heart. The 11th Century was the time of the Crusades. There was a shortage of men, and girls were anxious to conquer and keep the hearts of their male companions. A pretty song

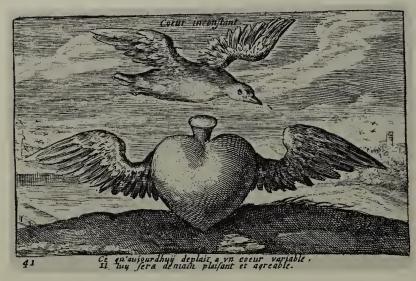
from Germany 'The Heart's little Key' is a typical example of this:

'You are mine - I am yours, you must be sure of that. You are enclosed in my heart, its little key is lost. So must you stay there forever'.

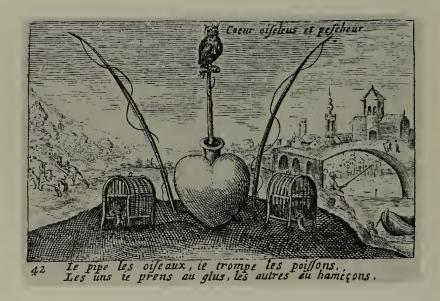


Eighteenth-Century Emblemata. Right-hand page: 'Valentines' and Romantic Cards, 1900.





The same kind of love-song where love put rhythm into the heart existed amongst others in Andalusia where the word 'corazón' has a musical sound which is particularly caressing. The songs and the poems of the troubadours, the great epics of this period, idealize the heart which is faithful to its love. Here, heart and body live together in harmony, are neither in conflict or rent apart. Chivalry created a new world where the chaste heart gave way to the need to be physically united to the loved one. Tristan and Isolde, the Chevalier à la Rose, the Nibelungen, provide so many examples where the heart's impulses overcome reason and morals. The Knights of the Grail themselves experienced guilty love. As an emblem of carnal







Left-hand page: Post-cards 'The Language of Lovers', beginning of 20th Century.

Top: Wrought-iron lock 18th Century (height 18 cm).

Bottom: Mother-of-pearl purse, open and closed (height 6 cm).

love, the heart continued to spread in the course of centuries. Those who were most responsible for this movement were the poets and novelists. Disdaining all scientific knowledge, they continued to see in the heart the source of all feelings. Pascal wrote: 'The reasons of the heart, which reason knows not'. Vauvenargues: 'The great thoughts which come from the heart'. For writers, the heart is the organ wherein all passions are born, its principal function being to unloose love between man and woman. The climax of this heart-related literature could be situated in the 18th Century with Marivaux, the Abbé Prévost, and above all Goethe and Schiller. The current vocabulary dealing with the state of the heart was constantly being enlarged. People spoke of a light heart, a hard heart, a heart of stone, a great heart, heartless, broken heart...

In the 19th, and particularly at the beginning of the 20th Century, the heart was banished from Literature. Great novelists such as Balzac and Flaubert avoided evoking the heart when they wrote of love, because that was commonplace and low-class. Later, with Proust and Gide, any allusion to a loving heart was considered a vulgarity. Eroticism and sexology invaded Literature and inexorably chased the heart away. The latter made a timid come-back round about 1950-60 with the novels of Françoise Sagan, but it was very rapidly swept away by the new novel in which to approach it was unthinkable. Now we only find it in the 'popular' literature of certain weeklies and in the 'Problem Pages' of those same papers.





Below: Rings and ring-cases of various origins and dates. Right-hand page: Porcelain boxes of various origins, 19th and beginning of 20th Centuries.











Left-hand page, top: Liqueur flasks and a goblet in glass with polychrome enamel, Central Europe, 18th Century.

Left-hand page, bottom: Embroidery on paper, 19th Century.

Left: Papier-mâché box, given as a love-token, England, 19th Century (diameter 7 cm).

Below: Lover's post-card.

This alienation of the heart as a literary symbol is all the more strange in that from 1960 onwards, under the impulse of the Hippie Movement, objects and jewels in the shape of a heart grew in number. Almost all young people wore round their necks a heart-shaped medallion, the symbol of love. The heart also became an emblem of commercial publicity. A great number of posters have hearts on them. You only need to go round a big Store to see this sign in universal use. You can find it on a great number of objects, from utensils and furniture, right down to undergarments.

The heart has pride of place with poets. Poetic Inspiration and the Heart - what a fine subject for a thesis!

How can we not evoke these few lovely lines:

Heart with a single object filled
Thou art possessed.
Heart with a single being filled,
Thou overflowest.
(Péguy)

Fruits, flowers,
branches and leaves these I offer today
And my faithful heart just for you will it beat.
Do not rend it apart
with your white hands, I pray.
To your beauteous eyes
may this poor gift be sweet.
(Verlaine)



Tear-drops in my heart,
And rain-drops in the town.
What languor is that
Which pierces my heart?
(Verlaine)



The word 'Heart'; its Etymology, its Metaphors



Left: Chalice-cover in embroidery and spangles, 19th Century (height 20 cm).

Below: Reliquary piece with a water-colour of the Heart of Jesus surrounded by gold paper, made in a convent in the 18th or 19th Century (height 22 cm).

Right-hand page: Bride's head-dress, Alsace or Germany, with the date '20th September 1905' (height 50 cm).

The etymology of the word 'heart' is an interesting study. 'Heart' derives from the Latin cor and from the Greek Ker, Kear, or Kardia. The medical term 'cardiac' comes directly from the Greek. But what was the first meaning of this word? It will help to clear up this point if we make comparisons with the other languages of the Indo-European family. The Latin word cor and the Greek kardia are identical in the Sanscrit word hrid, which also means heart. We know that, phonetically, the Sanscrit letter 'h' corresponds to the 'k' in European languages. Thus the phonetic analysis allows us to give the same root to the word crudize (heart in Slavonic), szird-is in Lithuanian, ssirds in Latvian, ssird in Armenian. The Germanic languages also offer an obvious conformity, in herz, heart, hearte, hairto.

All these words come from the same root, which must surely have a material significance, doubtless designating the physical organ. A researcher, M. Pictet, when studying the different names for the hart states that this animal is designated in the Indo-European and Anglo-Saxon languages by the word *hiruz* or *heort*: practically the same word as heart. Finally, he notes that in Sanscrit krid or kurd means to leap. In Germanic languages the heart is called *the leaper*. So, the heart is the leaper, the thing which bounds in the chest. Our ancestors felt the beating, the leaping, of an organ in their thorax, and called this organ rightly and in a picturesque fashion the leaper, or the heart. Have people not been saying for a long time 'to feel one's heart leap in one's breast'?





the Decemin cy. Sperpetuunque CorDe Vestro La IIDes psallite a Des P

Cor De Vestro - 605 La UDed - 558 Peta L. L. Ita - 101 Deo - 500 rii Majus oran grafius

Left-hand page: Chronogram; the date is given by the numeral letters of a sentence or a line of poetry. This literary genre was current in Germany, Belgium, and the Netherlands from the 11th to the 18th Century (height 30 cm).

Facing: Plate with a puzzle, in Creil porcelain, France, 19th Century (diameter 20.5 cm).

Below right: Brass stand for a flat-iron, England, 19th Century (height 23 cm).

Below, left: Stone heart and donkey's collar against the Evil Eye, Greece and Turkey, 20th Century.













Uyt de dru kkery van BREPOLS en DIERCKX Zoon.

This leaper who appears all through the history of humanity has become a universal symbol. In all languages, many metaphors have been formed from it. They take on many meanings and colours:

Previous pages, left: Hearts of Jesus and Mary in medallion shape in polychromed wood. Belgium, 18th Century (height 48 cm).

Above, right: Seals of various origins.

Below, right: Metal chocolate Mould, 19th Century.

Facing: Engraving tinted with water-colour representing a puzzle in the shape of a heart, Brepols Printing Works (height 16,5 cm).

Right-hand page: Holy pictures with machine-made lace edging, 19th Century.

To open one's heart to ambition is to close it to repose (Italian proverb)

Man's heart a kingdom is, rebellion's prey (Shakespeare)

The heart has its reasons which Reason knows not (Pascal)

When God created Man's heart, He first put kindness there (Bossuet)

The mind is always the heart's dupe (La Rochefoucauld)

The true nature of the heart's merit is the capacity to love (Madame de Sévigny)

Great thoughts come from the heart (Vauvenargues)

You are never a great man when you have more mind than heart (Beauchene)

The heart desires more than it can do (Chateaubriand)

The heart feels, the head makes comparisons (Chateaubriand)

You are as old as your heart (A. d'Houdetot) The heart is the least sure of counsellors (Madame de Remusat)

We received a heart from Heaven, only to love (Racine)

How out of tune are the mouth and the heart (Racine)

To give one's heart to God.























Left-hand page: Ex-voto set with mother-of-pearl, gems and

pearls, Belgium, 19th Century. Below: Engraving of the Heart of Mary surrounded by a black

paper cut-out, 19th Century (height 24 cm).



To offer a woman one's heart and hand. May he perish who bargains with his heart (J.J. Rousseau)

May I still hope that you might accept a heart which worships you (Racine)

To valiant hearts, nothing is impossible.

A good heart overcomes misfortune.

Hast a bold heart, Rodrigue? (Corneille)

This speech shook our imprudent traveller's heart (La Fontaine)

We wish to flee from our heart, and we find it everywhere (Massenet)

Man's heart is impenetrable (Flech)

God has reserved for Himself the wonderful secret of Man's heart.

All hearts are hidden, every man is an abyss (Voltaire)

My heart gives the lie to my mouth at every moment (J.J. Rousseau)

That woman is good-hearted.

Those two hearts were made to agree.

We praise those whom we admire with all our hearts (La Rochefoucauld)

Let me embrace you with an open heart (i.e. willingly) (Molière)

Mute, I take shelter in the Lord's bosom, and I listen and hear Him, voice to voice, heart to heart (Lamartine)

The heart is always young and can always bleed (Victor Hugo)

And I do not mince the words I have in my heart (Molière)

Wise men have their mouth in their heart, fools have their heart in their mouth.

loin des yeux, loin du prendre son () à deux mains avoir le V sur les lèvres - ouvrir son V à quelqu'un prendre quelque chose à 💙 - mauvaise tête et bon -avoir le net de pierre de tout humer le de grand de gaieté de n'être quun dartickaut Son () a parle decharger son le langage du n'avoir point de si le Vous en dit Mau métier - cela fait mal au 🔘 me saigne - aller droit au faire contre mauvaise sortune bon jeter son Oà la gribouillette avoir quelque chose sur parler d'abondance de trouser le chemin du s'en donner à joie être un sans a Mouver mon cher





The Hearts of Kings and Princes



Left-hand page: Front part of a church lamp, Belgium (height 25 cm).

Facing: Mother-of-pearl ex-voto, set with gems, Belgium, 19th Century (height 29 cm).

For thousands of years, the heart has always been regarded as an organ apart. A noble organ in Hellenic and Roman civilizations, in Aztec civilizations the hearts of prisoners, still living, were offered to the gods. In the Middle Ages, the hearts of the King and those of princes were separated from their bodies. Thus when Louis IX died before Carthage during a Crusade, his body was taken to Monreale in Sicily whilst his heart probably rests in a casket hidden in a wall in the Sainte Chapelle in Paris.

The bodies of the Kings and Princes of France have since rested in the Basilica of St. Denis, but their hearts are kept in urns in the Church of the Val de Grâce. The hearts of the Hapsburgs are likewise exposed in the Loretto Chapel in the Church of St. Augustine in Vienna. The heart of the King of Rome, who was a Hapsburg through his mother, is also kept in that Chapel.

This habit of removing the heart spread to artists and writers. And so Voltaire, that man of little heart, lent himself to this game, and his heart ended up in the Panthéon, from which it mysteriously disappeared. The hearts of Buffon and Marat, amongst others, were also taken from their bodies and kept in urns.







GHEBEDT

O Jesu wiens minsaem hert
Geleden heeft foo felle mert
tens door de Joden vreet gewont
maer diecwils vreeder door myn som
vergeeft my nijn ondanckbaerheyt
Door uwe goedertirenteyt
Geeft my u hert neemt gij het myn
Om saemen eeuwigh een te syn
en ick altijt met hert en sin
verslonden blijf in uwe min
Amen M. bunel















Sync Haylighey's Benedictis den XIV heef op hat Verfoerk van fyne doorlicht Hooghweer-digheys Dominicus de GEN TIS Bifton wan weepnaby belief den 12-the priz Vergint toor aftydt eens daeght 100 daegen Aflact, wandte Chrift geloovige van hee Bylom wan Antwerpedie fer teern van de vij Blogden Wonden om bal ighmacken devotayet op befoet hunne knieu fullen lêfen verfinal den vager on enden Weeft gegoot, met het Volgende gestelt.

ICK BEDANCKE U ALDERSOETS TEN IESUS DAT GY VOOR ONS SYT GESTORNEN IESUS DAT GY VOOR ONS SYT GESTORNEN





The Heart and its Image

Prehistory knew nothing about portraying the heart. Not one of the drawings which cover the walls of the caves of Lascaux in the Dordogne, and of Altamira in Spain, depicts the heart. The Abbé Breuil discovered 'the elephant's heart' in the cave of Pindal, but he himself is of the opinion that that is a dubious interpretation: a big red area more or less circular, can be seen where the heart should be. Not one factor allows us to state with certainty that this really represents that organ. It is more probable that it is a conventionalized ear. The same uncertainty applies to the drawing of a reaper in a cave in the South of Spain near Almeria, at Los Letteros. The reaper is holding a sickle in his hand, and on the sickle are objects that look like hearts.

We find practically no hearts in ancient Chinese, Hindu, or Mesopotamian art. On the other hand, the Aztecs must have known what its shape was, since they used to practice the rite of the cutting out of the heart. At the top of a pyramid, the sacrificer, with a stone knife, would cut out the heart of a living captive, and would raise it, still pulsating, towards the sun, as an offering to the gods. This scene is portrayed on a fresco in the Temple of the Jaguar in Chichén Itzá. The Maya civilization also knew about human sacrifices. Some victims, with their hearts torn out, figure on the steles of Piedras Negras.

The Egyptians also knew its anatomy. In sarcophagi, we often find a carved scarab which symbolizes the duties of the heart towards death. The Egyptians were certainly familiar with the mor-



Left-hand page: Cast-iron waffle-iron (height 55 cm). Facing: Religious medallions of various origins and periods.



phology of the heart. We should also note that in Ancient Egyptian, the hieroglyphic for the word 'heart' is in the shape of a vase. A papyrus of the *Book of the Dead of Ani* probably shows the first graphic portrayal of the heart.

Is the heart depicted in ancient Greek civilization, which was a brilliant period of the arts? An article by L.T. Valaes, which shows a great deal of research, enlightens us on this subject. If, in literature, the heart is often evoked as the seat of life, intelligence, the feelings and passions, its portrayal is very debatable. Perhaps the Hellenes had an exact knowledge of the heart. Animal sacrifices had made them familiar with the viscera (splagna) of the victims. Moreover, Hippocrates in his treatise 'Of the Heart', describes the external appearance of that organ: the heart is in the shape of a pyramid, and is dark crimson in colour. In the great sanctuaries such as the Asclepion, ex-voto can be found, some of which call to mind the shape of a heart. But the majority of decorative motifs on sculptures depict the 'ivy leaf' whose morphology is very close to that of the heart. We may conclude that, as an architectural decoration, this organ is practically non-existent in Greek art, as it is, moreover, in Roman art.

Paradoxically, the heart, which is one of the most widespread symbols of Christianity, remains without image or iconography until the 13th Century. During this long period, all art was confined to monasteries. The monks, who were the only artists at that time, were hostile to the portrayal of the heart. Not one illustration of it can be

Below: Sweet-boxes, jewel-boxes, pill-boxes and perfume-boxes, in silver, brass or silver plate. Various sources, 18th-20th Century. Right-hand page: Various pieces of jewellery, Flemish, English and French hearts, 18th and 19th Centuries.





seen in manuscripts. We have to wait until the 14th Century for its image to find a place in Christianity.

Curiously enough, towards the beginning of the 14th Century, the heart is portrayed above all in the form of commercial advertising. Certain craftsmen would give their products its particular mark, an this was sometimes a heart. In his Historical Dictionary of Paper Trademarks, Briquet tells us that one hundred and sixty are decorated with a heart. Yet it is not certain that these watermarks really depict that organ, whose morphology was at that time practically unknown. It may be that they are lilac leaves. This interpretation is all the more probable in that, when one makes a study of ancient sculpture, one finds stylized leaves which call to mind the shape of the heart.

The heart pierced with an arrow was the symbol of earthly love before it became a religious emblem. In the 15th Century, its first presentations come in the form of carved ivories. They are found in France and in Flanders.

In the Rhineland and the Alps, the heart became a decorative subject and ornamented the most ordinary objects. Besides jewel-boxes, either heart-shaped or decorated with that emblem, which were particularly popular in Germany, we find gingerbread moulds, carved chairbacks, painted furniture.

The theme of the Offering of the Heart to the chosen lady, so dear to troubadours, explains the craze for the heart in the 15th Century. Two admirable works remain to us from this period: the tapestry, said to be from Arras, in the Musée de Cluny in Paris, in which we can see the knight offering his heart to his lady, and *Le Livre du Cœur d'amour épris* (The Heart in Thrall to Love) by King René of Anjou, a wonderful manuscript,

illustrated with idyllic scenes. The original is in the Museum of Vienna. During this century, the heart as a symbol of earthly love is very widespread, but very few documents about it remain to us. A German engraving by Maître Casper, 'La Puissance de Vénus' 'The Power of Venus' illustrates the different ways of ill-treating Man's heart.

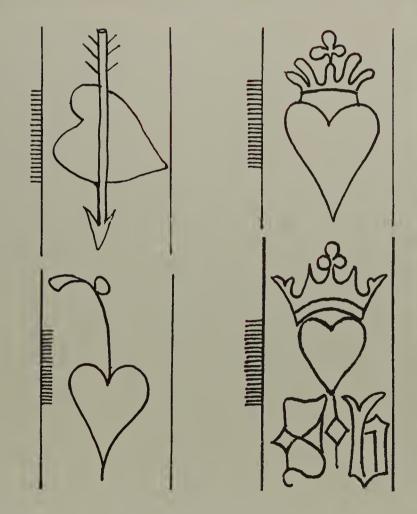
But it was playing cards above all which made the image of the heart so popular. In all card games, naturally, we find the King of Hearts, the Queen of Hearts, and the Ace of Hearts. These games carried the image of the heart into all social classes, into all countries of the world, and still do so in the present time.

The heart appears by chance as an architectural element in the 15th Century. Jacques Cœur was the greatest speculator of his times. He was born in Bourges in 1395, and died mysteriously in 1456, having made a huge fortune. In his home town he built a splendid palace in Gothic style. As he was not of noble birth, he took the heart as his emblem, and adorned his palace with it. The other decoration was the cockle-shell, in homage to the sea, from which his fortune stemmed. At the main entrance to the palace is a balcony, decorated with windows in trompe-l'œil. We can see Jacques Cœur and his wife standing waiting in front of these windows. Below, in a rose-window, a huge heart is sculpted. On the balcony is engraved the motto: 'To valiant hearts, nothing is impossible'. Jacques Cœur has left us one of the finest Gothic buildings of those times and his great house in Bourges perpetuates the symbol of the Heart.

A century which has bequeathed to us the Arras Tapestry, *Le Livre du Cœur d'amour épris*, by King René, and Jacques Cœur's palace, may legitimately be called the Golden Age of the Heart.



Following pages; left: Wooden gingerbread or couque de Dinant moulds, Belgium, 19th Century.
Right: 'Think of Me', quilted and embroidered with pearls; these cushions were probably made by sailors and given as love-tokens, England, 1900 (?) (height 24 cm).



Top, left: Playing-cards, Dubois 1813.
Bottom, left: 'Les filigranes' paper trade-marks from the 15th and 16th Centuries (by courtesy of Monsieur J. François).
Right: The Balcony of Jacques Cœur's great house in Bourges.

















The Emblem of the Heart in Christian Belief.

Below: Engraving by J. Gossner, 18th Century (height 56 cm). Right-hand page, top: Frontispiece of 'Flammulae Amoris', S.P. Augustini, 1629; beside it, an inner page of the book. Bottom: Engraving of St. Augustine, 19th Century (height 24 cm).

The iconography of the heart in Christian art was late in appearing. It spread very quickly. From the 18th to the 20th Century it was to supplant all other religious symbols.

The first presentations of the religious heart probably go back to the 13th Century. In the Museum of Vich, in Spain, a mould for the Eucharistic wafers (the Host) can be seen, and in Poitou in France there is a little seal decorated with a heart from which emanate rays of light.

It is interesting to see how, in its different portrayals through the centuries, the representation of the heart as a symbol of sacred love has evolved. According to Guénon, the heart giving out rays of light forms the oldest representation, because to begin with only intelligence and intellect were attributed to the heart. From the 17th Century onwards, the heart became the centre of the feelings and of emotion. It then appeared surmounted by a flame.

We should also note that in the 16th Century, under the influence of St. Theresa d'Avila and St. Francis of Sales, the Church's philosophy acquired a new trend. It abandoned its rhetorical style in favour of an emotional one. God cannot be perceived through intelligence, but through the heart; hence the pre-eminence of the heart and the pride of place which it was to occupy from then on in the Church and in Christian art.

Besides the rays of light and the flames, other attributes appear in the rerpesentation of the sacred heart. We often come across the heart pierced with one, or several, arrows. We must go back to



several sources to discover the origin of this: first of all, the soldier's spear which pierced the right side of the crucified Christ. This scene, which St. John recounts, constitutes one of the foundations of sacred iconography. Mary's grief before her Son's death is symbolized by a sword which goes through her heart. The picture of St. Augustine holding a heart pierced with arrows in his hand is





probably due to the text of his Confessions where he says: 'You will pierce our hearts with the arrow of your love'. This iconography is also influenced by the mystical transverberation of St. Theresa d'Avila's heart. In her autobiography, that Saint tells us that an angel pierced her heart with a flaming golden arrow.

The iconographical prototype of the Sacred Heart of Jesus portrays a heart with a bleeding wound on the right side, surrounded by a crown of thorns, and surmounted by flames and a cross. Mary's heart is encircled by a wreath of roses, is pierced through by a sword, and surmounted by a flame.

From the beginning of the 16th Century, paintings and engravings of the Sacred Heart of Jesus spread everywhere. Its final shape is already outlined in a woodcut by Lucas Cranach (1530), which is kept in the Museum of Berlin. In the Plantin museum in Antwerp, we can admire the heart of a crucified Christ-child, where the wounds in the right side, the hands and the feet, are represented by roses.

As early as the 15th and 16th Centuries, a few rare paintings are found illustrating the symbolism of the heart, one of which is a canvas by the Master of the High Altar-Piece of Schöppinger, where St. Augustine is shown holding in his hands a heart pierced by two arrows. A typical example of religious symbolism is *L'offrande du cœur à Jésus* by Joos van Clève (1530), and the triptych of St. Pancrace, which is kept in the Cathedral of Strasbourg; in it, the Bishop is holding up a burning heart.



S AUGUSTIN

From the 16th Century onwards, as the symbolism of the heart became more popular, a series of *emblemata* was published illustrating the different phases of the relationship between Man and Christ. It is impossible to enumerate all these works.



Left-hand page: 'La Sainte Famille', water-colour, Germany, 16th Century. The frame in black wood comprises eight reliquaries in the shape of a heart (height 31 cm). Facing: Tortoise-shell and silver paper-clip, England, 19th Century (height 12 cm).

Below, left: Convent work: embroidered hearts surrounded by gold paper with ears of corn and bunches of grapes, Spain, 19th Century (width 26 cm).

Below, right: Wax ex-voto.







Right-hand page, top: Frontispiece and Emblemata of the 'Schola Cordis', Van Haeften, 1663.
Right-hand page, bottom: Emblemata by Antoon Wierix, 1635.
Below: Emblemata from 'Volsinnighe uytbeelsels', by Gabriel Rollenhag.

In 1531, Andrea Alciati published Emblematum Liber. A little later, in Lyon, Georgette de Montenay published a book illustrated with one hundred emblemata, several of which included hearts. In 1624, in Antwerp, Herman Hugo published his *Pia Desideria*, which became a best-seller. In 1629, Otto Venius published a book: Amoris divini emblemata, whose engravings are by Boethius à Bolswert. The same engraver illustrated the Schola cordis by Van Haeften. This work, of great novelty, contains fifty-five engravings, all with a heart. In Antwerp, in 1635, Antoon Wierix engraved a series of eighteen emblemata under the title of Cor Jesu Amanti Sacrum. It enjoyed great success and gave rise to many editions and translations. The Flammulae Amoris S.P. Augustini by Michel Hoyer (Antwerp 1629) contains some very fine emblemata with St. Augustine's heart. In Arnhem, in 1615, Gabriel Rollenhag published a work on emblemata, certain of which include hearts.

In the 17th and 18th Centuries, books of prayers appeared: L'Oratoire du cœur, ou méthode pour faire oraison avec Jésus-Christ dans le fond du cœur (The Oratory of the Heart, or, the Method of praying to Jesus Christ in the Depths of the Heart). Querdu Le Gall's book (Paris 1713), contains some very interesting symbolic engravings of the heart. In the same way, the Oratoire Sacré by Petro Bivero, published in Antwerp by Plantin Moretus, is illustrated with a great number of hearts.

In 1661, a Carmelite, Joseph Sancta Barbara, made another series of engravings on Devotion to







SEMINATIO IN COR.

Verbum seminatum est in corde Mat. 13. 19.

Semina iam terræ manda divine colone,

Ne nostri, sterilis, sit tibi, cordes ager.

25.

P49. 317.



CORDIS DILATATIO.

Viam mandatorum tuonum cucurri, cum dilatalti

COR mcum Pal. 118. 32.

Quam volupe est quod amare prius COR duxit amarum,

Augustam lato currere code viam.

31.

Pag 360.



IESV. fontes fluant, Illis animam mundare A peccates expiare attarum rusuli. Ecce gaudent Angeli.



Ama IESV te cor amat Te suspirat, ad te damat Totis mentis vocibus.

Tu guod lubet, da mandatum Dum feruefeit, et paratum (Tuis adftat insibus



Sat est, IEsv, vulnerasti, Sat est, totum penetrasti Sagiltis ardentibus .

Procul procul hinc libido: Nám caleftis hic Cupido Vincet ignes ignibus.



Brass ex-voto, 19th Century (height 32 cm). Right-hand page: Engraving by J. Gossner, 18th Century (height 56 cm).



L'estat d'un homme qui faict Penitence, et qui en pratique les oeuures qui sont les Prieres, les Tumones, et les Teunes.



Deus cordis mei, ô Beata Trinitas!

the Sacred Heart. The author compares the religious life to a game of cards: the King of Hearts is Jesus, the Queen of Hearts the Virgin, and Man is represented by the Knave. The other cards are also religious allegories. Here, the engravings are unusual and very fine artistically.

At about the same time, in Spain, a Jesuit, Father Vega, published a new series of emblemata: *Le cœur de l'homme* (The Heart of Man), which enjoyed a very great success, and persisted right up to the beginning of our century.

In spite of the very many graphic portrayals of the heart which were in existence until the 17th Century, it is to Marguerite-Marie Alacoque that the merit belongs of having really made the image of the Sacred Heart popular. From that little Heart of Jesus, surrounded by the crown of thorns and surmounted by flames and a cross, which was designed at Paray-le-Monial, a whole religious imagery has invaded the Catholic world, almost right up to the present day.

All these religious engravings, especially those of the 16th and 17th Centuries, have, besides their contribution to religion, an obvious artistic interest, but up to now they have not been studied very deeply. For a long time they have been regarded as devotional objects in bad taste, with no aesthetic value. Now, in view of the capacity for feeling that exists in the present day, these Primitives of religious engraving would surely find favour with the public if they were better known. At a time when important exhibitions of Chinese, Hindu, Tibetan and Tantric graphic art are in-

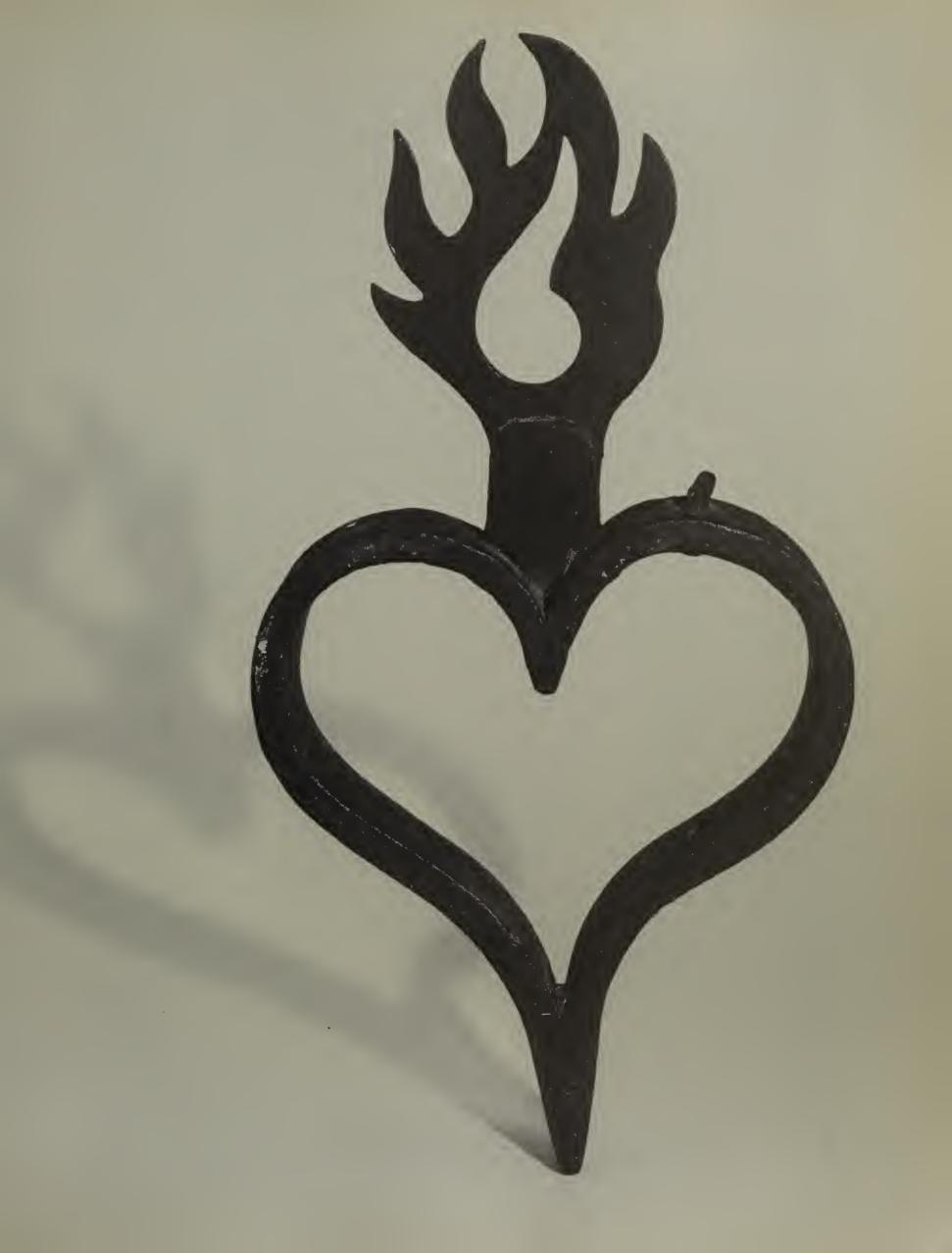
Facing: Engraving from 'Sacrum Oratorium' by Petro Bivero, 1634

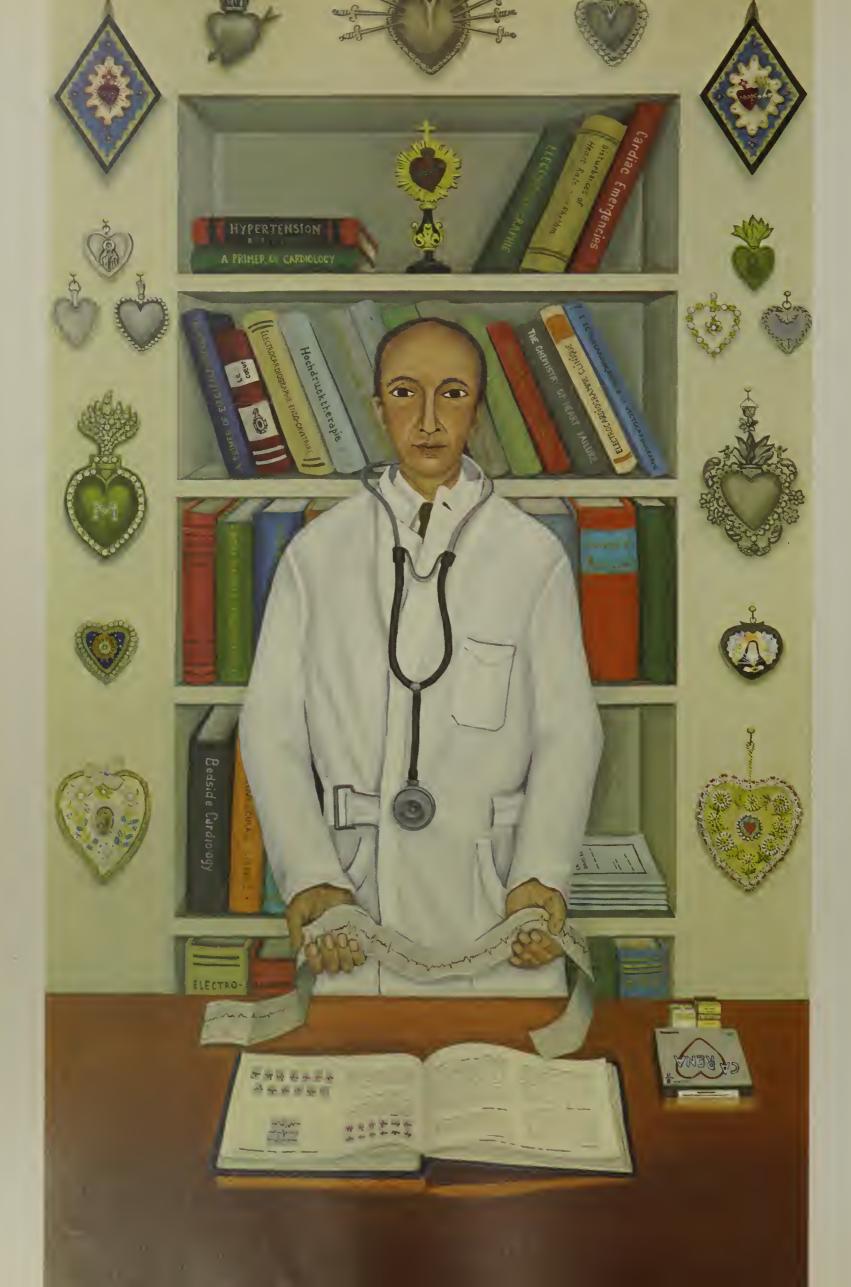
Below: Frontispiece of 'L'Oratoire du Cœur', by Querdu le Gall,

Right-hand page: Wrought-iron heart (height 28 cm).



creasingly to be seen everywhere, it is curious to note how one of the roots of our Christian civilization like Primitive religious engraving, is unknown and unappreciated.





In which the Collector goes the rounds of his Collection





Left-hand page: Convent-embroidered hearts, Spain and Portugal, 19th Century.

Above: Gilded brass ex-voto, containing the donor's messages, France, 19th Century.

This book is inspired and illustrated by a collection of hearts which I have been assembling for about twenty years. To whoever knows how to see it, the heart is everywhere present.

I thought it would be interesting to draw up the most complete inventory possible of the different plastic and graphic portrayals of the heart in all its spheres.

Where do we find these hearts? In all the countries of the world, but in particular in countries which have a Christian culture.

The sum total of these hearts can be put into two categories:

1. Religious or sacred hearts, religious offerings, coming most frequently from churches, convents

or pilgrimages.

2. Non-religious hearts, most often lovers' hearts, of very varied sources.

Religious hearts are often the oldest and most touching. Amongst them, first place must be given to ex-voto. These are religious offerings, objects of piety, in many and varying shapes, in silver, gold, silvergilt, copper, wax, material, sometimes very simple, sometimes very elaborate, embroidered, decorated with mother-of-pearl or precious stones. They are dedicated to Jesus, to Mary, to the Saints, and bear very distinct monograms. Sometimes the latter are replaced by an inscription: 'With thanks', 'In gratitude'.

The appearance varies according to where they are found: Italian hearts are often made of silver; they are slim, very elaborate, with a border of silver lace, giving a very fine effect. From Italy, you can also see hearts with seven swords. In France

Below: Brooches and pendants with precious stones, France, England and Spain, 18th and 19th Century. Right-hand page: Embroidered material hearts, oval frames, made in convents, France and Belgium, 19th Century.









Top: Mary's Heart in a material frame in the shape of a star. Portugal, 19th Century.

Bottom: 'Paradise', with the Heart of Jesus surrounded by Angels, Spain, 19th Century (height 23 cm).

Right-hand page: Holy-water stoups, in pottery, porcelain, and biscuitware (unglazed porcelain), France and Belgium, 19th Century.

and Belgium, copper and silver hearts are frequently found; some of them can be opened, and contain a message from their donor. Sometimes they are set with beautiful precious stones. In Spain and Portugal, we find hearts made of material, with delicate embroidery, pearls and spangles, surrounding a holy picture. In the same countries, we also discover superb carved hearts, most frequently made of gilded or polychrome wood.

In the 18th and 19th Centuries and the beginning of the 20th, nuns would devote themselves patiently and lovingly to making what were called convent-made objects; they were most often in the shape of picture-frames and reliquaries, many of which were decorated with hearts. These objects, made of paper, parchment or material, are often embellished with scrolls of gold paper; they are embroidered with silver or gold thread, occasionally they enclose a relic. They often include little paper patterns, little pictures, engraved or in water-colour, figures in wax or pipe-clay. They are all the result of long and patient work, and you can sense the love with which they have been created.

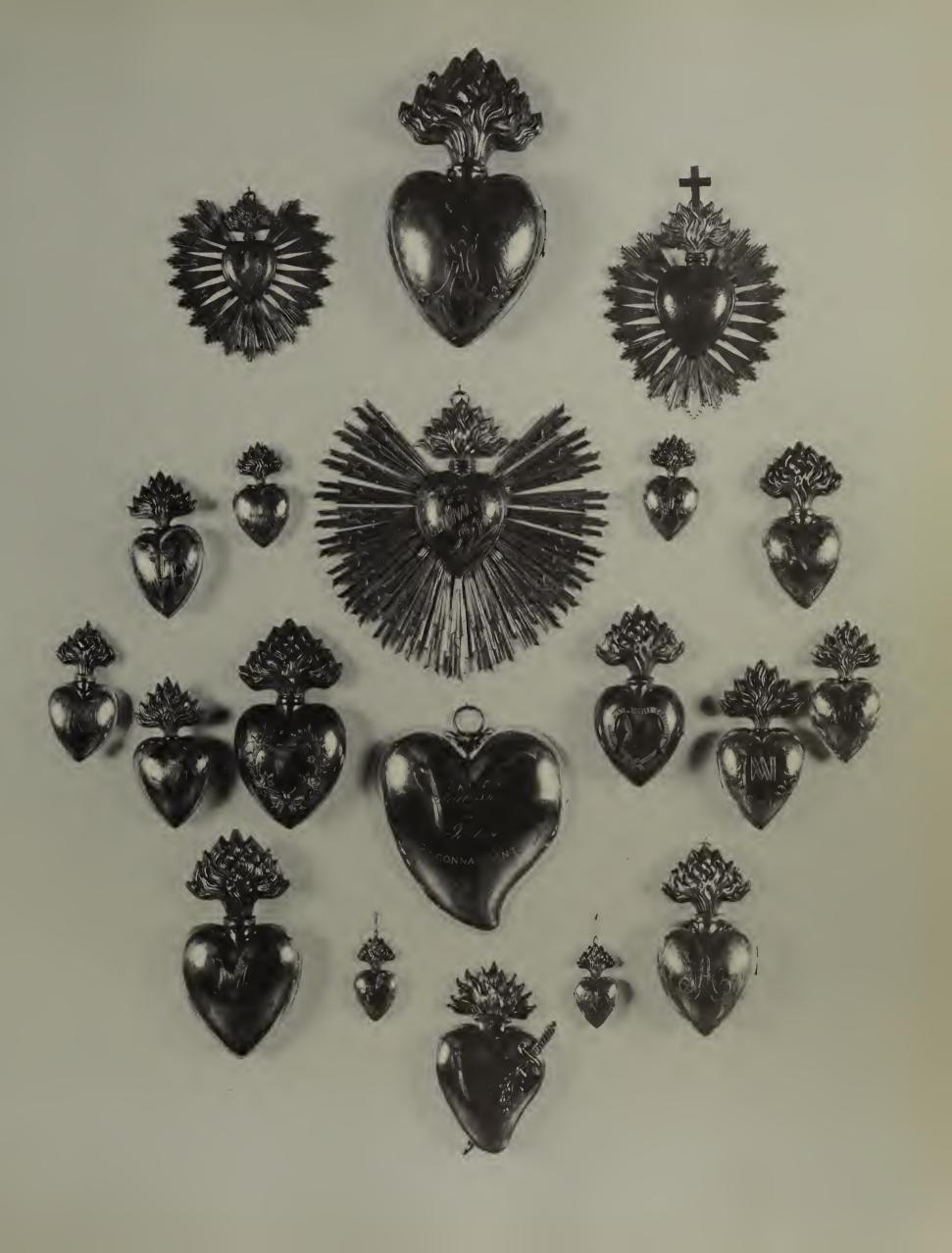
We also come across heart-shaped church oillamps, silver standard-lamps, lamps on wrought copper stands, surmounted by a characteristic red glass, in the shape of a heart, in which the oil was put. Occasionally, in front of the container, there is a heart with rays, set with blue or red stones. In Central Europe, particularly in Austria, there are Baroque lamps in the shape of a winged heart.

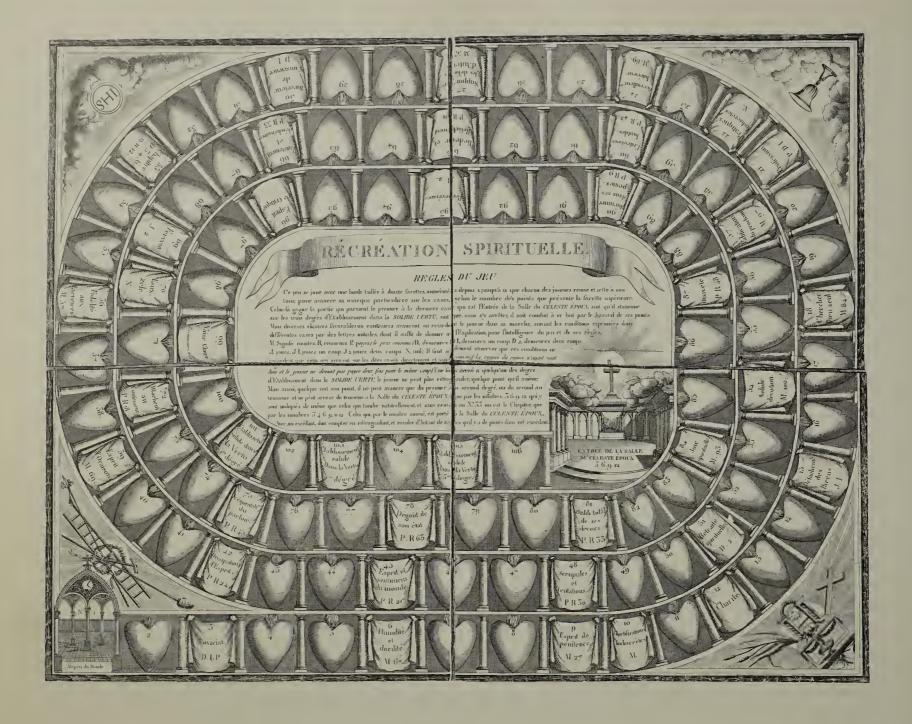
Many other religious objects are in the shape of



Below: 'Mizpah' brooches, England, 19th and 20th Centuries. Right-hand page: Copper ex-voto, from various sources, 19th Century.







Above: Game of Goose, 'Spiritual Recreation', Editions Ledoyen, France, 19th Century (width 62 cm). Right-hand page: Embroidered Scapularies from various sources, 18th, 19th and 20th Centuries.

a heart: more particularly, pyxis, the containers for the consecrated oil, made of finely engraved silver.

Holy water stoups, which are other objects of piety, are occasionally in the shape of a heart or decorated with that emblem. At the beginning of the century, these simple objects used to decorate the bedroom walls of most of our relations. At the present time they are keenly sought after by collectors.

From the 17th Century, little reliquaries, heartshaped or decorated with hearts, were widespread in Christian countries. The oldest ones, reverently made by hand, occasionally enhanced by a little painting, possess a special charm.

Scapularies, those antiquated objects, which were so widespread in past centuries, are often embroidered with a heart.

Religious medallions, engraved with a heart, have existed for a very long time. They were already being sold on pilgrimages towards the end of the Middle Ages. You can see some of them in the Musée de Cluny, in Paris. It is from the 18th Century onwards that these medals have literally proliferated in all places of pilgrimage, and they are still being made.

If a good number of religious objects in the shape of a heart are to be found, it is above all the





Facing: Birth announcement, with a little heart attached by a ribbon, Belgium 1916.

Right-hand page: Announcements of First Communion, of a Wedding and a mortuary memento, France and Belgium, 19th and 20th Centuries.

image of the Sacred Heart of Jesus and of Mary which became widespread from the 17th Century onwards. It occurs in the form of engravings, drawings, paintings, of images under glass...

The rarest of these are certainly the paintings. Amongst these, in my collection, I would like to indicate a canvas of French origin, probably from the 18th Century, which is strongly reminiscent of the paintings of Philippe de Champaigne. The subject is, literally, an explosion of hearts. It is an astonishing picture, which extols the pre-eminence of the symbolism of the heart. Another curious canvas portrays one of Marguerite-Marie's visions in which she is exchanging her heart for that of Christ. From this vision sprang the amazing iconography of the Sacred Heart.

Paintings on glass, articles of popular art which were very wide-spread in the 18th and 19th centuries, were sold above all in fairs and in pilgrimage-places. In Central Europe, particularly in Austria and Czechoslovakia, in Bavaria, Spain and Italy, but also in France, a great number of these objects were painted with hearts.

But it was above all in engraving that the religious symbolism of the heart expanded so greatly. From the beginning of the 16th Century, emblemata by German and Dutch engravers, and particularly those of Antwerp, were printed in series with the image of the heart. I have been able to assemble certain of these works, in particular, the *Schola cordis* by Van Haeften and the *Cor Jesu amanti sacrum* by Antoon Wierix. These works contain the first engravings popularizing the heart.

By the side of these emblemata, many pious pictures were published, from the 18th Century onwards. They are used for christenings, communions, births, and as souvenirs of deaths. They are in black and white, or in colours. Many of them are edged with lace. They portray, above all, the hearts of Jesus, Mary, and Joseph, either separately or together, but also those of the men and women saints who are associated with the heart. It is impossible to name them all. Those which appear most frequently are St. Theresa of Avila, St. Augustine, St. Eudes, St. Marguerite-Marie Alacoque.

From the 20th Century onwards, the Church put a stop to this iconographical exuberance and the Sacred Heart of Mary and of Jesus could only be portrayed in a stereotyped form. Thus a religious imagery came into being which was affected, and not at all attractive.

'Canivets', or cut-outs, are another form of devotional image. They are made from paper which is cut out by hand with a pen-knife, and look like lace. They are enhanced by water-colours. Some of them are decorated with hearts. Generally, they date from the 17th, 18th and 19th Centuries.

We must again mention the Church embroideries, lovingly executed in the convents; certain of these are of extraordinary delicacy. The heart is one of the foremost motifs of these works.

The series of 'Epinal' pictures telling a story, portraying Jesus, His Mother, or the Saints, brought the heart into people's homes from the beginning of the 18th Century.



Première Communion

et de ma

CONFIRMATION

COLLÈGE SAINTE-BARBE

le 31 Mars 1887.

Jésus, le Roi de mon enfance, En ce jour, à moi vint s'unir; ésus reste mon espérance, e jour, mon plus beau souvenir! EDGARD MESTDAGH,



l'occasion de leur mariage, Madame et Monsieur DARAGNES recevront leurs amis, chez eux, 14, avenue Junot, le samedi 7 février 1931, de 6 heures à 8 heures.



Son sang racheta le monde que nos fimes s'élèvent vers

Ter liefde Gods.

BIDT VOOR DE ZIEL VAN WYLEN MYNHEER

LAMBERTUS BELLEFROID, Geboortig van Otrange, ECOTGENOOT VAN JUFFROUW

Anna-Maria-Catharina Ians,

Dewelke, bediend met de HII. Sakramenten godvruchtig in den Heer ontslapen is te Hasse' den 8 Juny 1845, in den ouderdom van 65 jar

R. I. P.

Benauwdheden en pynen heb ik onderv en den naem des Heeren heb ik aengeroe

Lieve kinders vroegtydig hebt gy my verloren; Doch troost u wy zyn voor het graf geboren! Rid God voor myne ziel, vergeet myn lessen

ost in lyden en verdri aer gebeel uws leve , in alles ondersch zyt vroom, zorg* , ter wereld en

zullen g Hoofdk Gasthuis to

drukker van Z. K. i. rtog van Braband.

O mensch peyst op de 🦃 want zyu.metzat sparen,



Kiest dat gy Thick beklaegt, DenHeer uw Leest zoo dat Jesus Opdat hier noyt uw Want't isdit minkaem Bid altyd dal uw



maervraegt , altyd mag't uwbestralen , iot hwade lust magdalen, dat wegneemt alle pyn, met God vereent mag Kyn.

Op't 👬 uw ruste zockt, laet lust der 🎂 varen 🗢









Left-hand page, top: Reliquary Heart by S. Sibilla, silver-gilt, South Netherlands, dated 1684 (height 6 cm).

Left-hand page, bottom: Delft Marriage-plates in polychrome, 18th Century; one is dated 1785 (diameter 22.5 cm).

Facing: 'The Exchanging of the Hearts' by M. M. Alacoque, Canvas, France, 18th Century (height 49 cm).

When the collector of hearts forsakes the sphere of religion, and turns towards the temporal world, he is faced by an immense difficulty. How can he assemble, co-ordinate, and catalogue all the hearts which surround us? Indeed, he perceives that, in everything that takes place in human existence the heart is present. The document, the article, the piece of furniture, the jewel, which symbolize these events, often include a heart, and have done so for several centuries.

In the vast category of non-religious hearts, it is the heart of the lover which predominates. Up to the beginning of this century, country-folk, who were often illiterate, would express themselves by symbols, which could convey their thoughts and feelings. One of the most popular of these symbols was the heart.

In all spheres of popular art, the heart is the foremost of decorations. Craftsmen, working in wood, produce furniture, chests, boxes, buttermoulds, gingerbread moulds, all carved, engraved, or painted with heart-shaped patterns. Others fashion the earth, and create those wonderful objects in popular ceramics: dishes, pots, jugs, inkwells, holy-water stoups, on which the heart so frequently appears. Special mention should be made of the beautiful Delft weddingplates, generally 18th-Century, which are often decorated with two hearts and two hands, symbolizing the sacred union of Man and Woman. Certain patriotic plates made in France, particularly in Rouen and Nevers, at the end of the 18th Century, also have a heart as a device.



Glass-blowers blow those flasks of opaline or glass on which are painted flowers, birds, and stylized characters surrounding one heart, or several. These are gifts which lovers give to each other. Besides these flasks, there are glasses, carafes, and small jugs decorated with hearts.

Iron, bronze, copper, are fashioned by craftsmen. Certain of them put plenty of heart into them in all senses of the term: we find locks in the shape of a heart, keys which end up with a heart, wrought iron, branding irons, and heart-shaped seals.

Bakers and confectioners make heart-shaped gingerbread decorated with coloured spun sugar.

Lovely heart-shaped watches exist, which lovers doubtlessly give each other, in order to live every moment in unison.

We find innumerable boxes, of all sizes and in all materials, either heart-shaped or decorated with



Left-hand page: Inkwells in crystal, pottery and varnished earthenware; various sources, 18th - 20th Century.
Below: Perfume-bottles, little oval boxes, match-boxes, in silver, crystal, glass, or enamel, France and England, 18th and 19th Centuries.



Below: Three red velvet hearts on a background of black material, with patterns traced in straw. Flanders 1893 (width 75 cm). Right-hand page: Boxes for beauty-patches and pills, England and France, 18th and 19th Centuries.













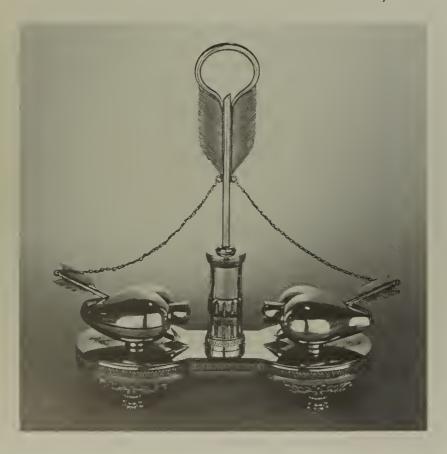






Below: Silver salt-cellar, France, 18th Century (height 24 cm).

hearts. In gold, silver, pottery or porcelain, glass, crystal, laquer, wood, cardboard, papier-mâché, they have been made in every country since the 15th Century. Hearts for rich people, in precious materials, ornamented with rare stones, hearts for poor people, humble boxes for sweets, they are all objects of love or friendship. The elaborate silver boxes of Victorian England or of the France of the Second Empire, boxes for smelling-salts, fine porcelain boxes for beauty-spots, dear to the coquettes of the 18th and 19th Centuries, exist side-by-side with the delicately painted Spa-wood boxes and the boxes covered with material and many-col-



oured embroideries of Portugal and Spain. Mention must be made of the very fine silver boxes from the North of Germany and Scandinavia. Engagement and wedding gifts, they have the initials of the fiancés and the year of marriage engraved on them.

In India, we find rouge-boxes in precious metals, curiously formed in the shape of a heart. A great number of heart-shaped flasks, in silver or engraved crystal, come especially from Victorian England.

Inkwells in the shape of a heart, in pottery, porcelain, glass, crystal, and silver, were used by our ancestors who had no telephone and no ball-point pen to express their feelings of friendship or love.

It is in jewellery and the goldsmith's work that we see a profusion of the non-religious heart. Indeed, he who says jewel, says love, and gift. And how could you not put a heart into what you are giving?

An entire book would be needed to talk about heart-shaped jewellery. It has existed since the 16th Century. Its pieces are innumerable. Pendants are the favourites of lovers. In them, people used to put, and indeed, still do, a miniature, a photograph of the loved one or a lock of their hair. Made of precious metal, very elaborate, set with diamonds, or humble, unpretentious, they have remained for centuries the gift of the heart, the symbol of love par excellence. They are found in all countries of the world.

Brooches in the shape of hearts, with one heart, or two entwined, are seen especially in England.



Facing: Tatooing.

Below: Silver rattles, 19th and 20th Centuries.

Following pages: Valentines and Romantic cards, about 1900,

U.S.A., France and Belgium.

The 'Mizpah' are lovers' jewels, peculiar to that country. We should also bring to notice the Scottish brooches, the Chouan or Breton hearts. A popular piece of jewellery called 'Norman heart' or 'Flemish heart' was widespread during the last century in France and Belgium. This is a very characteristic piece, made of silver, with little diamonds. It is made up of two parts: the first one was given to the young woman on the occasion of her wedding, and the second, on the occasion of the birth of her first child. There are also many filigree hearts of Spanish, Portuguese, or Dutch origin. Rings in the shape of a heart - what could be more natural. There, also, it is a symbol of attachment, of an eternal bond.

If the heart occupied an important place in religious iconography, it also very quickly became the emblem of relationships of friendship and love. 'Valentines' are messages which lovers in Anglo-Saxon countries send to each other on St. Valentine's Day, February 14th. To begin with, in the 18th Century, they were cut out, drawn, and painted by hand. Because of their great success, publishers in the 19th Century were already fabricating series of Valentines, with machine-made lace. Then, at the end of that century, the postcard appeared; it was to spread universally far beyond all imagination. On St. Valentine's Day, at the New Year, on birthdays, lovers or friends sent each other post-cards or chromolithographs, often decorated with a heart. Long before the almost exaggerated craze of today for post-cards, I have been able to get together thousands of them which

have a heart as their emblem. An exuberant fantasy, an unbridled imagination, a disarming charm, are exuded by these cards, especially by the oldest ones, those which were printed in about 1900. In the materialistic, mechanized, dehumanized world of 1980, these pictures bring us a perfume, a state of grace, which are irreplaceable. A post-card from the nineteen-hundreds fills us with relaxation, calm and inner peace. Trying to collect them is much more effective than all tranquillizers that Pharmacopoeia can offer!

The universality of the symbolism of the heart is again confirmed when we look at tattooing. The

















To my Valentine





















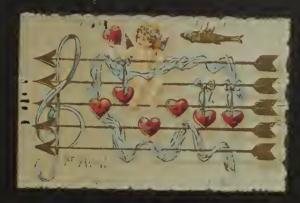


























Facing: Pottery plate, France, 19th Century (diameter 29 cm). Below: Convent work, 18th Century (?) (height 31 cm). Right-hand page: Paper cut-out; with a water-colour enhanced with gouache depicting two hearts with rays, and a Holy Bishop, France, 18th Century (height 34 cm).

heart often pierced by one or two arrows is a frequent subject and gives expression to the tattooed man's fantasy.

The heart is present, too, in contemporary paintings. In the first place, we should mention Jim Dine, who for a long time has painted nothing but the heart.

At the European Congress of Cardiology, held in 1972 in Amsterdam, the Firm of Bayer organized an exhibition of contemporary paintings with hearts. W. Beuermann, V. Viviani, N. Verhoeven and E. Alcoy, amongst others, there displayed talent and imagination in portraying that emblem.

One number of the Belgian magazine *Phantomas* has been given up to the heart. Besides a painting by Viviani which is the cover illustration, works by G. Erro, J. Marti, G. Biasi, and M. Mariën, show the heart in a Surrealist context.

Also in Belgium, collages by Mesens and Andrée Arty occasionally include hearts. Finally, Micheline Boyadjian, obsessed by her companion's collection, has painted him surrounded by his hearts. The painters D. Haine and W. Mestach have also portrayed the collector in a heart.

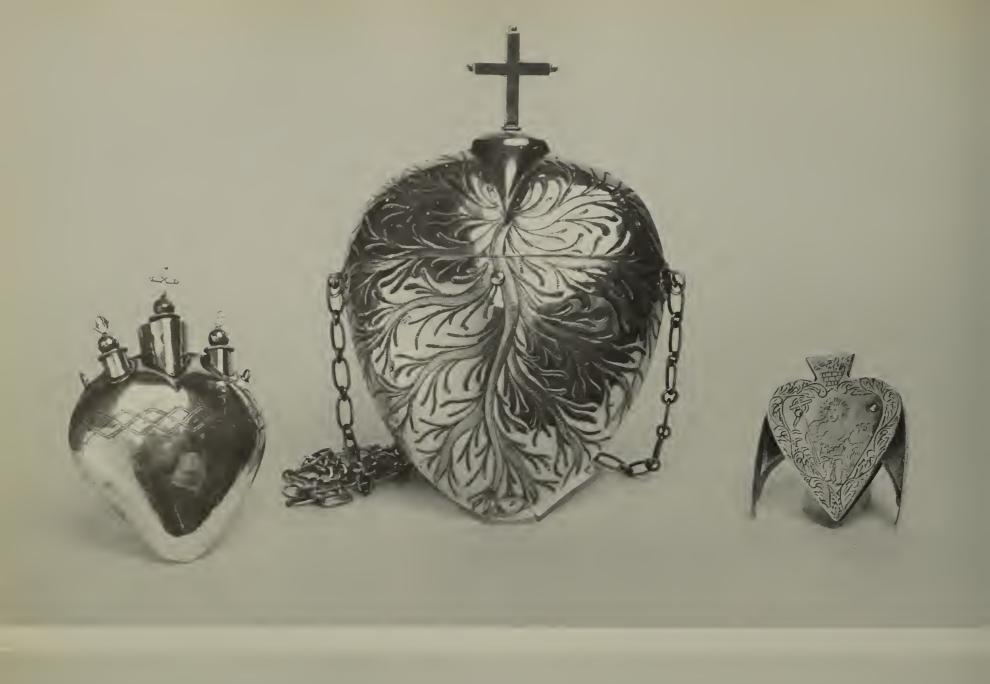


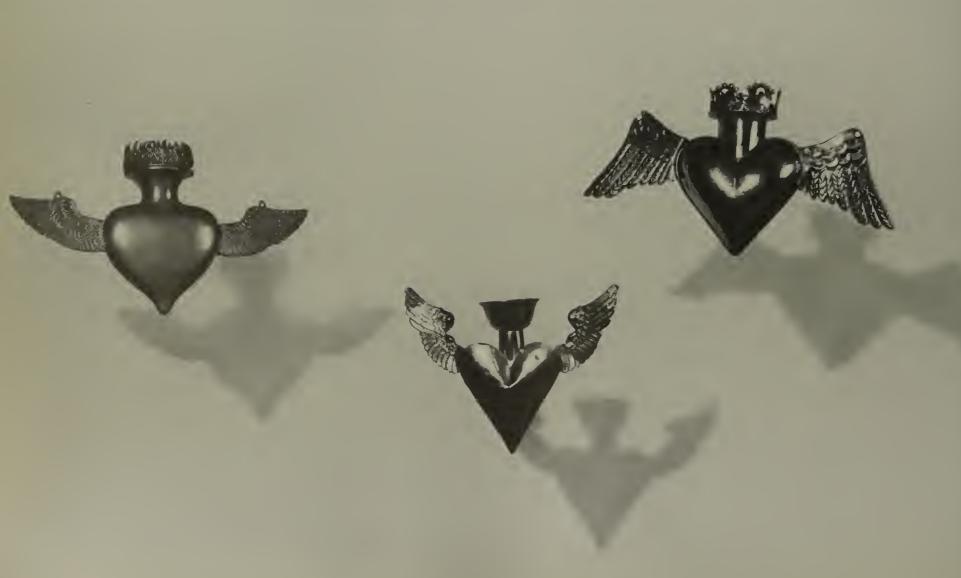






Can cardio-circulatory Physiology explain the Predominance of the Heart?





Left-hand page, top: Chrismatory with three containers in engraved silver, Mexico, 18th Century, a heart in silver, containing the Host, Spain, dated 1857, and engraved silver incense container, Spain, 17th Century.

Left-hand page, bottom: Oil-lamps, winged hearts in pewter and brass, Austria, 18th or 19th Century.

Below: Gold and silver watches, England, 19th Century. Below: Heart pierced by an arrow, silver, 19th Century.





Perhaps physiology might be able to explain why, for centuries, and still in our day, the heart is considered as the seat of the passions and feelings, when we know that the whole of our psychical and emotional life stems from the brain.

Bichat shows us that, side by side with the nervous system of relation (the central nervous system), a nervous system of vegetative life exists which is broken down into two groups: the sympathetic and the para-sympathetic. To this neuro-vegetative, (autonomic), system this writer assigns an important role in the origins of the manifestations of the human passions. For him, fear is located in the stomach, anger in the liver, kindness in the heart. Thus psychosomatic medicine comes into being.

Claude Bernard, the father of modern Physiology, rectifies and clarifies these facts. The heart is the most sensitive of the neuro-vegetative organs. It is the first to receive cerebral influxes through the nervous, sympathetic, and para-sympathetic systems. The brain is the most sensitive of the organs of animal life. It is the first to receive the effects of the circulation of the blood, from whence comes the permanent interaction between these two organs: the heart and the brain. The feelings we experience always reverberate in the heart, and the latter in effect reacts, sets in movement our psychical sensations: it is the heart which manifests our psychical sensations whose one centre is the brain. This interdependence probably explains the long metaphysical argument which has existed in all the different civilizations, concerning the seat of the soul. For some, the seat is the heart, for others, the brain.



The Heart and its Diseases

An Historical Account of the Anatomy, the Physiology, the Pathology of the Heart and of Circulation through the Ages

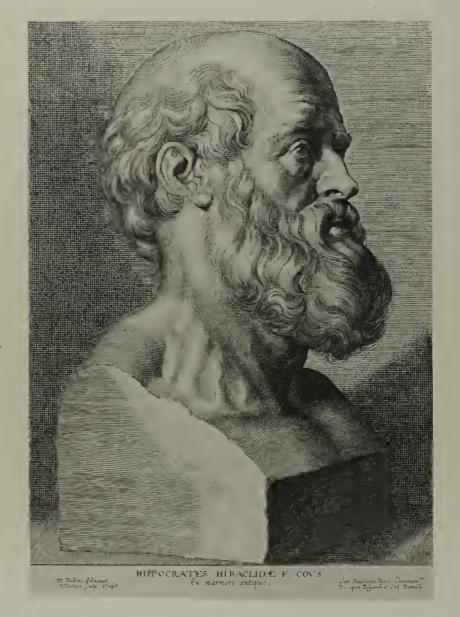
When we study the history of cardio-circulatory diseases we are struck by a curious phenomenon: up to the 18th Century, cardiac complaints were unknown; practically nothing is said about them in treatises on medicine, their existence is even denied.

In the first century A.D., Pliny the Elder wrote: 'The heart is the only internal organ which disease cannot touch, and which does not prolong the sufferings of life'. This idea was maintained until the 18th Century. In his Encyclopaedia, Diderot states that diseases of the heart are extremely rare. Strange contrast: from the 20th Century, particularly from 1940, cardiopathies, especially coronary diseases, have become a real scourge in all the industrialized countries.

In the U.S.A., where medical statistics are kept better than anywhere, half the morbidity and mortality is due to cardio-vascular diseases. We do not possess any precise figures in Western Europe, but, assuming a diet and a way of life very similar to those of the U.S.A. the proportion of heart-cases is probably the same. We must indicate straightaway that it is complaints of an arteriosclerotic origin which have multiplied.

Until William Harvey (1578-1657), we can speak about the pre-history of the heart. Indeed, practically nothing was known about that organ, the pump of the circulation of the blood, so essential to life.

Hippocrates, the Father of Medicine (460-377 B.C.), had rudimentary ideas about the heart and circulation; he likened the movement of the blood



Left-hand page: Bust of Hippocrates (460-377 B.C.). Below, left: Engraving portraying Galen (131-201). Below, right: Engraving portraying Michael Servetus (1511-1553).





Below: Pincushion and hat-pins, beginning of 20th Century. Right-hand page: The Heart of Mary, with Flowers and Rays, polychromed wood, Belgium, 18th Century (height 65 cm).

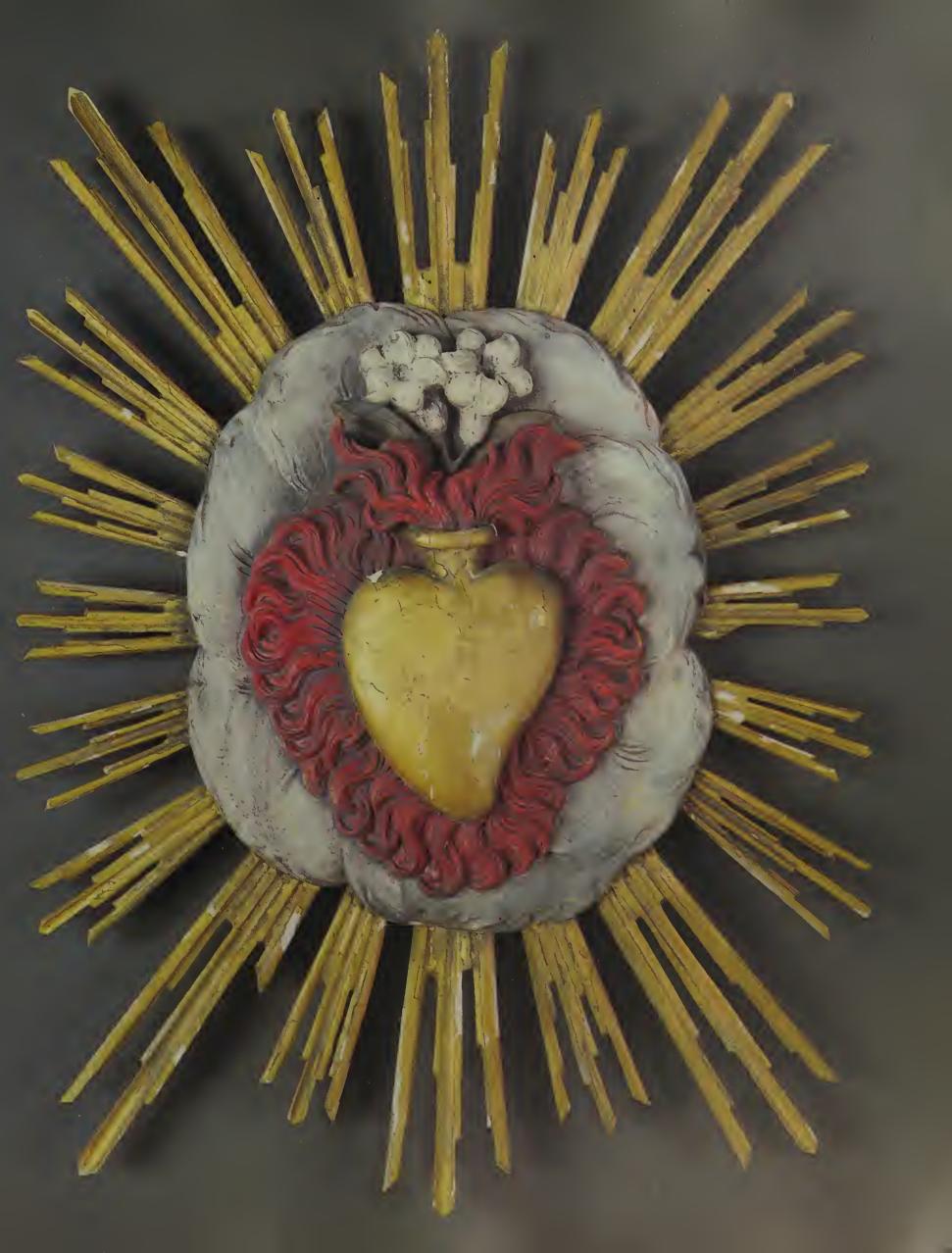
to a coming and going similar to the ebb and flow of the sea. Aristotle (384-322 B.C.), who was not a doctor, was more concerned with the Philosophy of the heart; for him, it was the organ of the feelings and the emotions. In that period, the physiology of the circulation might be resumed thus: the air coming from the lungs reaches the heart, the blood is fabricated by the liver from the food we eat.

In the 4th Century B.C. Greek doctors in the School of Alexandria brought out new facts concerning the circulation and the heart. As dissection was allowed in Egypt, Herophilus



examined the body in its totality. He dissected the heart, and found several cavities in it. He also studied the pulse. He noted that by observing the pulse it was possible to evaluate the seriousness of illnesses. Erasistratus, one of his disciples, continued his research. He showed that the arteries contain blood, but did not manage to shake off previous theories: for him, too, the air from the lungs came in to the left of the heart through the arteries; the veins and the right side of the heart contained blood. The blood was set in motion by flux and reflux, and then again he acknowledged, as did his predecessors, that the septum which separates the two cavities contained pores.

Erasistratus made another contribution which History should conserve. He was the first practitioner to make use of psychosomatic medicine, and the rhythmologist. Seleucas, the King of the Syrians, summoned Erasistratus to attend to his son Antioches, who was wasting away. After a thorough examination, the doctor asked all the women living in the King's court to file past the patient's bed. When Antioches saw his young stepmother Stratonice, his pulse began to beat rapidly and irregularly. Erasistratus gave the seventy-year-old King his diagnosis, and he, wisely, separated from his wife and married her to his son, who was completely cured. Thus, for the first time, at a sick man's bedside, the link between the cardiac rhythm and the emotions of love was revealed. 'Stratonice', a painting by Ingres,



Embroidery on a blue background. A heart surrounded by four angel's heads, Spain, 18th or 19th Century (height 49 cm).

portrays the scene of the diagnosis.

After Hippocrates, Galen is the most illustrious representative of the medicine of ancient times. He was born in Pergamos in 131 A.D. His conception of the circulation is nearer the truth, but still very incomplete. According to Galen, the blood is formed in the liver, then, in the course of the diastole, it passes into the right ventricle; during this same diastole, the air from the lungs reaches the left ventricle through the pulmonary vein. During the systole, the blood passes into the pulmonary artery to feed the lungs, and into the left ventricle, through the openings in the intraventricular septum. In this ventricle, the 'vital spirit' is formed by the union of the blood and the air. This 'vital spirit' irrigates the body through the arteries. There is another aspect which we find interesting: the humoral theory on illnesses which Galen sets forth. For this writer, illness comes as a result of the interaction of the humours. He characterized four: the sanguine, the phlegmatic, those of the yellow bile and the black bile. Galen's humoral theory, which seems so fantastic to us, nevertheless formed the base of all medical treatment, which continued in use up to the 19th Century. However, History was to reserve a strange fate for Galen. For, the propagator of a scientific method based on experience, he was to found a system which for many centuries was destined to become a kind of act of faith, of dogma, which was going to paralyse the progress of scientific and medical research until the Renaissance. The perseverance and moral

courage of a Vesalius and a Servetus were needed to shatter this dogma.

Before we leave the Middle Ages, we must mention the little-known name of an Arab doctor, Ibn an-Nafis, who lived in Damascus in the 13th Century. A paper by Leon Binet in 1948 reveals to us that Ibn an-Nafis had, before Harvey, described the correct pulmonary circulation and was the first to deny the existence of the intraventricular pores. He states: 'There is no communication between the two ventricles', 'The passage of the blood towards the left ventricle is made through the lungs'. He had just discovered pulmonary circulation. It is improbable that the scholars of the Renaissance, Servetus and Harvey in particular, had any knowledge of these works.

Leonardo da Vinci, the most versatile mind of the beginning of the Renaissance, studied the heart, and has left us many drawings of it. However, he could not break away completely from Galen's theories. In his drawings of the heart, the partition between the left and the right hearts still contains a communication, an opening.

Without doubt, one of the most astonishing personalities of the 16th Century was Michael Servetus (1511-1553), an inquiring, restless mind, dissatisfied with God and the world, argumentative to the nth degree. He was trained in Theology, and studied the Natural and Medical Sciences. He published a book on Theology which caused him to be excommunicated, and expelled from several European countries. He reached Geneva, where Calvin was imposing his religious



Right-hand page: Engraving depicting William Harvey (1578-1657).

Great Discoveries in the Cardio-Circulatory Field

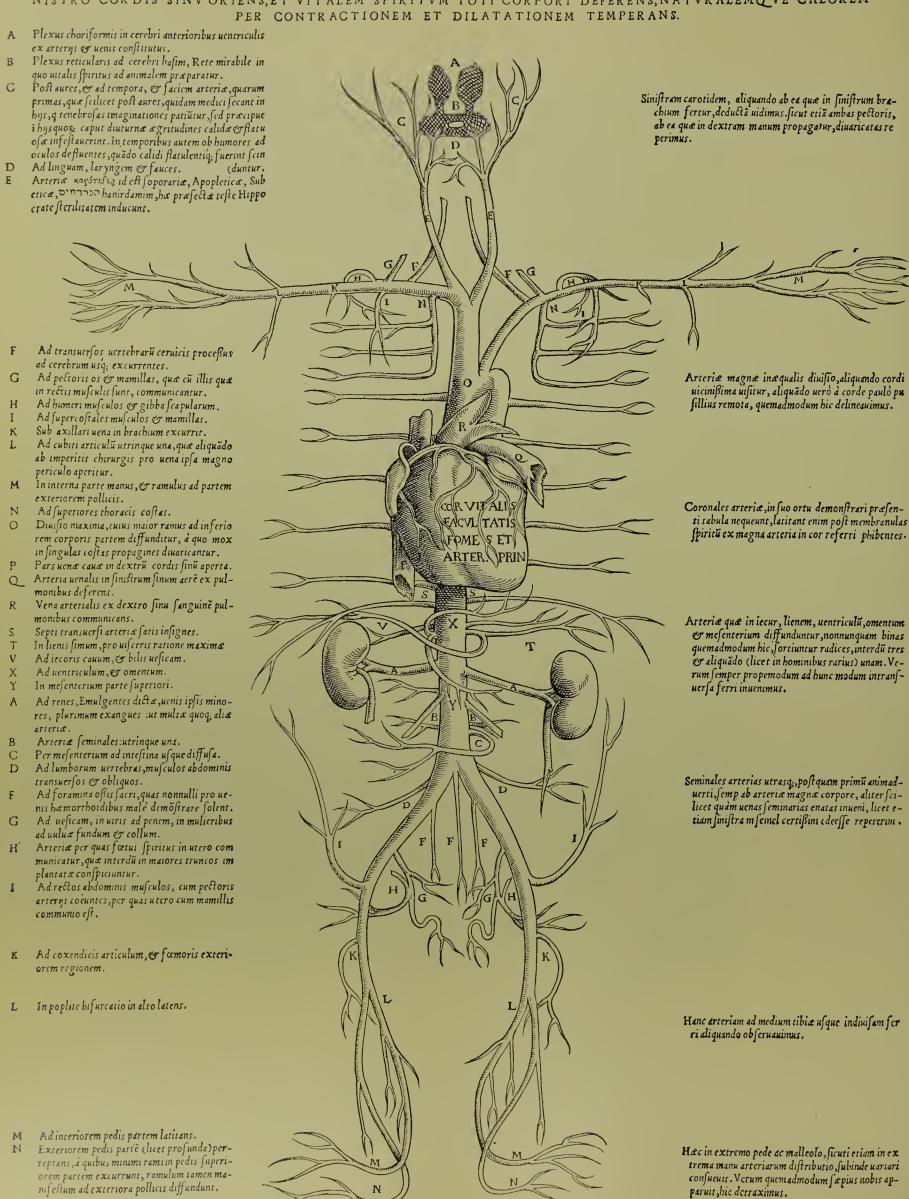
terror. He was arrested and sent to the stake in 1553. In his Theological work, we find a few lines, in which he describes, clearly and fully, the circulation of the blood between the heart and the lungs. He writes: 'The connection between the cavities of the heart is not established through the median partition of the heart; a wonderful track conducts the blood, which flows in a long detour from the right of the heart to the lung, where it undergoes the action of the lung and becomes red; at the moment of relaxation (diastole) it reaches the left cavity of the heart'. Few doctors paid any attention to this exact description of the lesser circulation, all the more so because it was in a book of Theology, whose author had been burnt at the stake. Two Italian doctors from Padua, Realdo Colombo (1505-1559) and Andrea Cesalpino, (1529-1603) re-stated this fact, without quoting Servetus. Cesalpino has the merit of having been the first to create the term 'pulmonary circulation'.

Andreas Vesalius, born in Brussels (1514-1564), the creator of modern Anatomy, does not make an attack on Galen, but in his anatomical drawings he corrects many of the latter's errors. In his magnificently illustrated book *De humani corporis fabrica libri septem*, which appeared in Basle in 1543, he shows that the intraventricular partition is impermeable, but he does not draw any physiological conclusions from this.

It was William Harvey, (1578-1657) who was to be the great discoverer of the circulation of the blood. Trained in the Universities of Padua and Cambridge, he practised medicine in London and lectured in the College of Physicians. His book, Exercitatio anatomica de motu cordis et sanguinis in animalibus, based on Anatomy and experimenting, is a model of clarity and precision. The dissection of corpses was forbidden in England. All Harvey's work in that field was based on vivisection. He was the first to show that the heart works like a pump. When it contracts (systole) the blood from the right of the heart is propelled towards the lungs through the pulmonary artery and the blood of the left heart into the rest of the body through the aorta. He furthermore reveals that the auricles are not static reservoirs, but are also contracted at the moment of systole. He meticulously re-traces the circulation of the blood. He confirms that no communication exists between the two ventricles, and that the veinous blood passes from the right of the heart into the lungs, where it is oxygenated, then goes into the left auricle, and next into the left ventricle. The only thing which escaped him was the passage of the blood from the arteries into the veins, either in the case of the lungs or that of the periphery. This was to be the work of Malpighi who, thanks to the microscope, discovered the capillary circulation effectuating this arterial-veinous passage. With William Harvey, the circulation of the blood was scientifically established, and the period of the Renaissance was at an end. Thus begins the era of Modern Medicine.



NISTRO CORDIS SINVORIENS, ET VITALEM SPIRITUM TOTI CORPORI DEFERENS, NATURALEMQ VE CALOREM



Thanks to Vesalius and Harvey amongst others, the anatomy and physiology of the heart and circulation were quite well known from the end of the 18th Century onwards. On the other hand, the diseases of the heart remained a field which was practically unknown. In their Encyclopaedia Diderot and d'Alembert wrote, in the article *Heart*; 'Generally speaking, we can say that diseases of the heart are rare'. People were therefore at the same stage of ignorance as they had been at the time of

Pliny the Elder, at the beginning of our Era.

In the course of autopsies, certain cardiac anomalies were pointed out, in particular by Morgagni, an anatomist in Padua, but the connection between the anomalies and cardiac semiology was never established. If cardiopathies appear to have been very rare at the end of the 18th Century, it is because the doctor had no factor of diagnosis at his disposal. A century and a half after Harvey, cardiological medical science was still not in existence. The only undisputed factor at people's disposal was the examination of the pulse. The latter had been widely studied by the Chinese and the Arabs. Many learned works are devoted to it. A multitude of pulses are described; it was known that emotion makes it beat faster, that a good pulse is the sign of good health, and that is all.

When we consider the evolution of our knowledge concerning the diseases of the heart, one thing is astonishing: it took centuries before Man, Nature's most enquiring being, put his ear to his fellow-creatures' chests to listen to the sound, the music, of the heart. Hippocrates had established Left-hand page: The Arterial Circulation, extract from Tabulae Anatomicae, by Andreas Vesalius (by courtesy of Dr Van der Elst).

Below: Engraving portraying Vesalius (1514-1564).

Following pages: Postage-stamps and envelopes involving a heart, of various sources, 20th Century.



































































Below: Painting of R. Laennec (1781-1826).

Bottom: Laennec's stethoscope.





the possibility of listening to these sounds by putting the ear to someone's chest, but this had been forgotten for centuries. It was probably religious taboos, and blind belief in Galen's dogma, which held up the progress of Medicine for so long. In point of fact, the heart began to become audible from the 19th Century onwards. In 1761, a Viennese doctor, Leopold Auenbrugger, published a little brochure on the sounding of the thorax by percussion. This work, that of a little-known doctor, had no repercussions, and the technique would probably have been forgotten if Corvisart (1755-1821) had not adopted it. When he was called in consultation into the presence of the Emperor Napoleon I, he was able, thanks to sounding the latter's chest, to state that he was only suffering from a mild cold. Delighted with this diagnosis, Napoleon appointed him his private doctor. Thanks to the authority of Corvisart, who moreover translated Auenbrugger's brochure into French, this manner of sounding people's chests rapidly became a universal technique in the clinical examination of the heart and lungs.

A Breton doctor, René Laennec (1781-1826) worked as Corvisart's assistant, and therefore became familiar with this method, but he realized that this technique was inapplicable in the case of obese patients. One day, having to examine an opulent young woman who, as was the habit of the times, had kept her chemise on, he tried to sound her chest by percussion, but could hear nothing. He was extremely upset and thought that if he put his ear up against the patient's chest, he might be

Facing: Engraving portraying W.C. Röntgen (1845-1923).

able to discover what was wrong with her. But in those days, to put your ear up against a lady's chest was quite unthinkable. Then he had what turned out to be an inspiration. He picked up an exercisebook which was on his desk, rolled it up, held it tightly and made a cylinder of it. He applied one end of this cylinder under the patient's left breast, and put his ear to the other end. He was surprised to find that he could distinctly hear sounds coming from the heart. A great discovery had just been made which was in actual fact going to overturn Medicine. Laennec had just invented auscultation. He perfected the acoustic trumpet, which he called a 'stethoscope', from the Greek meaning 'the spy of the chest'. He replaced the roll of paper by a hollow wooden cylinder. This instrument was rapidly brought to perfection. It has almost become the emblem of Medicine.

But the discovery of an instrument did not settle everything. It was necessary to learn to interpret the sounds of the heart and lungs. It was necessary to invent the semiology of cardiac and pulmonary auscultation. Laennec devoted his life to this. As he was himself tubercular he became interested above all in pulmonary auscultation, and published an important work: On mediate auscultation, or, Treatise on the diagnosis of diseases of the lungs and heart.

A Czech doctor, Joseph Skoda (1805-1881) made an important contribution towards the auscultation of the heart. He was the first to describe the cardiac sounds and murmurs. He pin-pointed their localization, by scrupulously careful



clinico-anatomical studies. He tried to define the clinical auscultatory signs which allowed the diagnosis of this or that cardiopathy to be made. He in actual fact created auscultatory cardiac semiology.

From the 19th Century onwards, progress in cardiology made rapid strides. On the one hand, through the discovery of new techniques of investigation, such as radiology, electrocardiography, and on the other, thanks to the description of new nosological entities, of etiological facts...

In 1896, W.K. Röntgen read a paper to the Society of Medicine of Würzbourg and described his discovery of X-rays, which allows us to see the inside of the body. This technique made a fundamental contribution to medicine.



Left-hand page: Holy-water stoup: Hearts of Jesus and Mary with their symbols, Limoges, 19th Century.
Below: Meeting between Einthoven (1860-1927) and Sir Thomas Lewis (1881-1945).

In Holland, a few years later, W. Einthoven created the first electrocardiogram and described its morphology. A new technique, the importance of which even Einthoven, at the time, did not appreciate, was incontestably going to overturn cardiac physiology: all the irregularities of the heart, all the coronary diseases which have become so important in our time, are revealed by electrocardiography. Amongst those who have made the greatest contribution to the progress of this science, we should mention Sir Thomas Lewis, H.E.B. Pardee, and F.N. Wilson.

Towards the end of the 19th Century, blood pressure was measured thanks to sphygmomanometers which were devised by Riva Rocci and later by Vaquez and Laubry. If we add that in 1928 a German doctor, Forssman, carried out on himself the first human cardiac sounding with a catheter by plunging an opaque probe into the vein of one of his arms and introducing it into the right auricle, we can see that all the ingredients are in place for the understanding of the overwhelming progress in cardiological know-ledge after World War II.

Cournand, a Frenchman living in the United States, made cardiologists familiar with cardiac sounding with a catheter. He demonstrated its utility and its harmlessness. Angiocardiography, which consists in injecting an opaque substance into the heart or the vessels and then photographing them, became a current practice. Thanks to these techniques it became easy to make a precise diagnosis of congenital and valvular dis-



eases of the heart, and soon cardiac and vascular surgery came into being. Helen Taussig studied congenital cardiopathies and had the first operations on blue diseases performed, which made such an impression on the public. Blue babies are often suffering from a particular disease, Fallot's Tetrology. It consists primarily of a pulmonary valvular stenosis and an interventricular communication.

In the field of congenital cardiopathies, the persistence of a patent ductus and the coarctation of the aorta, interauricular or interventricular communication, pulmonary stenosis, Fallot's Tetrology, the transposition of the great vessels, become, thanks to surgery, complaints which in a good number of cases can either be cured or ameliorated. We are also managing to prevent these diseases. We know that during pregnancy, German Measles, Diabetes, and certain medicines, if taken, are prone to cause congenital abnormalities, which we can take the necessary precautions to avoid.

Valvular cardiopathies have been known since the beginning of the 19th Century. As early as that period, Bouillaud had described a rheumatic complaint which bears his name, and which can give rise to an endocarditis with regurgitation or stenosis of the mitral or aortic valves. The work of Jones, amongst others, reveals that the cause of valvular cardiopathies is a haemolytic streptococcus which appears most frequently in an attack of angina. The discovery of penicillin by Fleming turned the therapy of infectious diseases upside down. People soon realized that the haemolytic streptococcus, the pathogenic agent of rheumatic valvulitis, is very vulnerable to penicillin, and from this stems the enormous progress in the prevention and therapy of these diseases. Furthermore, when valvular lesions have formed and are irreversible, and provoke a severe cardiac deficiency, the deficient valvular apparatus can be replaced nowadays by a prosthesis which re-establishes normal circulation. Thousands of artificial valves have been put in. Patients exist with three: aortic, mitral and tricuspid.

It has been possible to carry out these openheart operations because, in the United States, in about 1950, researchers devised an artificial heartlung which allows the blood to be oxygenated outside the body. Thanks to this apparatus, whilst an operation is being carried out on the open heart, which is therefore arrested, the brain, the kidneys, and the coronaries are irrigated by blood which is artificially oxygenated. A great number of scholars have participated in the creation of this apparatus. In particular, the name of John Gibbon should be mentioned.

The pace-maker, or implanted cardiac stimulator, consists of a special battery inserted under the skin, which stimulates the heart to a specific rhythm. This appliance makes possible the survival of a great number of patients suffering from heart-arrest as a result of the Adams-Stokes syndrome.

Cardio-Vascular Diseases, the Curse of the Present Day

Below: Coronarography: the coronaries become visible.

In 1980, the cardiologist is confronted above all by two groups of diseases which in the last few years have become a veritable scourge in the West. We are referring to hypertension and arteriosclerosis, with their cardiac complications (coronary insufficiency, myocardial infarction, decompensation) and their cerebral complications (thrombosis, haemorrhage).

Hypertension is a complaint which is very widespread in our lands. About 10% of the adult population is hypertensive. By definition, an adult whose maximum blood pressure goes above 160 mm of mercury and whose minimum goes to 90 mm, is regarded as being hypertensive. Here is an important fact: 20% of hypertensions are unknown. Now, this complaint is not only dangerous in itself, but it is one of the factors of coronary diseases. In more than 95% of cases, hypertension is said to be the main cause, because the real cause is unknown up to now. Every hypertensive person should receive attention, all the more so because at the present time a whole number of efficacious diets and medicines are available.

Arteriosclerosis, or atherosclerosis - they are so close as to make practically no difference - constitute problem number one today in cardio-vascular pathology. What is atherosclerosis? It occurs when the arteries are affected. The internal side of these vessels is covered with a fine membrane of tissue, which is called endothilium. For a reason which escapes us, this endothilium deteriorates in certain parts of the body, particularly in the case of the aorta, the coronary arteries, the cerebral arteries



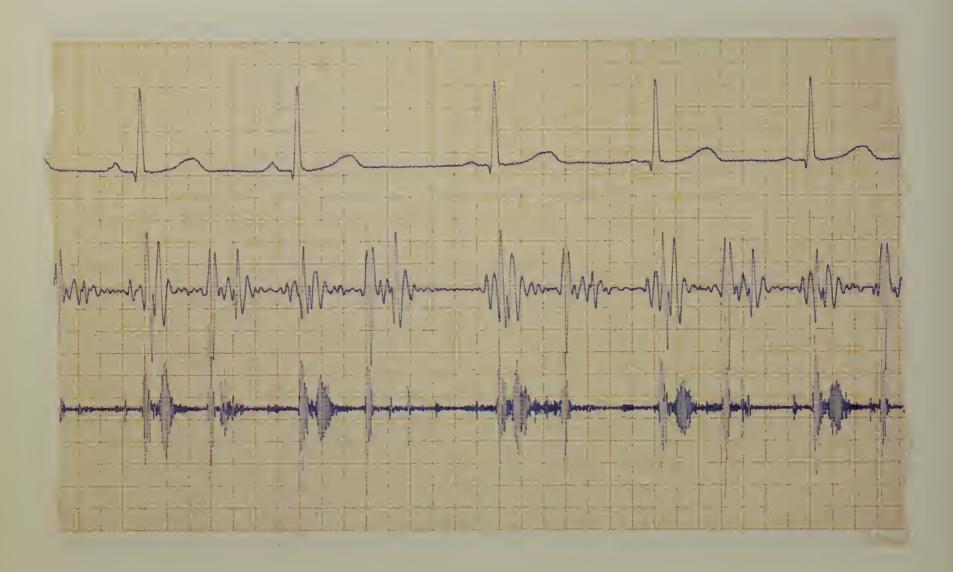
and the arteries of the lower limbs, and in these cases a deposit of fats, and patches of calcium are formed, which tend to make the passage of these vessels smaller, and occasionally to block them up. This narrowing of the arteries is at the root of the ischaemia, or diminution of the quantity of blood which irrigates a muscle or an organ. When ischaemia reaches the coronary arteries, then we have the classic illustration of angina and, eventually, of coronary thrombosis. When it exists in the case of the vessels in the brain, then we have the syndrome of the stroke, with paralysis, aphasia, etc. In the case of the aorta and the lower limbs, it makes itself known by obliterating endarteritis, which gives rise to that typical pain in the calves,

Right-hand page: Radiography of the Heart with a pacemaker

implanted under the skin.

Below: Electrocardiogram and Phonocardiogram: the Rhythm

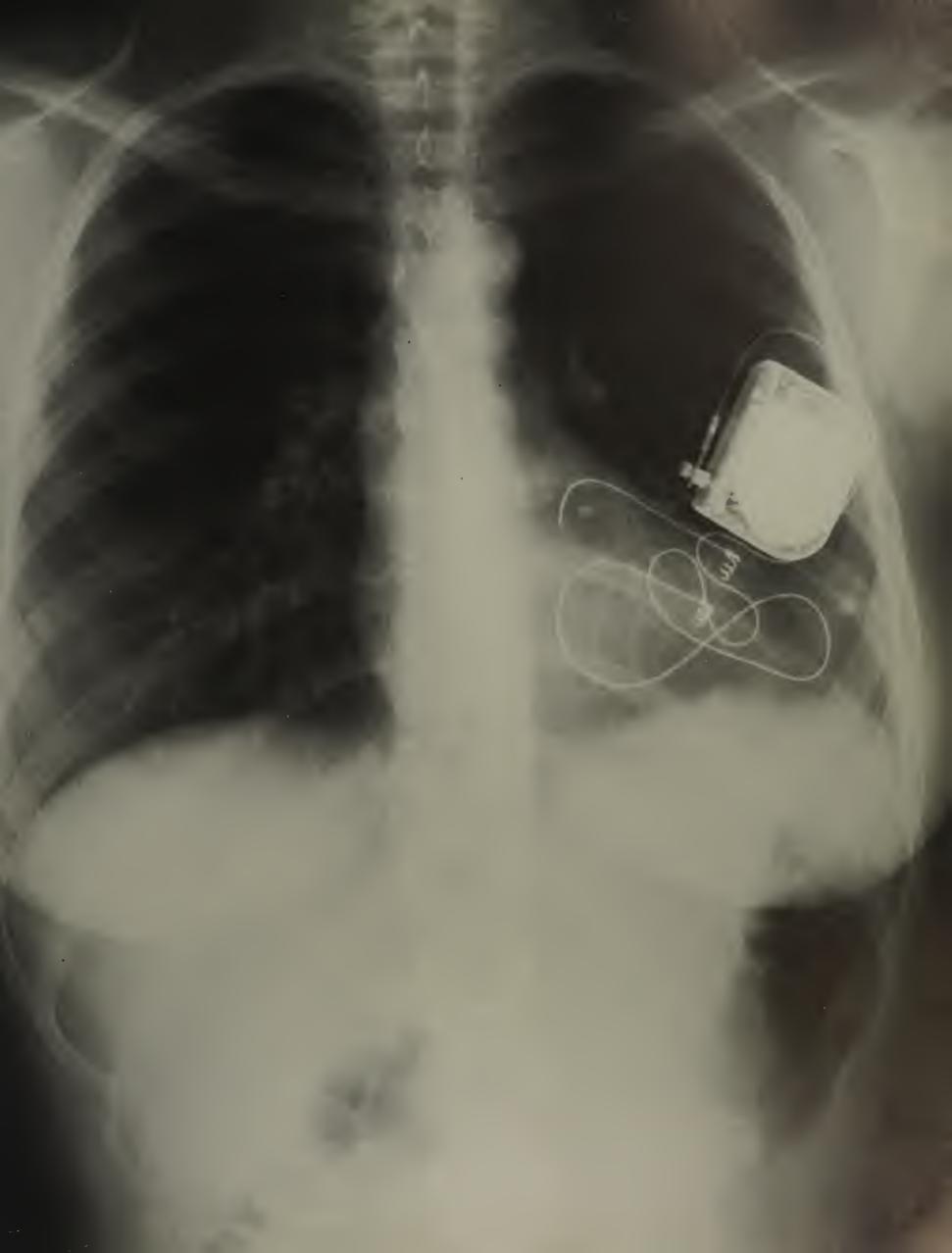
and the Music of the Heart.

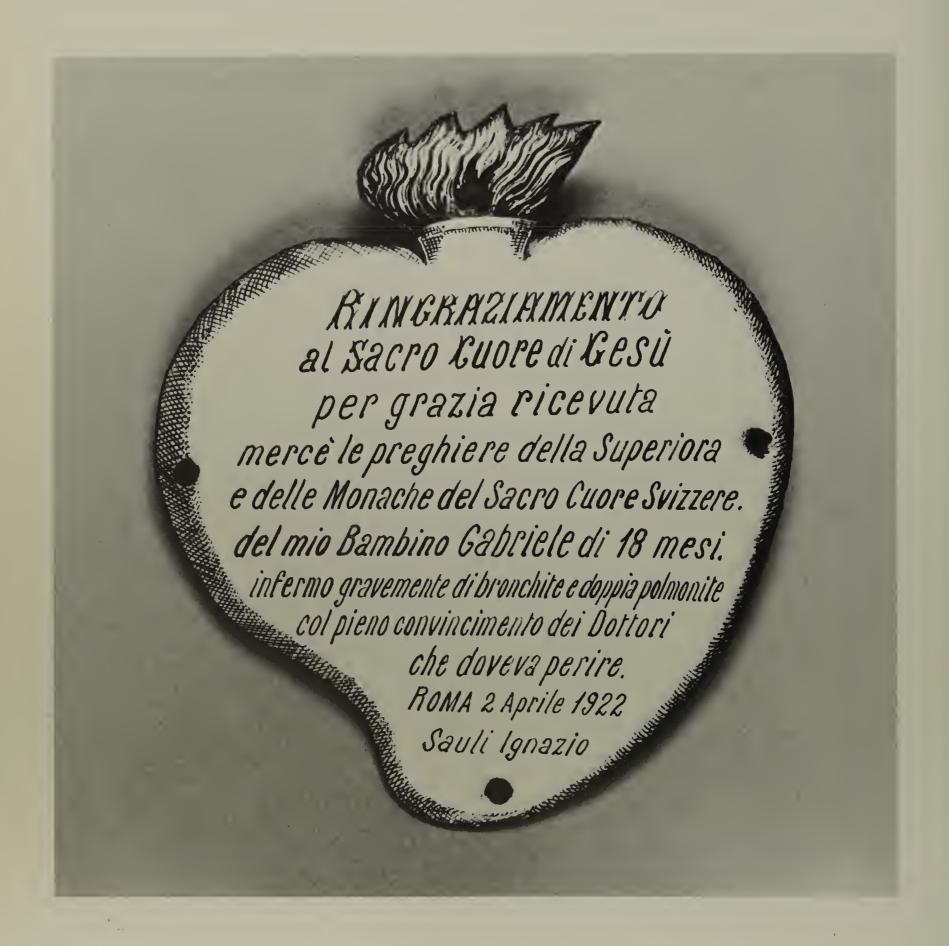


when walking, which is called intermittent claudication.

What are the causes of arteriosclerosis? For more than thirty years, thousands of researchers have been trying to detect its cause or causes. Along with cancer, it is certainly the field in which research is most intensively pursued, and with good reason. For 50% of the mortality and morbidity in Western countries is due to arteriosclerosis and its complications. If we do not know the origin of arteriosclerosis and therefore of coronary diseases, certain risk-factors have been brought to light. These are:

- 1) Heredity. Families of people suffering from coronary complaints have been known of for a long time.
- 2) Hyperlipidaemia, or increase in the fats circulating in the blood, particularly an increase in cholesterol and tryglicerides, often of alimentary origin.
- 3) Diabetes, an important factor of atherosclerosis.
- 4) Tobacco. According to recent statistics, this is probably the most important factor in the origin of coronary cardiopathies.
- 5) Hypertension.





Left-hand page: Enamelled ex-voto, offered in gratitude for a miraculous cure, Italy, dated 1922 (height 20 cm).
Below: The Anatomical Heart, moulding by Bayer.
Below, bottom: Anatomical drawing by Leonardo da Vinci.
Kept in the Library in Windsor Castle.
(By courtesy of Professor Rylant).

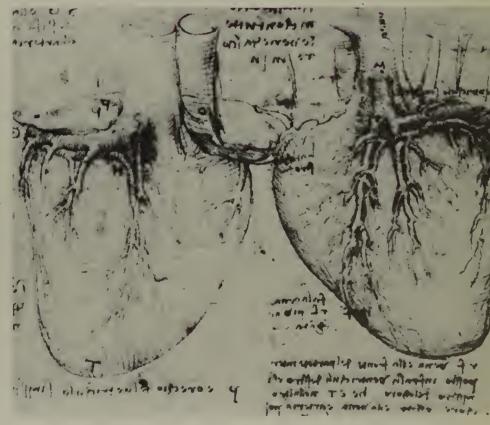
- 6) Obesity.
- 7) Stress, or nervous tension brought on by one's job or family life. Lack of exercise should also be added.

When these risk-factors are analysed, one fact becomes obvious: every being is directly responsible to himself. Indeed, in this field at any rate, his state of health depends to a great extent upon him. He can correct hypertension by a diet and medecines which nowadays are well-defined. He can, and should, do without tobacco; obesity can be overcome by a special diet; lipidaemia and diabetes are now curable by well-adapted diet and medication. All this is so true that in the U.S.A. where the population, more motivated and disciplined on this subject than in our country, has been following medical advice for about 10 years, the number of coronary diseases has diminished.

If the prevention of coronary diseases is possible and profitable nowadays, the treatment has also benefitted from very great medical and surgical progress.

For about twenty years, a whole group of medicines with very different effects has improved the prognosis of these diseases. But the most spectacular progress has been made in the field of the surgery of coronaries. Coronarography consists in introducing a probe into the left ventricle and rendering the coronaries opaque. Radiography of these coronaries allows both the localisation and extent of the stenotic zones to be put into concrete terms. Thanks to these pictures, the surgeon is able to effect one, or several, aorto-







coronary by-passings. This operation, which has been developed to perfection nowadays, has lessened or suppressed the anginal pains of tens of thousands of sufferers. Furthermore, it is possible that the expectation of life of cardiacs may also be

The technique of this by-passing is simple, but to carry it out is a delicate task. With the help of an extra-corporal circulation, the thorax is opened and the heart arrested. During the intervention, the surgeon has taken a vein from the patient's leg, and with this vein, he makes an anastamosis, a canal, which starts from the aorta and ends up in a coronary below the stenotic area. Thus the irrigation of the myocardium is improved, and from this, in more than 80% of cases, the angina is diminished. Nevertheless, we must insist on the following point: this operation does not cure the disease, but suppresses its principal symptom, which

Right-hand page: Church offertory-box, polychromed wood,

Spain, 18th Century (height 30 cm).

Facing: Funerary plaque; Belgium, 20th Century

(height 15 cm).

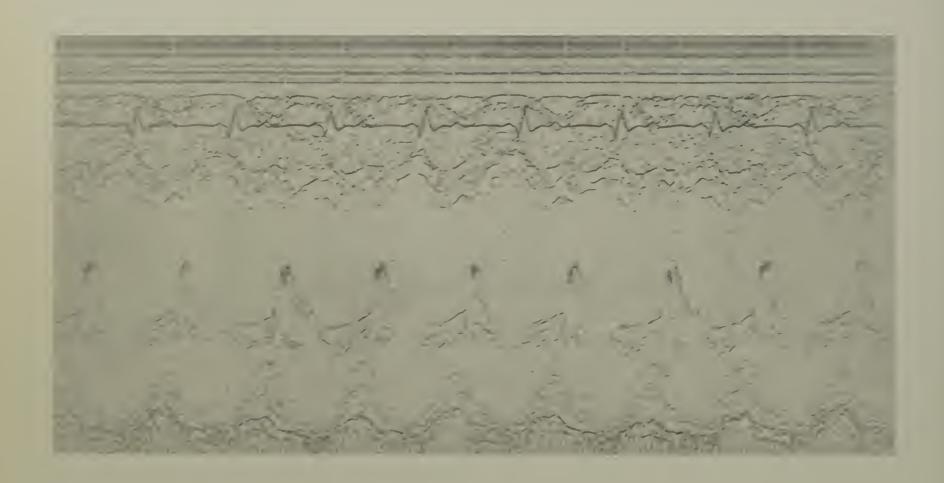
is anginal pain.

Ever since the beginning of the surgery of coronary diseases, an important controversy has been entered into between the partisans and the opponents of by-passing. Up to this day, in spite of numerous statistics, in spite of tens of thousands of cases which have been operated on, it is difficult, when one tries to analyse this problem calmly, and as objectively as possible, to take up a formal position. This is not a question of an academic discussion, but essentially a vital problem. For coronary diseases are so frequent that they constitute a social scourge. The cost of this disease in sick-days and medical care is so high, that all efficacious therapeutic measures have an influence on the very future of society. All cardiologists agree on the following point: when angina becomes crippling, that is to say that the pain is making the sufferer's life unbearable, in spite of a well-conducted medical therapy, then the operation should be performed if the coronarograph shows that it is feasible. But in a great number of cases, the pain is not unbearable. It comes on at certain times, most frequently in a moment of strain, or during the night. It regularly responds to Trinitrine and often improves under a well-adapted medical treatment. On the other hand, in the case of many of these patients, coronary stenoses are found of such a kind that a by-passing could be indicated. It is this group of patients, so important because they are so numerous - as many as several thousands in Western countries - which constitutes the apple of discord in cardiological circles.

lengthened.



Echocardiogram: this technique, based on the ultrasonu principle, makes visible the dynamic anatomy of the myocardium and the valualar system.



For, in spite of all the progress we have made, it is impossible to indicate with certainty the length of the expectation of life of patients suffering from coronary diseases and nothing up to now proves that a by-passing really increases that expectation. Now, we must take into account the fact that coronarography, which is an indispensable investigation before by-passing, is itself not completely devoid of danger. It has a mortality rate which varies, according to different statistics, from

I to 10 per 1000. On the other hand, aorto-coronary by-passing, according to the best figures, still carries a mortality rate of 3%. From this comes cardiologists' hesitation in passing over to surgeons patients whose angina is not incapacitating. To which, cardiac surgeons and certain cardiologists reply that when angina becomes very serious, the chances of surviving an operation and of post-operative improvement are reduced. This problem will probably be resolved a few years

Myocardial scintigraph: with the help of radio-isotopes, defects in the irrigation of the myocardium can be detected.

from now by long-term statistics on a great number of sufferers, some medically treated, others, surgically.

A word about heart-transplants. This operation has struck the public's imagination very forcibly. but it is an operation which is more spectacular than it is useful. Looking at things in proportion, it is rather like the journey of Man to the moon. Up to now, that has not brought any practical solutions. Out of some 500 patients operated on up to this day, only a very few have survived the operation and in the majority of cases the patient dies soon after the transplant. When we know of the lengthy sufferings of patients who have been operated on and the enormous cost of this intervention, we can justly say that a heart transplant is not a practical operation. It is obvious that in certain cases the cardiac muscle is so injured, so changed for the worst, that no treatment, medical or surgical, can allow survival. Then, the only solution would be to replace the heart, but it is not the transplant of a human heart which will solve this problem. An artificial heart of synthetic product will certainly be found. This is a question of a very complex problem, the solution of which will not come tomorrow.

Since the last war, that is to say, in 35 years. Medicine has made more progress than it did in 35 centuries, and there is no reason to believe that this progress will not continue. Cardiology in particular, thanks to new techniques, the latest of which is echocardiography, has taken forward strides which are quite inconceivable. It has become so



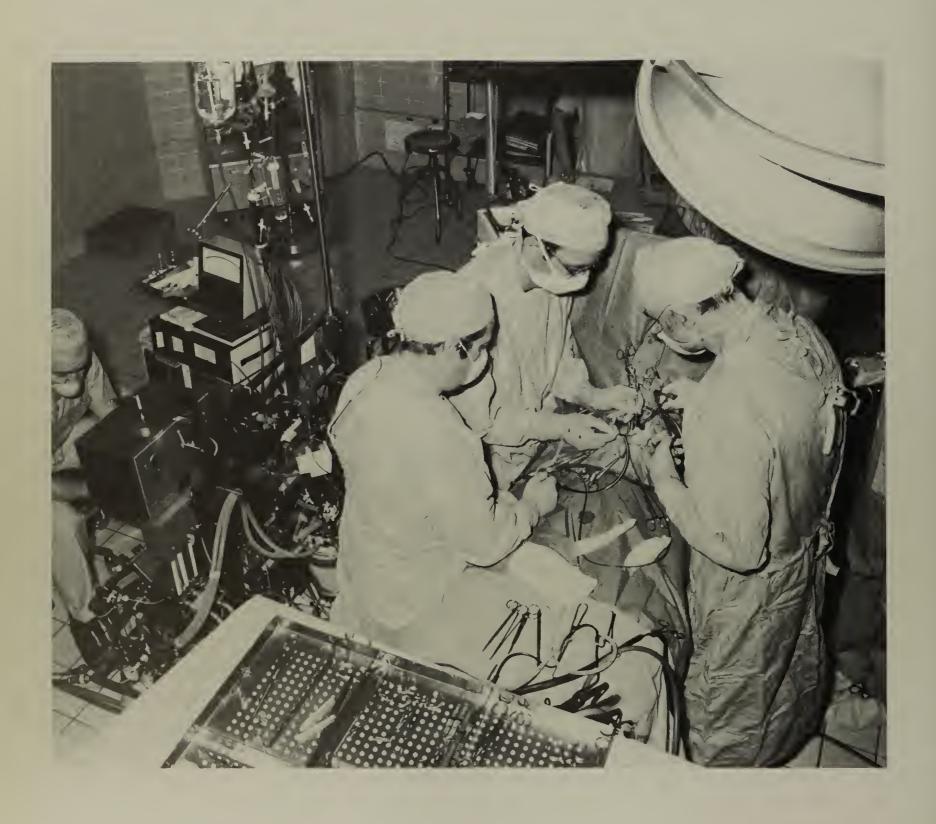


vast that one single man can no longer assimilate it, dominate it, and master all its techniques. In this particular branch, subsidiaries are being formed. Cardiologists are becoming haemodynamists, devoting themselves above all to cardiac catheterisms, angiocardiographists, echocardiographists, scinticardiographists, etc.

Before ending this chapter, I would like to mention an exceptional cardiologist, possibly the last to have been able to predominate over new cardiological attainments whilst remaining at the same time an exceptional clinician: I am referring to Professor Jean Lenègre of Paris. With his strong personality he has made his mark on several generations of cardiologists not only from France, but also from Europe, and perhaps from the whole world. In our memories, he will remain, par excellence, the Heart-man with his heart in the right place.

Right-hand page: Radiography of the Heart: valves of mitral, aortal and tricuspid prosthesis.

Below: Professor Primo and his team, during an open-heart operation, in Brussels.





As long as there are forests in the world, and lovers in those forests, the heart, as a symbol of love, will exist. Indeed, on how many thousands, if not millions, of trees throughout the universe has a lover carved, with a penknife, with trembling hand, a heart pierced through by an arrow, and in that heart, all his love, with these simple words: John loves Joan, James loves Jenny.





Bibliography

Barenton, H. de. La dévotion au Sacré-Cœur. Paris, 1914.

Blanchard, P. Sainte Marguerite-Marie. Alsatia, Paris, 1961.

Briquet, C.M. Les filigranes. Dictionnaire historique des marques du papier, Leipzig, 1923.

Charbonneau-Lassay, L. Le bestiaire du Christ, Desclée de Brouwer, 1940.

East, C.F. The story of heart disease. London, Dawson, 1957.

Eschmann E.W. et coll. Das Herz. Biberach an der Riss, K. Thomae, 1965.

Etudes carmélitaines. Le Cœur. Desclée de Brouwer, 1950.

Fishman, A. et Richards, D. Circulation of the blood: men and ideas. New York, 1964.

Guénon, R. Symboles fondamentaux de la Science sacrée. Gallimard, 1962.

Héjj-Détári, Anciens joyaux hongrois. Corvina, Budapest. 1965.

Herrick, J.B. A short history of cardiology. C. Thomas. Springfield, 1942.

Kanters, C.G. Le culte du Sacré-Cœur. Bruxelles. Deroit, 1927.

Knipping, J. Iconography of the Counter Reformation in the Netherlands, 1974.

Landwehr, J. Emblem Books in the Low Countries, 1556-1949, Utrecht.

Leake, C.D. Some founders of physiology, Washington, 1956.

Le livre du cœur d'amour épris du roi René. Verve, 1949.

Les origines de la médecine en Grèce, Athènes, 1968. Edité à l'occasion du 5e congrès européen de cardiologie.

Lewinsohn, R. Histoire entière du cœur. Plon, 1959.

Paray-le-Monial et le Culte du Sacré-Cœur. Leseuver et fils à Lyon, 1965.

Reau, L. Iconographie de l'art chrétien.

Staff, F. The valentine and its origins, F.A. Praeger, New York, 1969.

Stierli, J. Le cœur du Sauveur. Salvator, Mulhouse, 1956.

Vallet, P. La tête et le cœur. Paris, 1891.

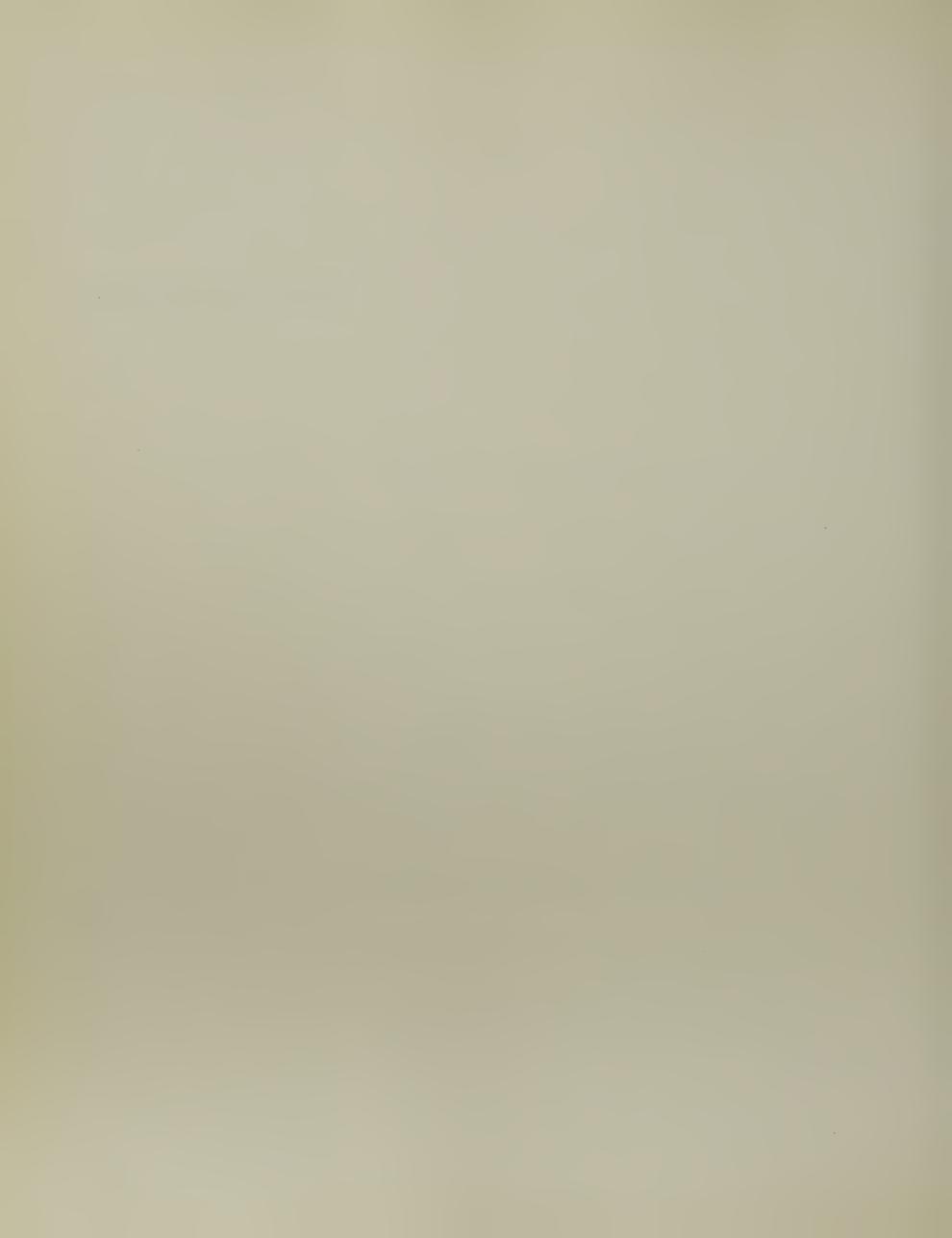
Van Mâle, L. L'art religieux après le Concile de Trente, Paris, 1932.

Willius, F. and Dry, T.J. A history of the heart and circulation, Saunders, Philadelphia, 1948.



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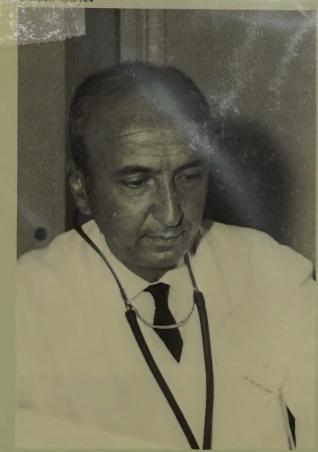
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Dr N. BOYADJIAN studied medicine at the Université Libre de Bruxelles. Qualified in 1943, he very quickly turned to cardiology and published numerous works devoted to electro-cardiography and cardiac arrhythmias.

In 1966 he became Head of the Cardiological Service in the Brussels Polyclinic.

He has always been interested in the symbolism and iconography of the heart. He assembled an important collection of hearts from which this work is illustrated.

This book is the outcome of his research

This book is the outcome of his research and his reflections in a field which is still relatively unknown.

