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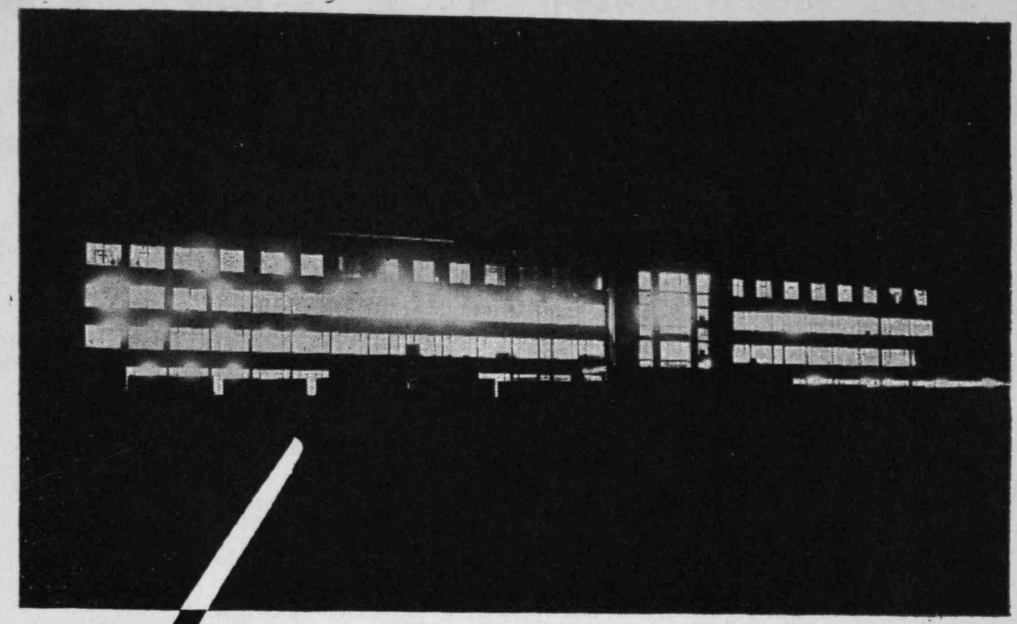

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- LACK OF "EDUCATION" OF THE BOWELS; this results from ignoring the "urge" and irregular habits.
- SIDE EFFECTS; of certain conditions, e.g. Pregnancy, Hæmorrhoids and also taking certain drugs such as codeine.
- INSUFFICIENT EXERCISE; this is self-explanatory but is most marked in the patient confined to bed or convalescing.
- TAKING IRRITANT LAXATIVES; the majority of laxatives contain irritant drugs such as Phenolphthalein, Cascara and Salines. When these are taken regularly a "tolerance" is built up and increased doses are required, resulting in reliance upon the very medicine which is being taken to cure constipation. Also a "tired" gut is likely to result, lacking muscular tone.

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The prime factor in the successful treatment of constipation is that the bowels should be assisted in regaining a regular, efficient evacuation with the *minimum of discomfort to the patient*. The drug or medication employed should, without purging, produce the desired effect within a reasonable period and should not cause excessive irritation of the bowel mechanism.

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# ELIXIR

*Journal of the Hong Kong University Medical Society*

PRINCIPAL CONTENTS




SUMMER 1957

Editorial and Business Address:
The Department of Anatomy, Hong Kong University.

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# FACT AND FANCY

THE END OF AN EMPIRE, the disintegration of a civilization or a change in the Editorship of *Elixir* are not matters to be viewed lightly, and we who now occupy an editorial throne of some magnitude have been made fully aware of our responsibilities.

Until recently it was our impression that Editors are worried men with green eye-shades and desks piled high with manuscripts. We know now that *worry* alone is our lot. There is a desk – but no manuscripts. We have nothing to read – so our eye-shade is superfluous.

Perhaps it would be unwise if we were to take our readers to task for this singular lack of publishable material. Yet, who else is there to blame? It is a peculiarity of this organ of the Medical Association that its readers and contributors are recruited from the same magnificent body of men and women. But whilst they can all *read,* it is not at all clear that they can write; and this is something to be deplored.

Throughout the world the Medical Profession has been outstanding in that its members have often been men and women with many interests apart from their work. It is not difficult to find examples of doctors who have contributed much to fields of study far beyond the day-to-day grind of professional practice, and it seems strange, to say the least, that in a Colony like Hong Kong, students and others can find no time to take their noses from their books, and devote their undoubted skill and perspicuity to *some* pastime, to *some* interest worth writing about.

It is with some feeling that we appeal to you all, for the sake of *Elixir,* to rake the dusty recesses of your brains and produce articles, cartoons, comments, and letters to the Editor on *any* topic close to your hearts. Here is a forum for your thoughts, an outlet for your great ideas, and clean white pages for your literary and poetic genius.

For goodness sake, use it.

* * *

Perhaps it was only fitting that the plane which carried off the Previous Editor of *Elixir* – irrepressible and unpredictable to the end – should have played the pranks it did. Few of the weeping multitude at Kai Tak would have believed it possible that ere they reached the safety of the Island the Goulds would be back in Hong Kong. Yet, back they were – in the Peninsula Hotel. Officialdom spoke of something called Fuel Trouble; but we all knew in our hearts that less tangible forces were at work. We are informed that no effort was spared to see the P.E.E. off the Colony the following day, but (as with most legendary figures) there are rumours that he has been seen slinking about the Compound and the narrower alleys of the Town. There is even a feeling that if ever the University should be in dire need, a tocsin on the bell will bring the P.E.E. to our sides, a golden sword in hand, ready to do battle for our cause. It is a comforting thought. For no matter how irrepressible and unpredictable, his departure from our midst was a great loss, and *Elixir* (unless we ring the tocsin) will never see his equal. During his tenure the magazine improved its circulation and status to such an extent that within a very short time $7,000 have been transferred to the Scholarship Fund. More is needed – much

more. But this magnificent start is due entirely to Donald Gould, and we must all be grateful indeed for his efforts.

* * *

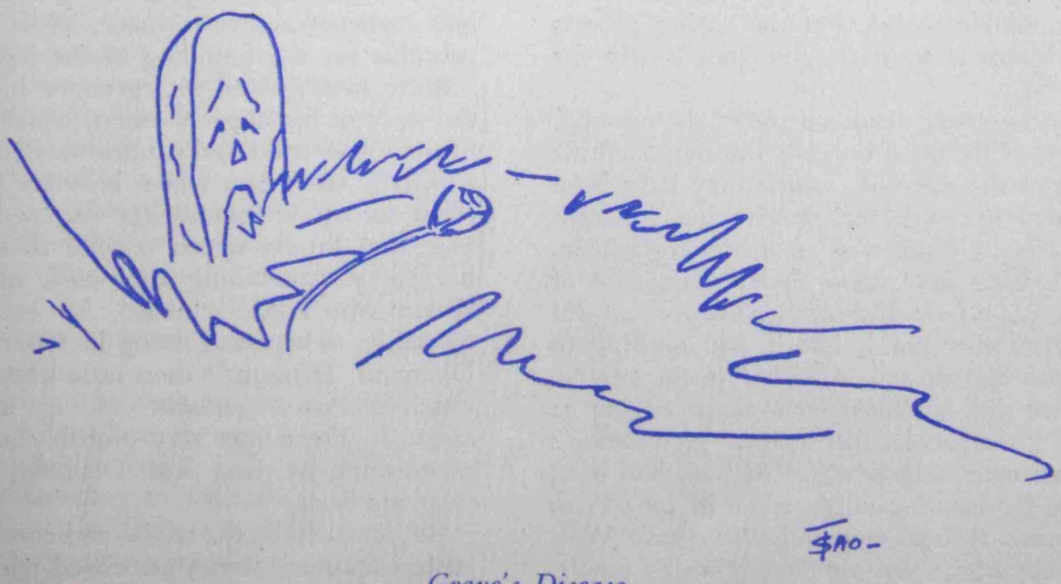
It would only be fair to our readers if we state at the outset that no major changes are contemplated in the form or content of *Elixir*. Under Dr. Gould's guidance a happy combination of the grave and gay in life had evolved which gave *Elixir* a flavour unique among magazines of its kind, and we see no need to revert to the dreary expedient of publishing technical articles on medical matters. We are a social journal whose purpose is to act as a focus for the Medical Association of the University, and since we are non profit-making, to devote all the surplus income to the Scholarship Fund. We must endeavour to interest as many people as possible outside of the Medical Faculty if the Fund is to be able to function in the foreseeable future, and it is only reasonable that our articles should interest as wide a public as possible.

The previous edition of *Elixir* included a magnificent Supplement illustrated by Douglas Bland, and our readers were privileged indeed to have a "preview" of drawings which may soon appear in book form elsewhere.

Following on this excellent precedent, we hope to arrange the publication in future editions of articles and other contributions on non-medical subjects. Art, we hope, will have its say again; but on this occasion "divine Philosophy" has the limelight, and we have much pleasure in presenting Mr. Keith David's controversial essay. We hope that our readers will not take it all lying down, and look forward to their comments in our next issue.

* * *

Whilst on the subject of *Elixir* and its contents, we wish to appeal for the revival of "Caduceus". Although this magazine has not functioned for some considerable time, it is clear that there is need for technical medical journal in the University. Support for the revival of "Caduceus" would almost certainly be forthcoming from all the departments of the medical school, and the possibilities should be discussed at the earliest possible moment.



*Grave's Disease.*

# SCIENTISTS AND LEGEND

WE ARE APT to think that science and legend are incompatible, for when the clear light of science shines must not the mist of legend fade away? But science is a social activity and its history, like all history, will show fable subtly interwoven with fact, and legend blended with actual happenings in the lives of its heroes. The history of science is such a new subject, and so comparatively little research has been done, that there is likely to be more of traditional fable and legend in the history of science than in other branches of the history of civilisation.

Legend has grown up around the lives of scientists from Thales to Einstein. We all know some of the stories – Thales and his prediction of an eclipse, Galileo and the weights falling from Pisa's Leaning Tower, Newton and the falling apple, Watt and the lifting of the kettle-lid by the power of steam, and many others which appear in the popular science histories and many which add human interest to more serious works.

It is difficult to eradicate legend from the second-rate or third-rate histories of science, for these stories lighten the text for the ordinary reader and they are transferred from one generation of books to the next by uncritical authors. Thus many doubtful tales remain which have now been omitted from more reliable works, but the sifting process would appear to have gone not nearly far enough.

We can easily dismiss some of the personal stories, with little bearing on the scientific work of the scientist, which may have been invented by some imaginative but ignorant writer or by some wag of an undergraduate. James Watt may have observed the rise of the kettle-lid on his mother's stove, as did many another child, but it had nothing to do with the discovery of his steam engine. Neither did he invent the steam engine as some school books still assert. Newcomen's engine, extremely wasteful of fuel, had been in use for half a century when in 1763 Prof. Anderson at Glasgow University gave Watt a model of a Newcomen engine to repair. It was that stimulus and the knowledge of latent heat which he received from Dr. Black, which inspired him to make the capital improvement of a separate condenser, and so construct a far more economical engine.[1]

Mathematicians especially are singled out in popular opinion for absent-mindedness and incompetence in the ordinary affairs of life. Aristotle says of the great Greek mathematician of the fifth century, Hippocrates of Chios, that he was robbed of much money "owing to his silliness" by the customs collector of Byzantium.[2] It has been related of Einstein that he argued with a ticket collector on the tram about his change and the collector said to him: "You are not very good at arithmetic, are you?" when he proved that he was right.

There are stories about Newton's pet animals, although there is no record that he kept a cat or dog. One of these fables relates that Newton had a hole cut in the door of his rooms at Trinity so that the cat could make her exits and her entrances without disturbing him. As is the way with female cats, there were kittens, and Newton, thoughtful as ever, cut a small hole for the kittens. Some years ago, I believe, a blocked-up hole was discovered in this door when it was under repair and probably this hole, whenever it was made, provided the stimulus for the founding of the legend.

More firmly fixed in legendary history is the story of his dog Diamond, which is told to show how mild and equable was Newton's temper. One day when Newton left his room for a few minutes the dog overturned a lighted candle which set fire to some of his papers containing the work of years. When Sir Isaac returned he exclaimed, according to a person living in 1780: " 'Oh, Diamond, Diamond! thou little knowest the mischief done.' without adding a single stripe." There was very probably a loss of manuscript by fire, but Diamond was a fabulous beast.[3]

But let us leave the trivial and consider the more important stories associated with scientific discovery. Thales of Miletus (c.600 B.C.)

has been credited with being the founder of many sciences, but some modern writers have cast doubt on his reputed discoveries. But he must have been a great man for he always appears in the list of the Seven Wise Men, and usually heads the list. The legend of his prediction of the eclipse of 585 B.C. has had a long run, and first appears in the writings of Herodotus. It relates that when the Persians and the Lydians were fighting a war in which there seemed little likelihood of an early victory for either side they heard of Thales' prediction of the failure of light on a certain day, and when it came to pass on 28th May 585 they were so impressed by his wisdom that they ceased fighting and concluded an agreement. For this Thales was declared a Wise Man by the oracle at Delphi. It is now believed that Thales could not have known enough to make such a prediction. The assumption was that Thales had learnt in Egypt of a Babylonian method of calculating the time of eclipses of the sun, but it is now agreed by historians of ancient astronomy that the Babylonians could not have discovered "the Saros", a period which enabled them to predict eclipses, before the fifth century. Thales thought of the earth as a disc floating upon the ocean, so he could not have conceived of a modern explanation. Herodotus merely says: "Thales of Miletus had foretold this loss of daylight to the Ionians, fixing it within the year in which the change did happen." He might, of course, have made a lucky guess which proved correct within a year, but even this is thought unlikely.[4]

There are two well-known anecdotes connected with the discovery of the law of gravitation which deserve mention – the story of the falling apple, and the story that Newton in 1666 put aside the work on gravitation because he had assumed an incorrect radius for the earth, and only revived it in 1682 when his attention was drawn towards a more accurate measurement.

The trivial incident of the falling apple would seem to bear the marks of invention but, curiously enough, it is more likely to be true than many another accepted anecdote. John Conduitt who married Catherine Barton, Newton's niece, lived with Newton for ten years and was his successor at the Mint, writing to Fontenelle of Sir Isaac Newton says "In the year 1665, when he retired to his own estate on account of the plague, he first thought of his system of gravity, which he hit on by observing an apple fall from a tree." Voltaire quotes the story as having come direct from Catherine Barton. Newton was at Woolsthorpe in apple-harvest time in this year, and the falling apple in his orchard did probably stimulate Newton's interest in the problem of gravitation.[5]

With regard to the other story, that it was a careless assumption by Newton of an inaccurate diameter of the earth which held up the publication of the *Principia,* Prof. L. T. More in *Isaac Newton* demolishes this legend although admitting there is a weighty tradition behind it. There is no doubt that in 1665 or 1666 when Newton in his own words "began to think of gravity as extending to the orb of the moon", he took an incorrect value for the earth's diameter in his first rough calculations, as he was away from reference books, but even then he found his calculations to "answer pretty nearly". But Prof. More shows that there is little likelihood that this early error delayed the publication of *Principia.* Prof. Cajori, in *Isaac Newton, 1727 - 1927,* attributes the delay in publication to Newton's inability to solve the problem of the attraction of a sphere on an external point, to which Prof. More would add Newton's temperamental procrastination.[6]

As a last instance of modern investigation into legends about scientists let us take the story of Galileo and the Leaning Tower of Pisa. This would appear to be a well defined and authenticated description of an experiment performed by Galileo in 1590-91. It appears in nearly all the histories of science and generations of teachers have vividly illustrated the contrast of the scientific attitudes of the Middle Ages and of the modern world by this simple experiment of Galileo's. Here is a description of what has been the generally accepted account from a recent book on the history of science: —

" . . . he got them together outside the Leaning Tower of Pisa and climbing the tower dropped his two weights, one heavy, one light, so that all could see them reach the ground together, thus proving Aristotle

wrong. This incident made him very much disliked and from then on he made many enemies who were to do him much harm in later years." [7]

Such accounts have been repeated with slight additions and variations from century to century ever since Viviani, the biographer of Galileo, stated in 1654 that Galileo proved that moving bodies of the same material but of unequal weight all moved at the same speed, by repeated trials from the Campanile of Pisa "in the presence of other teachers and the whole assembly of students." This would seem to be authoritative, but Prof. Lane Cooper in *Aristotle, Galileo and the Tower of Pisa,* points out that there is no confirmation of the accuracy of this description from any contemporary source and doubts whether this passage can be accepted as proof of the incident. There is no reference in literature to what surely should have been considered an important occasion. Mazzani in 1597 published *Comparison of Aristotle and Plato,* in which he accepted Galileo's principles but yet makes no mention of any researches of Galileo at Pisa.

Renieri, who succeeded Galileo at Pisa, did make experiments in 1641 from the Tower and wrote to Galileo about them, but neither he nor Galileo alluded to any former series of experiments.[8]

Galileo in his dialogue *The Two New Systems* mentions experiments on falling weights. Sagredo says: "But I, Simplicius, who have made the test, can assure you that a cannon ball weighing one or two hundred pounds or even more will not reach the ground by as much as a span ahead of a musket ball weighing only half a pound, provided both are dropped from a height 200 cubits." (200 cubits is about 120 metres, and the height of the Leaning Tower is fifty-four metres). The experiment of the falling weights most probably had been performed many times before Galileo's day, and possibly by Galileo himself but not from the Pisan tower.

And what of the young, eager Galileo in the Cathedral of Pisa measuring the oscillation of the swinging lamp by counting his pulse-beats? That, too, may be but a pretty fable. But enough!

Perhaps we seem to be rather hard on myth in a time when many have been preaching the power and the glory of the myth. At any rate we would seem to need a canon of scientific legend.

HAROLD VISICK.

**References:—**


1. H. W. Dickinson and H. P. Vowles—James Watt and the Industrial Revolution.
2. G. Sarton—A History of Science—p 278.
3. L. T. More—Isaac Newton—pp 132, 389.
4. G. Sarton—A History of Science—p. 170.
5. L. T. More—Isaac Newton—p. 44.
6. L. T. More—Isaac Newton—Chap IX.
7. Reason—Modern Road to Science.
8. Lane Cooper—Aristotle, Galileo and the Tower of Pisa.
   Nature—6/7/35 and 4/1/36 (Prof. Eve—article).


## *OPEN COMPETITION No. 1*

*The present Editor regrets that he will be unable to continue the Previous Editor's offer of two $25 prizes for the solutions to Elixir crossword puzzles, of which there have been seven to date. There will be no No. 8.*

*Instead of indulging the Intellectuals, The Great Unwashed are to be given a chance of earning an honest coin. Accordingly, a sum of $50 is offered for the best original cartoon on any subject of the competitor's choice.*

### COMPETITION RULES

1. No captions! – The cartoons must be self-explanatory.
2. Use india ink on plain white paper or card.
3. Send your attempts to the Editor of Elixir, Department of Anatomy, Hong Kong University.
4. Closing date September 30th, 1957.

*The Editor has appointed a panel of three judges, whose decision in this competition will be final.*

# OBSCENARIOS IN THE CHICKEN ROOST

**being a further extract from MODERN ENGLISH CONVERSATION, in which the author, Mr. Edwin Lo-Tien Fang, describes a merry night at the Opera. The first extract appeared in our previous issue.**

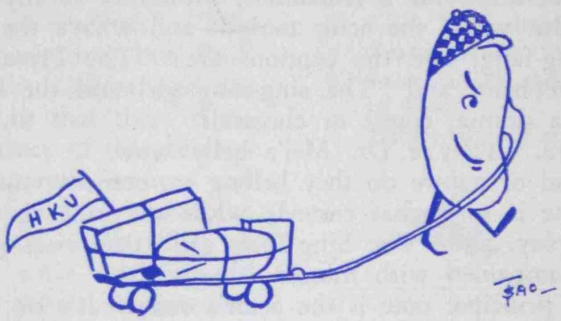
Hello, Wang, you have time to go to the Star Theatre today? It's a colorful night, you can't miss it.
I have a great mind for a relaxation; the strain of my work has almost worn me down. But who's the actor tonight and what's the caption?
Dr. Mei Lang-fang, and the captions are: "The Prince of Princes" departure from his sweet-heart and "The sing-song girl and the literate."
Are the opera drama, comic or classical?
Classical opera. They're Dr. Mei's belly wow.
But what kind of nature do they belong to, comedy, tragedy or historical?
Historical; one is somewhat comedy while the other is tragical. "The Prince" is a one-act play, and "The Sing-Song girl" comprises two acts.
Are they accompanied with music?
Yah, but the principal note is the actor's voice. It's his lucid profuse voice that captivates people's soul.
I see, some twenty years ago, I did once listen to his singing. I remember he is a good feminine personator.
That's it. Well, you're not a frequenter of theatres, I see, but have you got the ducat?
Not yet. We can get it at the box office – Oh, the ropes are all up. Let's go to the chicken roost.
Yes, this is a usual case with bankrollers. Well, we're in the nick of time; the curtain is just raising.
The spots and foots are so fascinating as to make the whole stage a weird romantic world, almost illusive to our vision.
True, the setting is artistic enough. A stage setting must be in keeping with the scene and the background of the anecdote.
But what a deafening clangor rings through the air! The whole theatre seems to be turned topsyturvy by the noise of gongs, drums, symbals and so forth, I almost become headache.
Yes indeed, but this is merely a live stage. And now listen! It stops all at once, and a sweet solitary voice breaks out from somewhere behind the stage. The actor is about to appear before the audience.
Yes, such a lovely and graceful form in such an elegant antique costume. And his carriage is so natural and fair! His long-drawn transparent warbling tone seems to soar aloft and play around these high vaults.
Yes, This is the fat part of the play. It's very easy on the ears. The whole audience is mysteriously absorbed by his mellow melodious modulations of voice. But do you like talkies and modern plays?
Oh, Fairbank and Chaplain are in some repects to my liking. The other movie stars, especially those burlesque shows and obscenarios are, dame it, disgustful to me. They are too vulgar, too melodramatic, and too rough. In my opinion, theatricals must have some moral influence in one way or another. They must contribute to character building or temperament refinement. Otherwise they should be banned by the censor office.
You're indeed an educationist; you consider every thing from a viewpoint of its cultural value. Well, let's go, the curtain is dropped.

*Wang:* Will you take some repast in a buffet around here? I am thinking of taking some beef and noodles.

*Chang:* Yes, I'll take some toast and hot milk.

AUTHOR'S GLOSSARY OF TERMS

belly wow – *trump card*
ducat – *ticket*
live stage – *curtain raiser*
obscenarios – *feelthy pictures*




*Movable Kidney*

## FRESHMAN'S CONFERENCE 1957

J. H. DUTHIE
Director of Physical Education

IN AN ATTEMPT to assist freshmen to make a satisfactory transition from school to University life it has been decided to organise a Freshman's Conference in September 1957.

The idea and its execution may possibly receive a volume of criticism distributed according to the usual pattern – 75% misconstrued and ill directed and 25% on target. The following is written not only to produce interest and focus attention on our project (and thus increase the total number of shots) but also to make clear what we are trying to do so that we can be helped in evaluating how well our objectives were achieved.

The project has grown out of much discussion with students and tutorial staff and I will attempt to give a brief synopsis of the views expressed. Clearly, some of us believe that our undergraduates are not sufficiently stimulated to achieve a sense of identity with, and belonging to, this University; that too many students are not able to alter behaviour stamped in during their schooling sufficiently to take full advantage of the new learning situation presented by a university and that the result of these attitudes is the impoverishment of our intellectual and social life.

No one of course would believe that a ready made solution exists or even that a great deal can be achieved quickly but everyone, I trust, would agree that if all freshmen can be made to feel welcome, if all students could be led to realize that this is their University, much may be built on such a foundation. The Freshman's Conference might be regarded as an attempt to produce such orientation as soon as possible in an undergraduate's life. To achieve these aims will demand the cooperation of all members of the University, great assistance will be rendered by those who feel inclined to give suggestions and advice to the organising committee.

## THE CHERISHED LOVE

*Away hath been my love brought far*
*To that endless eternity,*
*May where grant thee with thy Maker*
*The angelic chaste soul merry.*

*Eight years, nine months and yet ten days*
*The staircase rang, the steps tapping —*
*It told but father's walking ways*
*"But where is mother!" I crying.*

*"She's gone, she's gone and back no more:*
*The winds howl and the sea rages,*
*The surges swell lapping o'er shore —*
*The mast went down" — she's gone for ages.*

*So hence my love a vision now,*
*Cherish'd only in memory —*
*Often I dream she kiss my brow*
*And says, "this is your destiny."*

*To live in dreams how much I like,*
*For then pass back to childish realm —*
*Maternal rule binds me in love*
*With warmth, care, peace, hope, joyful health.*

*I cried she'd kiss away my tears*
*And soothe me with that warm embrace —*
*Which arms not felt again, but bear*
*That touch, hold I, with hopeful grace.*

*I studied how to write and read*
*In cold winter hard frozen night;*
*Thickly clothed she by me seat'd*
*To wrap me tight against cold fright.*

*When ill in bed, for oft I did*
*She'd never leave her sick loved son*
*Who need'd her and she never hid —*
*A gentle nurse, a loving ma'am.*

*Much worry frown'd her pretty face,*
*But never sad was she with me,*
*For sadness joyful smile replace*
*'Cause happy me was all wish she.*

*The dreamland oft my kingdom is*
*A wonderland of happy bliss;*
*But waked to the dawn's golden peep*
*All fades, she leaves, "adieu!" I weep.*

AU-YEUNG MAN BUN.

# HISTORY OF CAESAREAN SECTION*

*by*

D. W. C. CHUN

Mr. Chairman, Ladies and Gentlemen,

It is with great pleasure that I am addressing you today, and a particular pleasure that I should have for my subject one that is so appropriate to the year 1957.

It would, indeed, be a trifle more appropriate, perhaps, if I could have made this lecture some 56 years or so earlier – but as neither I nor any of my students were then born, perhaps it is just as well for our sakes that we are having the lecture, instead, today.

The year 1957 – I need hardly remind you, Sir – is exactly 2,000 years since that fatal day in the Capitol in Rome when the Emperor Julius Caesar met his end at the point of his friend's scalpel. But while it is true that Julius went out of the world by the aid of a knife, we are today more concerned with the fact that he is also said to have come into it by the aid of the same instrument.

My subject today is the operation which takes its name from him, though, according to Pliny, he also took his name from it – his mode of entry into this world.

Let me remind you that, when the young Julius emerged from an incision in the abdominal and uterine wall of his patrician mother Aurelia . . . the great Han Emperor Wu Ti was extending the borders of China for the first time into Sinkiang and southwards to the Yangtze River.

I believe this operation, Mr. Chairman, to be the oldest recorded (if only by legend) in the history of surgery . . . as it is also the greatest. Siamese twins excepted, it is the only operation in which two lives are concerned.

"Caesarean Section" means the delivery of the child from the uterus through an incision in the abdominal and uterine wall. It does not apply for the removal of the child from the abdominal cavity after rupture of the uterus, or in the case of advanced extrauterine pregnancy.

Its earliest records are shrouded in mystery. Pliny writes in his Natural History of the first century of the Primusque Caesarean operation performed at the birth of the first Caesar – "so called from being cut from his mother's womb."

Whatever the justification of the legend, the facts concerning it are that records of some sort (including the works of Pliny AD 23-79 and Celsus, about AD 30) suggest that this operation had been performed in cases where either mother or child were already dead, possibly in cases where both were living, and certainly – for funeral purposes – when both mother and child were dead.

According to Roman law it was forbidden to bury a pregnant woman until the child had been removed from her abdomen, even when there was little chance of the child's survival.

Aurelia, Caesar's mother, lived for many years after her son's birth. It is the hope of this University, Mr. Chairman, that patients who in future years submit themselves to our graduates may do the same.

The story of Caesarean Section through the centuries is a cavalcade of anecdotes.

Jacques Guimaneau was the first to use the term "section" in connection with this operation, in his book of midwifery published in 1598 and translated into English in 1612.

While the antiquity of the operation is thus definitely established under early Roman civilization, it was also practised by ancient Hindus when movements of the foetus were detectable after a mother's death. And many an ancient mythologist and poet ascribed marvellous Caesarean birth to his gods and heroes. According to Orid, Aesonlapius – the god of physics, owed his birth to this operation . . . and the operator

* Professor Chun's Presidential address, delivered on March 29th, 1957.

is no less a personage than Apollo. Bacchus too is said to have been preserved in the same manner.

All this, of course, does not prove that Apollo was an historical surgeon of antiquity, or that Bacchus was the original first drunkard. But the existence of such myths seems to indicate that the method of Caesarean birth did exist at a very early date.

An ancient Oriental story is quoted by Mackenzie (1927) which describes the operation:

> " The wife of King Sol became pregnant, but the child was so large that she could not bring it into the world, and so came nigh unto death. Then there appeared unto the King, the Simurg, and he advised him to give to his consort a medicine of hyoscyamus, whereby she fell into a death-like sleep and became devoid of feeling. When this had come to pass, her body was cut open and a great lusty son, which received the name of Rustrum, was taken therefrom. Then the cut was sewn together, Simurg laying a feather on it . . . and so it was soon healed. A certain substance was held under the nostril of the sleeping woman, and its smell woke her up again from sleep."

Shakespeare, in his play "Macbeth", has not overlooked the theatrical advantages of the birth with which tradition invested Macduff:

> " . . . . . Despair thy charm;
> And let the angel whom thou still hast serv'd
> Tell thee, Macduff was from his mother's womb
> Untimely ripp'd."

In 1860 Buckmill deduced, probably correctly, from the use of the word "untimely" that Shakespeare intended to allude to the post-morten performance of the operation.

Shakespeare makes another reference to the operation of Caesarean Section in his work "Cymbeline" (V. 4) of 1610, where the author in the vision claimed that Lucina had not lent her aid, but had taken her during the course of childbirth so that posthumus, a thing of pity, had to be ripped from her, and so was born alive.

However, none of these references really justify a belief that the operation was performed on a living woman. It would appear probable that most of the early civilizations practised Caesarean Section on women who died late in pregnancy.

The details of Caesar's birth remain a legend. Perhaps the Romans endowed him with the story of miraculous birth to make up for murdering him . . . a kind of "posthumous V.C."

All this must be based on assumption, but according to Boley (1939) the oldest authentic record of a living child born by means of the operation is that of Gorgias, a celebrated orator of Sicily, 508 BC.

It was inevitable that Caesarean operation had to run the gauntlet of religious criticism. Mohammedism absolutely forbids it, and directs that any child so born must be slain forthwith as the offspring of the Devil. Christianity, on the other hand, concerned with the saving of souls as well as the lives of the children, encourage the operation as soon as possible after the death of the mother - but it was not permitted to sacrifice the mother's life to save the child.

Interestingly enough, two Church dignitaries were brought into the world this way . . . Burcard, Abbot of St. Gallen, in AD 959, and Gebhard, who was Bishop of Constance in AD 980.

There is a tradition too that Robert II, King of Scotland, was, like Duncan "untimely ripped". It is said that on March 2nd, 1316, whilst returning from attending the services in Paisley Abbey, his mother was thrown from her horse. The injured woman was immediately seized with labour pains. Sir John Forrester, one of her followers who had acquired some surgical skill in the wars, was entrusted with the task of performing the Caesarean Section to save the unborn heir.

The child was duly delivered alive, but with an eye injury which caused him much trouble in later life. It was subject to violent attacks of inflammation and accounted for name "King Blear-eye", later contracted to "King Blear-ie". The unfortunate mother died immediately after the operation. Such is the substance of the story as given by George Crawfurd in his "History of Renfrewshire", 1710.

Sir John Hayward records the birth on October 12th, 1537, of Edward VI, son of Henry VIII and Jane Seymour:

> " All reports do constantly run that he was not by natural passages delivered into the world, but that his mother's body was opened for his birth and that she died of the incision the fourth day following."

Such was the need for heirs – and the fate of Queens!

This story, however, may be without foundation. It was an age of twisted gossip, much of it centring around the throne. The operation had never previously been performed in England, and it seems improbable that Henry's favourite wife should be chosen for such an experiment – although of his country's passionate need for a Protestant heir to the throne might be a powerful inducement.

Caesarean Section in the living was known to certain early races – notably the Jews. In the "Mischnagoth", (published in 140 BC) and in the Talmud (the next oldest book) it is mentioned in terms which make it extremely probable that Caesarean Section was resorted to before the start of the Christian era. For example . . .

> " The abdomen must be opened by Samm (i.e. sharp instrument), the child extracted, and then the parts healed."

Children delivered through the flanks of their mothers were given the name of "Jotze Dofan" by the ancient Jews (Mansfield, 1826).

The operation is so frequently mentioned in the old rabbinical writings that its practice long before the 16th century seems placed beyond all doubt.

Among the uncivilized peoples, perhaps the strongest suggestion of the possible early development of Caesarean Section on the living is furnished by Felkin's account of the operation as it was performed by a native surgeon in Uganda, and witnessed by Felkin (1884) himself. This operation was performed at Katura in 1879 on a primipara, 20 years old, who was first reduced to a state of a semi-intoxication with banana wine.

The patient was tied to her bed with bands of cloth over the thighs and thorax and her ankles were held by an assistant. The operator washed the patient's abdomen and his own hands with banana wine, then made a rapid midline incision from the pubis to umbilicus through the whole thickness of anterior abdominal wall, and through part of the uterine wall. Bleeding from parieties was arrested by a red hot iron sparingly applied. When the incision in the uterus was completed the child was removed and the cord clamped. The uterus was massaged to make it contract, and cervix uteri dilated with the fingers . . . placenta and blood clots were then removed through the abdominal wound, and a red-hot iron was used to check further haemorrhage. Then a porous grass mat was placed over the wound. The uterus was not sutured.

When her various bands had been removed, the patient was turned over so that the fluid in the abdominal cavity would run out on to the floor. Seven thin iron spikes, well polished and resembling acupressure needles were used to bring the edges of abdominal wound into close apposition. The wound was dressed on the 3rd, 5th and 6th days, one or more pins being removed on each occasion. By the 11th day the wound was entirely healed.

The girl's temperature never rose above 99.6°F., except on the 2nd night after the operation, when it was 101°F. and the pulse 108/m. She made an excellent recovery. Such a well developed technique suggests that the operation had been known and practised a long time.

It is well known from records of a number of cases in which impatient and ignorant women have performed the operation of Caesarean Section upon themselves, although they were not likely to have had knowledge of such an operation.

The oldest known case of this kind occurred in 1769. Mosely in 1795 relates that, a negro woman, a four-para, being in labour, performed the operation upon herself, and took her child out of the left side of her abdomen by cutting boldly through it into the uterus. She performed the operation with a broken butcher's knife.

Her first three labours had been without incident, but, being a violent tempered woman, she had resorted to section to obtain more rapid relief. The child came out by his own struggling. As a matter of fact she had to be carefully watched at her

next labour, 2 years later, to prevent repetition of the experiment.

The first Caesarean Section performed in the United States was a self-inflicted operation (McClellen, 1822). The operator and subject was a coloured girl 14 years old, illegitimately pregnant with twins and in active labour. She opened her abdomen with a razor while lying in a snow bank. The incision was L-shaped, and extended through the abdominal wall into the fundus of the uterus. She had delivered herself per vias naturales of an infant which she had buried in the snow, and her second child was protruding through the wound when Drs. Basset and McClellen were called in. They removed the protruding infant, dressed the wound after closing it with interrupted sutures. Surprisingly the patient recovered and she was seen by Basset, 6 years later, alive and well. The fate of the children is unknown.

During the present century cases of self-performed Caesarean Section have been reported by Loffler (1901) and Patek (1913). In the first of these, a 15 para who was suffering from severe pulmonary tuberculosis and osteomalasia, believing herself about to die, opened her abdomen with a rusty jagged knife. When the child fell from her body, she fainted; but later recovered consciousness sufficiently to call her thirteen year old daughter to sew her wound up. The child did this by continuous suture with a rusty needle and ordinary thread. The wound was dressed with moss, healed by "first intention" and mother and infant did well.

In Patek's case, a 19 year old girl was admitted to hospital with a self inflicted abdominal wound involving the uterus which contained a few remnants of placenta and membranes. The wound was repaired and after a stormy convalescence, the patient recovered. The infant had been allowed to fall into a bucket of water on its extrusion from the abdomen and was drowned. At a subsequent pregnancy, she laboured naturally.

Amazingly enough there are many cases on record reported from Germany, Spain, France and the U.S.A. where women far advanced in pregnancy have had their abdomen ripped open by the horns of bulls, cows and other horned animals.

In Harris's collections (Spain, 1785) 6 mothers out of 9 recovered and 5 children were born alive. He also mentioned 3 cases where pregnant women had their abdomen ripped opened by horned animals but without rupturing the uterus, and a normal confinement followed at term.

He concludes by saying: "What more convincing argument can be produced to prove that Caesarean Section operation is made as fatal as it is by meddlesome midwifery"

It appears impossible to ascertain exactly when the operation of Caesarean Section was first performed, whether on a living woman or in post-mortem. There is no doubt, however, that it is a very old operation.

Authentic history of the operation may be divided into 5 periods.

First, prior to 1500 AD.

During this time the operation was occasionally performed post-mortem in the hope of saving the child. Apart from the passage in the Talmud Mischnagoth, previously referred to and concerning which learned Hebrew scholars in and out of the medical profession have held divergent views, there is no evidence to warrant the belief that the operation was performed by doctors upon a living woman, at any rate among European races.

The second period begins with the year 1500. It was the day that the wife of a castrator of pigs, went into labour. For reasons not clear, she was unable to deliver herself of the child. Midwife after midwife was summoned until no fewer than 13 had tried to help the unfortunate woman without result. Then the husband sent for the local lithotomist, but however skilful these gentlemen may have been in their profession of cutting out gallstones, they were of no assistance in getting out the baby.

The husband was now desperate and he asked permission from the local Mayor to perform Caesarean Section. This was at first refused, but was granted on a second application. Imploring Divine aid, Jacob Nufer, using a razor, proceeded to perform a successful Caesarean Section. His wife made a good recovery and in later years gave birth to 5 other children, including one set of twins, by the natural route. And the child which had such a sensational start in

life lived to the age of 77.

Doubt has been thrown on the accuracy of this account because about 82 years elapsed between its performance and its account by Caspard Bauhin in the appendix to his Latin translation of a book by Francis Rousset (1582) (physician to the Duke of Savoy).

Rousset's book was a masterpiece. He appears to be the first writer who had the courage to advise performance of the operation upon a living woman. In the first part of his book he pointed out the usefulness and necessity of the operation where there was imminent danger to both mother and child in cases where delivery by the natural passage is impossible. Next he established the possibility of the success of the operation by instances of various kinds which proved that wounds of the parts to be divided during the operation are not necessarily fatal. Lastly, he entered into a detailed account of several obstetrical complications which were incomparably more terrible than the operation he proposed and which, for the most part, may be avoided by its performance.

The first properly recorded case of Caesarean Section intentionally performed upon a living woman was carried out on April 21st, 1616, by Trautmann of Wittenberg, and recorded by Professor Sennert of that university who was present at the operation. The child was healthy and unhurt but the mother died 25 days after the operation. The reason given for its performance was that the patient had a large hernia which contained the gravid uterus, and delivery per vias naturales would have been impossible.

Between 1500 - 1700, the technique of the operation was extremely crude. Anaesthetics were unknown. Patients were only held down in the strong grip of assistants, but many of them had suffered so much already that probably their sufferings were not greatly increased.

The abdomen was divided with a bistoury, the incision made in the right or left semilunar line (most often the left). This is probably the origin of the popular fallacy, which persists to this day, that in Caesarean Section the child is taken out of the mother's side.

The uterus was opened, generally by the longitudinal incision, and the child and placenta extracted while the assistants did their best with their hands to prevent protrusion of the intestines.

The uterine wound was not sutured, the contraction and retraction of the organ being relied upon to check haemorrhage. Most of the patients died of haemorrhage or infection.

Sutures were first employed by Lebas (1769), but did not come into general use until after the appearance of Sanger's article in 1882. The abdominal walls, however, were approximated with a few crude stitches and with sticking plaster.

Before the work of Porro and Sanger, the mortality following the operation was appalling. There is no wonder that at the time craniotomy and symphisiotomy were strongly advocated as preferable alternative procedures. Meyer (1867) collected 1,605 cases from the literature with a mortality of 54%. In spite of the fact that successful cases were reported far and wide, much less was mentioned of fatalities; while in 80 cases performed in the U.S.A. up to 1878, (Harris) 52.5% of the women died.

In Great Britain up to the end of the 18th century out of 19 operations two mothers and seven children were saved. And according to Budin, not a single successful Caesarean Section was performed in Paris between the years 1787 and 1876.

So poor were the results that Harris declared in 1887 that the operation was more successful when performed by the patient upon herself, or when the abdomen was ripped open by the horn of an infuriated animal. He collected 9 such cases from the literature with 6 recoveries, and stated that out of 11 Caesarean Sections performed in New York city during the same period, only one patient lived.

The year 1876 marks the commencement of the third era in the history of the operation of Caesarean Section, for in that year a new technique was evolved which was called the Porro operation after its inventor, Professor Porro of Pavia. This operation consisted in Caesarean Section followed by amputating the body of the uterus and stitching the cervical stump into the lower angle of the abdominal wound in order to

lessen the danger from haemorrhage and infection.

This procedure, being followed by satisfactory results, soon became quite popular so that in 1890 Harris was able to collect 264 operations from the literature with a mortality of 29%.

In 1890, Lawson Tait of Birmingham suggested a modification of the Porro operation which proved very successful and came to be known as the Tait-Porro operation, the cervical stump being covered by flap of peritoneum and dropped into the abdominal cavity before closure of the abdominal wound.

At first Porro's operation was received with great enthusiasm. Schroeder, however, declared he could not look on Porro's operation as the operation of the future. He regarded it only as a transitory method which must be replaced by some modification of the old Caesarean Section admitting of a safer prognosis.

The Porro operation, in its original form, is rarely performed today, but was, at the time of its inception, a distinct advance – the only serious drawback being the mutilation of the patient!

The 4th period began with Sanger, who in 1882 revolutionized Caesarean Section by insisting upon the necessity for suturing the uterine incision and by describing an accurate technique for the purpose.

This method came to be called the conservative Caesarean Section, or the Sanger operation, which secured the uterus in a condition almost similar to an uninjured organ, provided against both primary and secondary haemorrhage and reduced the liability of peritonitis to a minimum.

The new operation had a remarkable run of success in Germany, out of 33 Sanger operations, 29 mothers and 32 children were saved. Out of 17 similar operations performed in other countries, 6 women were saved, giving a 30% mortality out of the first 50 Sanger operations. This compared favourably with the first 50 Porro operations in which the maternal mortality was 60% – exactly double.

The first successful Sanger operation was performed in Britain in 1888 by Murdoch Cameron of Glasgow who in 1891 published a series of 10 cases with but one death. In advocating Caesarean Section in preference to craniotomy he said: "I think the time has come when the lives of the mother and child may alike be saved, and I prefer to think that an infant, comes to maturity, is destined for something greater than to have its glimmering life, extinguished by an accoucheur skilled in the use of a dreadful perforator. Let our motto be . . . we live to save, not to destroy".

The 5th period began in 1907 when Frank, of Cologne, who had become dissatisfied with the results following the classical conservative section, particularly in women who had been exposed to the possibility of infection prior to the operation, described a new operative technique. In this procedure a transverse incision is made through the anterior abdominal wall several centimeters above the symphysis and the peritoneum separated from the posterior surface of the bladder and the anterior surface of the lower uterine segment. After proper exposure, the latter is then incised transversely, the child is extracted by forceps, the placenta removed manually, and the wound closed.

By this method the entire operation is done extra-peritoneally, and according to its inventor, may be safely employed in such cases where conservative section would be contra-indicated. The technical difficulties of this operation are great. The bladder is liable to injury, and, though the risk of peritoneal infection is diminished, serious infection of the pelvic cellular tissue may occur. It was then pointed out by Kronig that the chief merit of Frank's operation lay not so much in the extra-peritoneal approach as in the lower position of the incision into the uterus.

In 1912 Kronig introduced transperitoneal lower segment Caesarean Section, and the old operation where the upper segment is incised is called Classical Caesarean Section. This new technique is now universally adopted.

Portes, in 1924, described a new type of Caesarean Section, which it is claimed is particularly adapted to infected cases in which it is important to preserve the uterus. In this procedure the unopened organ is delivered through the abdominal incision, but is not incised until the peritoneum has been sutured about its cervical portion and the abdominal wound closed above it. After extracting the child, the uterine incision is

## Table I

### CAESAREAN SECTION RATE

| *Year* | *Total Number of Deliveries* | *No. of Caesarean Section* | | | |
|---|---|---|---|---|---|
| | | *Booked* | *Non-booked* | *Total* | *Percentage* |
| 1951 | 5,819 | 36 | 15 | 51 | 0.88% |
| 1952 | 6,737 | 68 | 19 | 87 | 1.29% |
| 1953 | 6,817 | 66 | 4 | 70 | 1.03% |
| 1954 | 6,606 | 91 | 17 | 108 | 1.63% |
| 1955 | 6,197 | 142 | 15 | 157 | 2.53% |
| 1956 | 7,553 | 143 | 32 | 175 | 2.32% |
| TOTAL | 39,729 | 546 | 102 | 648 | 1.63% |

sutured, and the exteriorized organ is covered with moist dressings.

During convalescence the involution changes can be followed by the naked eye, and five or six weeks later when the uterus has returned to its normal size, the abdominal wound is reopened and the uterus restored to the pelvic cavity.

This operation has been performed in a few isolated instances only and was soon discarded in favour of the lower segment Caesarean Section.

## Modern Indications for Caesarean Section

In the days before Sanger devised the new method of Caesarean Section, there was only one indication for the operation. This was deformity of the pelvis, and that of an extreme degree.

Various writers gave other indications but, apart from obstruction to labour resulting from ovarian and other tumours, the operation was practically never performed on their account.

With the ever improving results from the new method of operating the indications quickly became extended – to such a degree in fact that the operation became greatly abused. There is hardly one of the graver complications of parturition which has not been mentioned as a suitable indication, in special circumstances, for Caesarean Section. Even heart disease and tuberculosis were thought to be sound indications for Caesarean Section since abdominal delivery avoided subjecting the patient to the stresses of labour. Time has shown, however, that the stresses of labour in these patients are less serious than are the stresses of Caesarean Section. If this is true for the patient whose life is compromised by a serious illness, then it must also be true in the healthy gravid woman.

The mortality following Caesarean Section has been further reduced in the past ten years by improvements in the anaesthesia, by a wide spread adoption of the lower segment operations and by the use of blood transfusion, chemo-therapy and anti-biotics. Marshall of Liverpool has in fact completed a series of 250 consecutive lower segment operations (clean, suspect and infected) without a death.

Here in Hongkong between 1951 to 1956 there were 638 consecutive Caesarean Sections performed at the Tsan Yuk Hospital with no maternal death, and a perinatal death rate of 10.5%. The Caesarean Section rate and indications are shown in Tables I and II.

The most common single indication here in Hongkong for the performance of Caesarean Section was contracted pelvis which accounted for 36% of all cases.

## Table II

### INDICATIONS FOR CAESAREAN SECTION

| *Indications* | *Booked* | *Non-booked* | *Total* | *Percentage* | *S.B.* | *N.D.* | *Total* |
|---|---|---|---|---|---|---|---|
| 1. Contracted Pelvis - - | 204 | 26 | 230 | 36.05% | 1 | 6 | 7 |
| 2. Previous C.S. - - - - | 144 | 2 | 146 | 22.88% | 1 | 1 | 2 |
| 3. A.P. Haemorrhage - | 67 | 41 | 108 | 16.93% | 18 | 23 | 41 |
| 4. Toxaemia - - - - - | 33 | 14 | 47 | 7.37% | 2 | 8 | 10 |
| 5. Malpresentation - - - | 24 | 8 | 32 | 5.01% | 3 | 3 | 6 |
| 6. Uterine Inertia - - - | 25 | 1 | 26 | 4.08% | — | — | — |
| 7. Complicated Elderly Primipara - - - - | 22 | 3 | 25 | 3.92% | — | — | — |
| 8. Post-maturity - - - - | 4 | 2 | 6 | 0.94% | — | — | — |
| 9. Cardiac Disease - - - | 4 | — | 4 | 0.63% | — | — | — |
| 10. Cervical Dystosia - - | 3 | — | 3 | 0.47% | — | — | — |
| 11. Diabetes Mellitus - - | 2 | — | 2 | 0.31% | — | — | — |
| 12. Miscellaneous: | | | | | | | |
| a. Double uterus & Cervix | 2 | — | 2 | 0.31% | — | — | — |
| b. Ovarine tumour - - | 2 | — | 2 | 0.31% | — | — | — |
| c. Prolapsed cord - - | 1 | — | 1 | 0.17% | — | — | — |
| d. Previous Manchester | 1 | — | 1 | 0.17% | — | — | — |
| e. R. V. Fistula - - - | 1 | — | 1 | 0.17% | — | — | — |
| f. Repeated P.P.H. - | 1 | — | 1 | 0.17% | — | — | — |
| g. Conjoined twins - - | 1 | — | 1 | 0.17% | 1 | — | 1 |
| TOTAL - - - | 541 | 97 | 638 | | 26 | 41 | 67 |

Maternal Death: Nil.

The next most common indication (22.8%) was the history of a previous Caesarean Section.

Regardless of how small the immediate risk of the operation may be there is always the possibility of rupture of uterus in subsequent pregnancy and labour. In a series of 14 cases of rupture of uterus occurring in the same period 3 had previous section (all classical).

The perinatal death rate as compared with spontaneous delivery is three times as high. It has been found that 61.9% of the foetal deaths were associated with Obstetrical catastrophe such as placenta praevia and premature separation of placenta. In these situations the foetus was often dead or seriously compromised prior to delivery and the Caesarean Section was performed as a life saving measure for the mother. Toxaemia was also a common cause of foetal death which accounted for 14.92%. There were, however, four deaths in the present series which were at least on theoretical grounds, preventable. These were cases in which there was cephalo-pelvic disproportion but in which the trial of labour was too long or too vigorous, and when labour was terminated by Caesarean Section, the life of the foetus was already compromised. This resulted in intrapartum and neo-natal deaths. These infants ac-

counted for 5.9% of the Caesarean Section perinatal foetal mortality.

Caesarean Section should not be performed when the child is dead or in serious danger except in cases of extreme pelvic contraction, convelaire uterus with cervix closed or in central placenta praevia. It is also contra-indicated when the mother is in poor condition or in surroundings which render an aseptic operation impossible. Since rupture is more common in classical Caesarean Section scar it should be replaced entirely by lower segment operation.

Mr. Chairman, I have placed before you, to the best of my ability, the historical facts relating to this operation and its modern practice.

Whether or not Julius Caesar was or was not born in this way, I leave you to judge. But I propose to end this lecture with a film in which you will see for yourselves the modern techniques. The old ones, let us leave with the long history of medical practice.

*Heart's Action.*

*We reprint this extract from The China Journal of Science and Arts (now out of print) in the hope that the Departments of Anatomy, Medicine and Surgery will see the error of their ways. It is quite clear that the present medical course could be severely pruned.—Ed.*

# SCIENTIFIC NOTES AND REVIEWS

## MEDICINE

*WELL KNOWN FRENCH SPECIALIST NOW IN SHANGHAI: The eminent French nerve specialist, Dr. Frederic Vidal, whose revolutionary method of treatment of certain nervous disorders once astounded conventional medical circles in France, but which has since by reason of his remarkable successes been put into established practice, is now in Shanghai.*

*Dr. Vidal has a world wide reputation and is at present on a combined travelling and lecture tour to make people acquainted with his new treatment, which is known as "Sympathicotherapy."*

*Briefly, his treatment consists of "nasal touches." These touches, entirely painless, are effected by means of flexible metallic rods applied on certain points of the nasal mucous membranes, where the main sympathetic nerve emerges. The main sympathetic nerve is one whose function has long been shrouded in mystery. It is known now that its main duty is to maintain an equilibrium and insure a normal functioning of the organs of the human body.*

*Dr. Vidal has made a thorough study of the delicate ramifications of this nasal sympathetic nerve. By applying tiny pressures on certain well-determined points, he provokes certain reflexes and in this way secures the cure of many illnesses which until now had resisted prevalent medical treatments.*

*This treatment, in a different form, has been known in China for a long period as "acupuncture" but localized within the nasal mucous membranes.*

*Treatment by nasal touches is effective only in a certain category of illnesses such as: Asthma and hay fever.*

*Nervous troubles: – Insomnia, headaches, dizziness, tremors, heart palpitations, general cerebral fatigue, neurasthenia, impotency.*

*Digestive Troubles: – such as stomach ache, excess acidity, heaviness after meals, enteritis, constipation.*

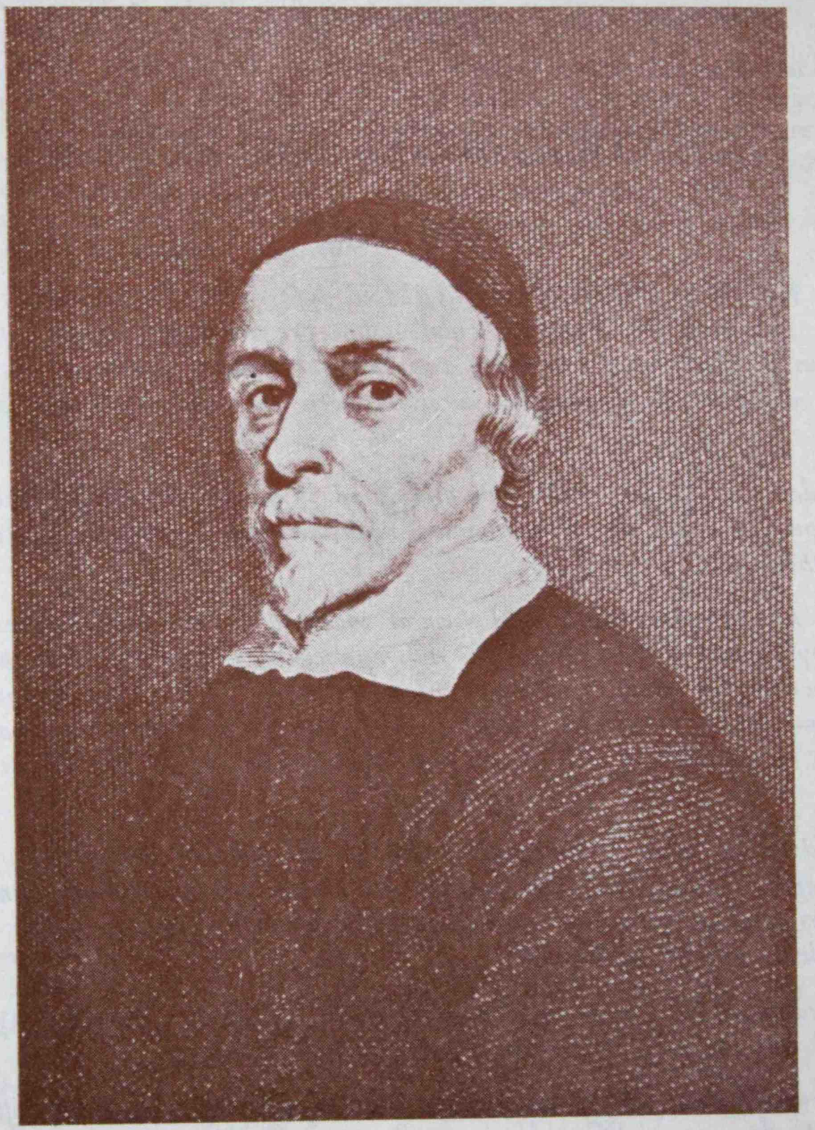
*Blood circulation difficulties. Hypertension, irregular or painful periodical troubles, blushing, change of life.*

*Rheumatical pains. Arthritis, neuritis, facial or sciatical, lumbago.*

*Certain cases of paralysis. Hemphlegy, Parkinson.*

*Finally tardiness in physical and intellectual development in children.*

# THE TERCENTENARY OF WILLIAM HARVEY



IT IS NOW three hundred years since William Harvey died in London at the age of seventy nine after a life of intense scientific endeavour. To the layman his name is associated with the discovery of the circulation of the blood – a prosaic, unspectacular fact known to every matriculation student today; yet the tercentenary of his death will be celebrated wherever medical science commands men's interest.

For centuries before Harvey's time it had been believed that the blood oscillates in the vascular system. The new doctrine, propounded for the first time in Harvey's book *An Anatomical Disquisition On the Motion of the Heart and Blood in Animals* (1628) did not at first receive universal acclaim; indeed, some forty years later an inaugural dissertation was presented to the Royal Society in London entitled: *Ergo sanguinis motus circularis impossibilis,* and it was not until after 1651 that the Harveian theories were admitted into the anatomy course in the famous Italian schools at Rome, Padua and Turin.

Important as Harvey's discovery was, his greatest contribution to medical science and to biology in general was his insistence on

the *experimental* method, by whose means alone the complexities of biological structure and function can be solved.

It is difficult to realize, in this age of experiment, the magnitude of the change brought about by Harvey and some of his seventeenth century contemporaries. With Aristotle (322 B.C.) Greek biology flourished and leavened European culture for the best part of five hundred years; but after the death of Galen (200 A.D.), science declined into a blind veneration of ancient dogmas. What with Aristotle and Galen had been mere conjecture was now given the rank of truth; and even the most obvious errors, which a few hours in the dissecting room might have corrected, were held from one generation to the next as sacred and indisputable fact. This tendency was reflected in the mediaeval anatomy lesson. In Italy, at Padua and Bologna, and in France at Montpellier and Paris, an *anatomy,* as it was called, was conducted from a rostrum by a *clerc* (professor) in cap and gown, who discoursed upon a text by Galen. At some distance from the rostrum a barber (surgeon), surrounded by students, dissected a corpse according to the *clerc's* instructions. Clearly such performances were never used for research, but merely to illustrate the traditional opinions of ancient authority. This often lead to stupid errors.

It is almost certain that Galen mainly dissected pigs, apes, and a few other mammals and transferred their anatomy by analogy to Man. It is not surprising then, that he described the human femur as being distinctly curved. Yet the mediaeval anatomists were unwilling to depart from Galen's text, and when the facts concerning the human femur were at last questioned, the reply was that the anatomy of Man must have changed since Galen's time – probably as a result of wearing trousers!

It was into this sort of medical babble that Harvey injected a spirit of free enquiry based upon direct observation and experiment. "I profess", he wrote in 1628, "both to learn and to teach anatomy, not from books but from dissections; not from the positions of philosophers, but from the fabric of nature".

After the seventeenth century, the anatomy lesson changed in character. The professor, abandoning the ancient texts, descended from his rostrum and made his own dissections, expounding anatomy from his own observations. It was (and is) an unpleasant task. "One might think", wrote Boyle in 1663, "that the conversing with dead and stinking carcases (that not only are hideous objects in themselves, but made more ghastly by the putting us in mind that ourselves must be such) should be not only a very melancholy but a very hated employment". Yet he confessed that its instructiveness had reconciled him to it. Anatomists today are more fortunate, since modern methods of preservation have removed much of the unpleasantness of dissection.

In spite of the initial opposition, William Harvey had the pleasure before he died of seeing his discoveries accepted by the most enlightened men of his time, and even at an advanced age maintained an acute interest in scientific matters. In 1653, when he was seventy five, Harvey wrote to an ageing Italian scientist suggesting some problems requiring investigation: " . . . . These are among the number of more abstruse matters and demand your ingenuity, most learned Nardi. Nor need you plead in excuse your advanced life; I myself, although verging on my eightieth year, and sorely failed in bodily strength, nevertheless feel my mind still vigorous, so that I continue to give myself up with the greatest pleasure to studies of this kind."

But by 1657, he knew he was finished. Only six weeks before his death he was writing to John Vlackveld of Harlem: " . . . . It is in vain that you apply the spur to urge me, at my present age, not mature merely but declining, to gird myself for any new investigation."

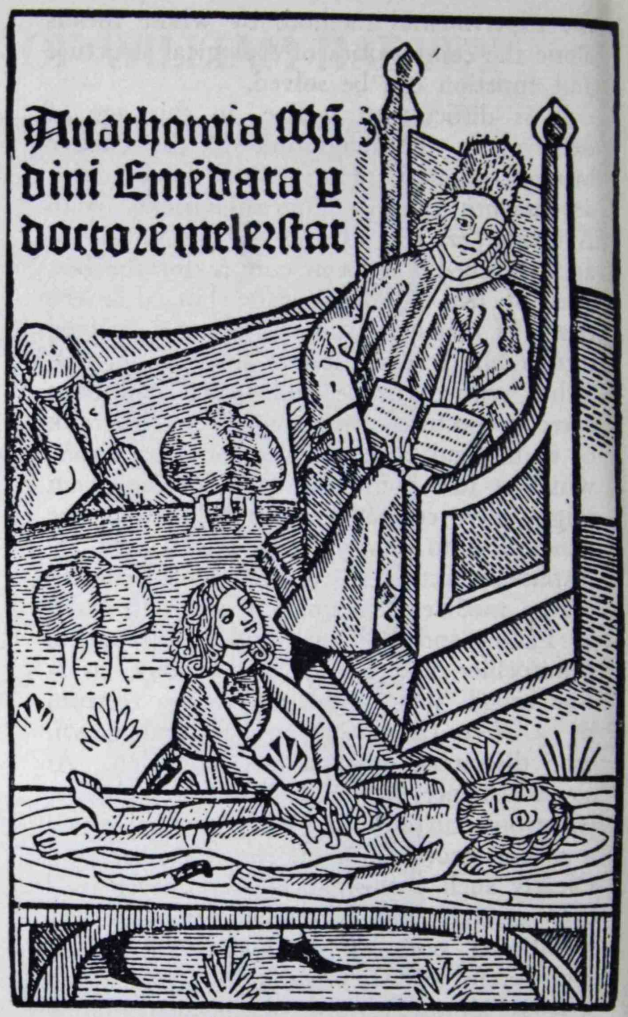
Harvey's achievements however were not confined to his studies on circulation. It is known that he had done an immense amount of work on comparative anatomy; but all his notes were destroyed during the Civil War – a loss which caused him the most intense grief. Fortunately his work on animal generation (i.e. on the science of embryology, in which he had a life-long interest), survived the vicissitudes of war, and during his sojourn at Oxford (1642-1646) he was engaged in collating his notes and making fresh observations and experiments. John Aubrey in his *Brief Lives* says of Harvey: " . . . . I remember that he came

often to Trinity College to one George Bathurst, B.D., who kept a hen in his chamber to hatch eggs, which they did dayley open to discern the progress and way of generation."

But Harvèy had dissected in much more exalted company. As Physician to King Charles the First, he attended the Hunt, and often had an opportunity to obtain buck and doe for study. "My Royal Master . . . . was himself much delighted in this kind of curiosity, being many time pleased to be an eye-witness, and to assert my new inventions."

Unfortunately it cannot be said that Harvey's work on embryology was successful. Interesting as his speculations are from a historical point of view, they contributed little that was new. What they reveal of the man himself is more important, in that they show the wide range of his interests and the magnificent qualities of a mind, puzzled perhaps by the intricacies of the subject, but intent on the pursuit of knowledge by observation and experiment.

ROBIN MANEELY.




*A Medieval Anatomy Lesson.*

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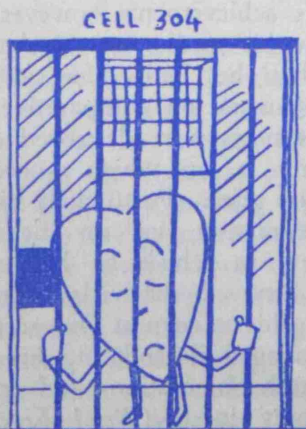


*Cardiac Arrest*

**Answers in H.K.U. Matriculation Examination.**

"That Bill Sykes should bear ill will of the Jew Fagin is not surprising, since they are equal partners in the burgkary. Equal partners in business, even when they are good men, are bound to bear ill will of each other."

* * *

"Not only does Bill Sykes kill Nancy, but he even ill-treats his faithful dog."

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"People were very cruel in the eighteenth century. For example, in travelling, wounded and half-dead passengers were not accepted."

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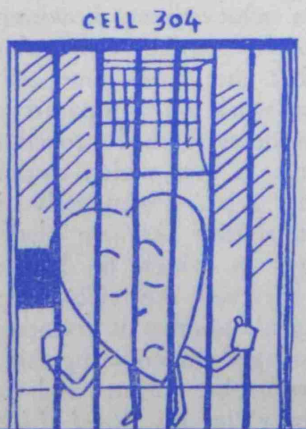


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## THE SOLITARY HAWKER

*Behold her! Sitting at the gate*
*Down the lane of Upland Hall;*
*There sits she, mused on her fate —*
*A rise tomorrow, o' may be a fall.*
*Still sits she there, stiller the stocks*
*On which she lives and gains a frock.*
*Disgusted with her poverty*
*Oft she drown'd in ecstasy.*

*The ecstasy wasn't saintly*
*For what she thought was not holy —*
*A blame, a curse it was mainly*
*On the world's injustice wholly.*
*A mood of melancholy pass'd her*
*So solitary; and a drop of tear*
*Rolling hesitatedly down*
*The rosy cheeks once beauty own.*

*Her thought rambles from past, present*
*And Hell and Heav'n and time to come*
*Of joy, fear and th' fire with no end.*
*Frightened be she, no one would care.*
*So weary, sad her countenance*
*Seems to tell some plaintive loss —*
*The loss opens wide an expanse*
*And the struggle left at her cost.*

*Will no one tell me who she is?*
*Or what the fact that makes her sad;*
*Might she once be a noble miss*
*Alas! It is the war that makes mad*
*And from her friends she's separat'd;*
*Alone amidst all unknown mates*
*She face the world both bold and brave.*
*May all that courageous be saved.*

AU-YEUNG MAN BUN.

# ON THE QUESTION: "WHAT IS GOODNESS?"*

AT ONE TIME OR ANOTHER, almost certainly during adolescence, thinking people are apt to find themselves assailed by a certain rather peculiar kind of perplexity. It is a perplexity which seems to find its most appropriate expression in the question: "What is (the nature of, the essence of, the real meaning of,) Goodness?". It comes, when it does come, with a sense of deep seriousness. Not only adolescents, but first-rate intellects of all ages – scientists and social reformers, poets and politicians, playwrights and philosophers among them – have been desperately concerned to find a formula beginning "Goodness is . . . " and so to resolve the bewilderment which appears to be so fundamental.

It is not my object here to suggest a formula of my own. Rather I want to discuss the logical status of the question itself. I shall try to establish the case that the only sensible interpretation of the question "What is Goodness?" is a technical one; that the only proper resolution of the perplexity is a painstaking analysis of the use of sentences of the form "Such-and-such is good"; and that any attempt to interpret the question as more "fundamental" than this must be based on fallacious assumptions.

I said in the first sentence that the perplexity at issue is of "a rather peculiar kind". I want to begin by justifying this claim for it is the clue to the whole problem. Consider questions like "Is Jones a good man or is it that I just happen to like him?", "Are Hong Kong-made umbrellas good ones?", "Is this a good apple?" and any similar question which expresses doubts as to how to assess a particular person or thing. In such cases the kind of answer which is called for is a piece of advice or a judgment preferably with reasons – "Yes, Jones really is a good man: he has a kind heart and could not possibly do a mean thing", "Hong Kong umbrellas are substantially-made, durable and thoroughly weatherproof", "No, the apple is too soft and not sweet enough." Now one may be perfectly convinced that one knows how to make concrete assessments of this kind and yet still feel bewildered about what "Goodness" is; alternatively there may be a genuine puzzle about whether or not Jones is a good man but this still seems to be a different puzzle from the one which finds its formulation in "What is Goodness?":— and this is odd! To anybody well-versed in philosophical literature it may not seem so, for philosophers have certainly made such questions as "What is Goodness?" their own special subject-matter, and under such influence it is fatally easy to lose sight of the ordinary usage of words. But there is no difficulty in seeing the oddity in more prosaic but entirely parallel cases. If you are at the fair, for example, and demand "What is candyfloss?", your perplexity is resolved as soon as you discover the sweetmeat to which the name "candyfloss" refers: if you persist with the question after you have been shown the stuff, have tasted it, and learnt how it is made, your question becomes peculiar in the sense that the only obvious line of reply is removed. Or again if you ask "What is (the nature of, essence of, the real meaning of) foolishness?" and yet you give ample evidence that you have no difficulty in recognising foolishness when you see it that you can present paradigms of foolishness, that you can dispute sensibly as to whether Falstaff was a fool or not, and so forth – and still feel that your question has not been answered, there is no clear way for your hearer to attempt an answer. In such cases the onus is upon the questioner to reformulate his question in such a way as to give a clue as to the kind of information he is seeking. We all do express ourselves in peculiar ways at times: indeed there is often no other way open to us to "get over" some subtlety in the context in which we find ourselves. But then it is the context itself which provides the clue. If it is a child-psychologist who persists with the question "What *is* candyfloss?" in a situation where everything is orientated in the direction of an academic enquiry, it may be inferable that what he

* At a meeting of the University's Philosophical Society on April 25th, 1957, a discussion of this topic was introduced by a modified form of this paper.

really wants to know is something which can be more accurately expressed by "What is it about this sweetmeat that has such an attraction for young children?". If you have just seen an example of the most crass stupidity your question "What is foolishness?" may be an elliptical way of saying "I never thought that anybody could ever be so foolish as that!". Remove all suggestion of context however, eliminate all clues to a reformulation that does make sense, and there is no alternative in these cases but a shrug of the shoulders: the questions remain simply unintelligible. And it is in this sense, I suggest, that the question "What is Goodness?" is odd. If it does not ask for concrete advice about the assessment of a particular person or thing, and if no context is supplied to enable the hearer to reinterpret the question, it cannot be treated as a genuine question at all.

It follows, if the foregoing argument is valid, that if the perplexity we are talking about is genuine – and I do not for a moment dispute the psychological fact that it frequently is – then some context must be implicit in the expression of it. Or, to put the same point in another way, the question "What is Goodness?" must be reformulable in a way in which an answer can be attempted.

One such reformulation, initially plausible though it may appear, can be dismissed immediately. It is: "What is the definition of Goodness?". The attraction at first sight of this rephrasing is due to the grammatical parallel to questions like "What is viscidity?", "What is olivaceousness?", and "What is Ferry-itis?". But clearly, whereas in these cases the appropriate kind of answer is one which teaches you how to use the words "viscidity", "olivaceousness" and "Ferry-itis" without misleading people who already understand them correctly, and how to avoid misunderstanding other people when they use the words correctly, it is not so in the case of "What is goodness?". You already know perfectly well how to use the word correctly: you are in no danger of misinterpreting people who insist at great length that it would be a *good* thing to have more ferryboats. No, if your perplexity is merely about the definition of the word "good" all you need is to learn the language in which it is used.

Two reformulations which have been tacitly adopted by thinkers who have had enormous influence – Plato and Mill – call for more serious consideration. For Plato the problem was: "What entity (object, thing) does the word 'good' name?". For Mill it was: " What property (quality) does the word 'good' stand for?". It is perhaps these ways of putting it that most nearly coincide with the heart of the perplexity as most people experience it. They not only preserve the grammatical similarity to questions such as "What is candyfloss?" and "What is olivaceousness?" ("What entity does 'candyfloss' name?" and "What property does 'olivaceous' stand for?"), but they conform to that scientific model which bears the hallmarks of precision and accuracy.

Grammatical similarity however is no safe guide to similarity in logical behaviour. Two examples will suffice to establish this. The first, beloved of the text-books of twentieth-century logic, is provided by the two statements: "The Prime Minister has a moustache" and "Unicorns have tails": clearly whereas the first statement entails the existence of a person, the second, though it is grammatically of the same form, does not entail the existence of unicorns. The second is provided by the two judgements "I like strawberries" and "I approve of restricting the atom bomb's use": again it is clear that whilst in the first case the speaker cannot be called upon to justify his taste (for matters of taste cannot sensibly be disputed), in the second case the speaker is committed to supplying supporting reasons for his claim if called upon to do so.

Now if the question "What is goodness?" were interpreted on the model of "What is candyfloss?" or "What is olivaceousness?" the appropriate method for finding a reply would be an empirical one. Accordingly we should have to apply the standard tests – looking, feeling, smelling, tasting, listening; aided perhaps by the microscope and the telescope and any other instruments that extend the role of perception. And we should have to accept the opinion of the experts in the matter: just as we can specify who is the authority for establishing this sweetmeat as candyfloss and this colour as olivaceous (the matter might be very much more complicated with regard to

'dispositional properties' like brittleness and happiness, but not different in principle), so we should have to accept some person as a priviliged perceiver of the thing or property that 'goodness' named. Moreover when all the tests had been applied there would be no room left for rational disagreement: either "goodness" refers to this object or it does not; either "goodness" refers to this property or it does not – and there's an end to the puzzle. Plato in a most sustained attempt to preserve this model tried desperately to keep it plausible. Recognising the absurdity of looking around the world for a hitherto undiscovered object which we all of us supposedly refer to every day, he postulated another 'world' for Goodness to exist in, a world not of things but of super-things or 'Forms' of which the Form of Goodness was at the 'top'. And recognising the high status of the sense of sight in establishing the existence of objects, he resorted to a sort of mental sight, 'insight' which enabled those few people who had it (persuasively defined as 'lovers of wisdom' or 'philosophers'; or circularly defined as those who had insight into the Forms) by which these Forms could be 'perceived'. Carried away by these metaphors Plato was prepared to call his philosophers experts and to eliminate the possibility of rational disagreement by cancelling the qualifications of all people who were mere 'lovers of sights and sounds'. In fact all Plato's political and moral proposals stem from the attempt to sustain the entity-model for the question "What is Goodness?". I wonder if authoritarianism in government would ever have taken hold if Plato had acknowledged the absurdity of trying to construe the question "What is Goodness?" along the lines of empirical questions!

John Stuart Mill very much more wedded to the scientific model than Plato could ever have been took the heroic course of claiming not only that Goodness is a property but that it is a property already known by another name, viz. happiness (sometimes pleasure). It delighted him to be able to locate a property that could be detected by empirical means (for Mill this meant not only introspection but observation too); it delighted him to be able to point to the authoritative perceiver in each particular case (the happy person himself and the psychologist), to remove the ground for rational disagreement once all the tests had been carried out, and to have a precise and accurately measurable quality to deal with (complicated, it is true, by Mill's distinction between the quantity and quality of pleasures, a distinction which Bentham who influenced John Stuart through James Mill did not draw). The only snag was that it can be demonstrated, as G. E. Moore was subsequently to do, that to say something is good is not the same as to say that it is productive of pleasure. For, to quote Moore, ". . . . there is no meaning in saying that pleasure is good, unless good is something different from pleasure." (*Principia Ethica* p.14.) It is interesting to note that Moore himself instead of abandoning the property-model as hopelessly inadequate for interpreting the question "What is Goodness?" took a Platonic course instead. After having shown the fallacy in identifying goodness with what he called a 'natural' property like pleasure, or 'more highly evolved' or 'what God wills', he claimed that nevertheless Goodness is a property after all, only it is "a non-natural, unique, indefinable property." It is as though, to employ a clinching analogy of Stephen Toulmin's, he had postulated the existence of a unique, indefinable bull, viz. a non-tauroid bull!

To him then, whose perplexity seems to find its most accurate expression in the question "What entity or quality does Goodness stand for?" I say that there is no answer except on the fallacious assumption that the word 'Goodness' must name *some* entity or property. But I do not expect anybody who has really felt deeply about the notion of Goodness to be satisfied with this. His perplexity is all the more likely to take a more urgent turn – If there is no such thing as Goodness are we not then reduced to utter scepticism? Is morals merely a matter of taste? Is goodness a purely subjective affair? Do values crumble and ethical judgements become just expressions of emotion?

This alternative, strangely enough, far from daunting many thinkers has positively attracted them. Hume founded a tradition which has continued to this day in the form of the Emotive Theory of Ethics, the central tenet of which is that moral judgements are

nothing more nor less than statements about (or evincings of) the agent's own emotions, sentiments or attitudes. The attraction of the theory I think, is rooted not so much in its avoidance of the difficulties which we have seen to lie in the entity and property theories, but in that same reverence for the scientific model that propped up the latter. For emotions, sentiments and attitudes can be studied empirically. They are the subject matter of the psychologist, anthropologist, sociologist and statistician. Westermarck went into the field and observed the moral emotions, and attitudes of primitive tribes. Contemporary sociologists are describing and classifying the attitudes of people in the more complex societies. Accordingly the analysis of judgments of the form "X is good" in terms of utterances of the form "I feel pleasure in (have an attitude of approval towards) X" carries a flavour of the exactness of scientific enquiry.

That this model is the only alternative to the entity/property model is however not the case. Precisely because it is a scientific model it will not do. Suppose "X is good" is construed along the lines of "X gives me pleasure" or "I have a sentiment of approval towards X". It follows that if I were to say "X is good" and you were to say "X is bad" we would both be making statements which can be empirically established to be true (or false: the point is that we would not be in disagreement). I feel an emotion and you feel a different one: I have one attitude and you have another. There would be no more point in debating whether or not X is good than there would be in debating the fact that I like strawberries and you do not. Moreover it would follow that it would be impossible for either of us to support our claims: Supporting reasons for having an emotion simply cannot sensibly be given. But clearly when you and I disagree about whether X is good or bad one of us is wrong: we cannot both be saying something that is true. Debate *can* be carried on sensibly. Supporting reasons *are* appropriate to our claims. We *are* in genuine disagreement. Ergo the sceptical model must be fallacious, and so it cannot be the only alternative to the entity/property model. The perplexity cannot properly be resolved by adopting a Humean answer.

If we shoulder our perplexity on to some imaginary person, we may very well suppose him at this point to have ceased to feel its former importance. If the question "What is Goodness?" turns out not to be a request to have some obscure entity or property indicated to him, and if he realises that he is not plunged into wholesale scepticism as a result thereof, he may be content with the knowledge that the question only arose because of fallacious assumptions about the kind of answer that is logically appropriate. Yet notwithstanding he may be imagined still to be uneasy: he may think perhaps: "There remains a point somewhere in my original question". For such a person there remain, so far as I can see, but two further possibilities.

The first is strictly speaking a variant of the category which we dismissed at the beginning of this paper. Instead of wanting advice over a matter of concrete assessment of a particular situation, person, or thing in all its complexity of detail, he may be experiencing bewilderment as to which from opposed but vaguely delineated ways of life he shall pledge himself: shall he fall in with Communism or Christianity?; shall he adopt Buddhism or Big Business?; shall he devote his energies towards social welfare or sport?; . . . . Such issues *might* find their expression in the question "What is Goodness?". If such be the case there is no short answer. He and he alone must make a decision. The relevant data are such as he and he alone can ultimately gather together. There is no expert who can offer him a formula beginning "Goodness is . . . . " from which he can deduce a right answer. He can of course seek advice, and profitably. He can obtain facts which only authorities in special fields can supply. He can and should consult the wisest and most widely-experienced people whom he can interest in his case, provided he knows that their hearts are in the right place. Indeed the advice of anybody who can see his position from the more detached viewpoint of the spectator must be valuable. In the last analysis, however, there is no authority – scientist, philosopher, or 'wise man' – on the nature of goodness whom he can 'look up'.

The second, and from the point of view of the whole of this paper, the final

possibility, is that his perplexity turns out to be a genuinely philosophical one. That is to say, he is concerned accurately to characterise the logical function of the word 'good' in ordinary discourse. This task is a purely technical one and one which once embarked upon he may find to be either fascinating or boring according to his temperament. His original question will be broken down into a host of issues of which the following are more or less typical: Has the word 'good' primarily a descriptive function or is its special job to prescribe?, What is the difference between the endorsing use of 'good' and its grading use?, Under what conditions does 'good' give factual information as well as confer praise?, Is there an advocating use of 'good'?, Do sentences of the form "X is good" ever withhold commendation, and if so how?, What are the similarities and differences between the advising and the persuading uses of the word 'good'? What is entailed in saying "Have the goodness to . . . . ?", What is entailed in saying "He does not know what goodness means"?, What is the point in insisting that the goodness of milk is destroyed by pasteurisation? and What is the logical status of the question "What is Goodness?"?

T. K. DAVID, *Lecturer*,
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# Remove the mask of anxiety, tension and pain

The specific actions of 'Largactil' brand chlorpromazine hydrochloride, have established its value for the relief of psychosomatic disorders without affecting intelligence or alertness

Its use is also suggested for the management of pruritus, hyperpyrexia, and nausea and vomiting due to a wide variety of causes.

'Largactil' is available as tablets and syrup for oral use and as solutions for injection.

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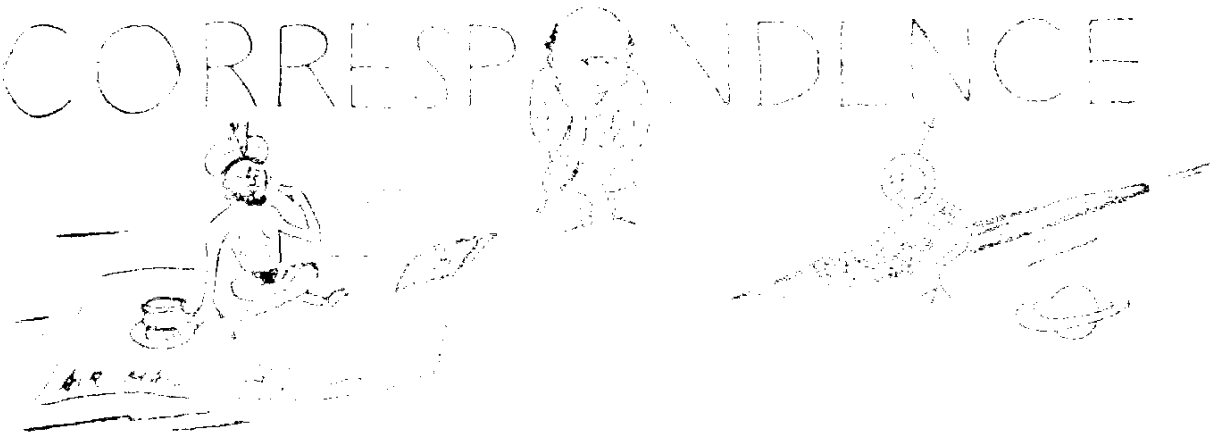
# CORRESPONDENCE



To the Editor,
C. M. A. Bulletin,
*Present.*

Dear Sir,

A subject of utmost importance to the interests of the members of the medical profession was brought up during the last general meeting of the Chinese Medical Association – that of "Charity Clinics". It is a well-known fact that whilst some well-meaning organisations are doing good work through these clinics, other unscrupulous individuals are making use of this high-sounding name for selfish monetary gains under the guise of charity and by other methods which are detrimental to the ethical standards of our profession. It was generally agreed during the meeting that some sort of control should be exercised over these clinics and a sub-committee was, in fact, formed to study the matter in further detail.

But, to control these clinics and to ensure a certain minimum standard of professional service for the protection of the public is not the final answer to the problem. We must put forward an alternative scheme whereby the less-previleged in our colony can find it possible to have adequate but less expensive medical attention when the need arises. The method best suited to the attainment of this end is the Medical Insurance Scheme recently proposed by the Civic Association and accepted in principle by the Chinese Medical Association, the British Medical Association, and the Pharmaceutical Society. This scheme calls for the organisation of a panel of doctors who wish to participate in the programme to provide the would-be subscribers with specific types of medical services for a certain stated sum a year. As a start, it will provide services for the treatment of medical cases only and will not include hospitalisation nor the filling of the prescription. Long term illnesses, such as mental diseases and tuberculosis, when already present before joining the plan will not be covered. If a subscriber so wishes, he may additionally be covered for surgical emergencies at a slightly increased rate. This surgical coverage will include operation and hospital fees and a stay in hospital of not more than seven days.

As to the actual cost of such a scheme to an individual subscriber, that is, the premium he has to pay for such a policy, a joint committee, comprising of members from the Chinese Medical Association, the British Medical Association, the Civic Association, and the Pharmaceutical Society, will be formed in the near future to study the scheme more thoroughly and the exact "Premium" will be determined by this joint committee. However, a fair estimate would be about twenty-four dollars a year for the wage-earner and that for his family at a sliding scale at an inverse ratio to the size of the family. Regarding prescription expenses, the Pharmaceutical Society has agreed to prepare a tariff at the lowest rate possible for the would-be subscribers; and, barring expensive medicines used, an average prescription good for two days will cost about one dollar. The additional premium for surgical coverage will be around four to six dollars a year.

It will be beyond the scope of this letter to discuss how the above figures are arrived at, but with the cooperation of all parties concerned, the plan as outlined will work out to the satisfaction of both the general public and the profession.

It cannot be denied that the scheme has many limitations, the most obvious of which is that it is far from being comprehensive. It is only good for those who are under regular employment and, at its initial stage at least, the scheme will reguire group enrolment to safeguard against the influx of unfavourable risks and heavy demand of service. On the other hand, however modest the plan may be at first sight, it still offers some protection to the wage-earner against sickness; and, for a small amount a year, he is assured of private and individual attention from the doctor of his own choice. Once a large membership has been built up, then one can consider the relaxation of the eligibility requirements and may even extend the service to cover more benefits without increasing the rates.

For the profession, the scheme offers a number of favourable potentialities. It utilises the system of individual practice of medicine and will bar persons earning above a certain sum of money a year to enrol. Any doctor willing to participate in the programme will not have to worry about any increase in overhead expenses irrespective of the number of subscribers under his panel since he has to keep an office in any case. He will be assured of a regular income from his panel patients in addition to his own practice. One big advantage of the scheme is that it does not require any capital expenditure to get it started.

To sum up, any such schemes will be caught between the Scylla of prohibitive prepayment rates, supporting fairly complete service for the participants and adequate remuneration for those rendering care, and the Charybdis of low prepayment rates, covering very limited service and assuring the physicians of reasonable payment. Of the two, I venture to recommend the latter with lower rates but restricted service, so that a larger proportion of the population may be able to participate and derive benefit from the service.

*(Signed)* PETER C. Y. LEE.

# Answers to Correspondents

Owner of 6¼ volumes.—1. Reading in a railway carriage is not injurious to a healthy lad, Irish or otherwise.

* * *

W. Turner—It depends on the boy; but for a boy in normal health to bathe once a day is desirable, and not injurious.

* * *

Which University (Anxious)—Like yourself we favour the tone of Cambridge. The weakness will leave you if you fight against it and PRAY.

* * *

Blue Ears (B.E.)—The result of weak circulation. Applications no good. Brace yourself up with the bath and exercise.

* * *

J.F.M.—We are unable to reply in the next issue, as in the first place the next issue went to press more than a month ago, and in the second we cannot make out what you mean. Perhaps our readers may help us. "In your next issue give me what information you can upon Mamuls, where they are found at present time, and I want to know whether they are called wholly Elephants, or have they wings on."

* * *

Lulu—"How old is the Old Man of Conniston?" It depends on what you mean. If you mean the mountain, it is Lower Silurian; if you mean Mr. Ruskin, he is 72.

* * *

Smoker—Smoke rises in the air, therefore smoke is lighter than the air, therefore if you fill yourself with smoke, you decrease your weight. Therefore, though the effect of two cigarettes a weak is not enormous, still it must have a tendency to elevatory influence, and would not diminish the lightheartedness that troubles you, therefore we say don't do it.

* * *

I.M.—Write again when you can spell properly. A boy who cannot spell "villas" is not a safe subject to trust with much information.

* * *

W. A. Wilson.—Learn to spell. When you have done so, write again. Do not trouble about boxing until you can improve on "Proffesser". You are not quick enough in the eyes, Wilson; you want more observing power.

Moustache (M. Nowel)—Yes, shaving will improve your down.

* * *

Ovid—We know of no Government reward for Perpetual Motion, but if you have discovered it, and live long enough, you may be sure of a reward far exceeding that any Government can afford.

* * *

Growing (Small boy)—You are nearly 21. No; you are done growing heavenwards – corporeally.

* * *

Bad Habits (Rufus and others)—If you value your life and happiness here and hereafter, abstain. We are glad you are penitent. Obey all the laws of health. Take no drugs. Read no quack books – that would mean destruction – and use a cold bath every morning.

* * *

Growing a Moustache—The chemist was right in putting a poison label on. Else you might have drunk it. Do you see? Then the moustache might have grown inside instead of out.

* * *

Boy's Troubles (Nero and many others)—We are sorry for you. Give up such bad habits or order your coffin. That is plain speaking – but you need it.

* * *

Poor Henry—Dear Boy A "coin", thin silver, with "Veuve Cliquot, Reims" on it, is it not rare? Very, if it were a coin; but is it not rather a bit out of the capsule of a bottle of champagne?

* * *

Nervous (Afflicted One)—Your troubles are connected with your time of life. Don't worry. Go in for exercise, the bath, good food. Do not drink nor eat before going to bed, and take a teaspoonful of Fellows' Syrup twice a day at meals in water.

* * *

Weakness (A Troubled One)—You may not be so bad as you think. Anyhow, go in for a course of hygiene coupled with gymnastic exercises. Take a cold bath every morning. Don't hurry at meals. Take a teaspoonful of Fellows' Syrup in water twice a day and keep your mind easy. A Harness be't would help.

* * *

Varicose veins (Scotland)—If this is the cause of your trouble you must consult a doctor. Yes, the electropathic belt will increase your strength and tone.

* * *

Nervousness ("Cheer up")—Well, cheer up, then. Read the paper on "Boys Ailments". Give up bad habits and get a Harness's Electropathic Belt.

Getting Thin in Hair (J.C. Read)—It is the "fast life" you so boldly speak about that is doing it, and you will be bald before you are thirty unless you change – and serve you well right too.

* * *

Nervously Ill (Penitent)—Glad to know you are penitent. We trust in time. Obey all the laws of good health. Be out of doors all you can. Read good books. Keep good company. For medicine, a teaspoonful of Fellows' Syrup twice a day in water after meals. Avoid quacks and keep your thoughts pure. Take a cold bath every morning with a handful of sea salt dissolved in it.

* * *

Noise in the Ears (G.H.B.)—If the noise continues after a few morning doses of Friedrichshal water after an anti-billious pill at bed time, you must consult a doctor. Have you any bad habits? These would induce it.

* * *

Various (Duchess)—1. Yes; some of our boys are a bit conceited. 2. When moulting, keep the bird warm. Cover up at night and if weakly, put a rusty nail in the water. 3. No; lemonade won't make you thin. Take ten drops of tincture of iodine in water thrice daily after meals for pallor of the complexion, and lots of exercise. 4. A sinew has started. Bathe twice a day in cold water. 5. Brick dust? No; soot.

* * *

Pimples (A. Fitz-P.)—Thinness of blood. Take steel drops, the morning tub, live well, and take abundant exercise.

* * *

Feet Perspiring (Many querists)—1. Use the bath. Also steel drops. Bathe feet night and morning in cold water with plenty of sea salt in it. Then damp over with a mixture of half an ounce of tannic acid dissolved in a pint of eau-de-cologne, or rum, dry them, and dust over with tannic acid. Use light wool stockings.

* * *

Henry M.—You may have been unfortunate in your schoolmaster, but you are in error in supposing that "all schoolmasters are the same", or that all lessons are "hatefull". A boy who is foolish enough to "dislike work of all kinds" is laying himself out to be for life a misery to himself and a nuisance to all who come in contact with him. Work is not necessarily work with the hands; in fact the hardest work is now done in the world by those who work with their heads.

* * *

Albatross—Flying machines on the screw principle have been tried, but all have been failures owing to the weight of the machinery being too great. What is wanted is a sufficiently light and powerful motor. Machines combining screw and the balloon have been tried and have worked to windward in light airs, but failed in heavy winds.

* * *

***The above answers to correspondents are all from the Boy's Own Paper, 1890.***

# THEY'RE AT IT AGAIN

## REASONS FOR HOPE IN NEW YEAR

### "Future Belongs To Those Who Exercise Their God"

### DULLES' YEAR-END STATEMENT

— TO-DAY MATINEE AT 12.30 P.M. —

**"DAY OF TRIUMPH"**

Reduced prices for students & Christians

Blom told the magistrate yesterday he married Rosita Corbeto, alias Anne Binte Rahamad, "for convenience," then found she had had 18 children.

Paris, Oct. 12.

The Dominican playbody-diplomat, Porfirio Rubirosa, said to-day that he would marry the 19-year-old French actress Odile Rodin, probably in Paris in a month.

"People who are nudists," the judge explained, "are really not quite the same as other people. One has to appreciate that their view of the Conventions is different."—Associated Press.

Miss Dorothy Lamour dedicated the bath by dropping her famous sarong—

| ALUMINIUM WARE — Beautiful Colours | | |
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| COCKTAIL SHAKERS | USUAL $45.00 | NOW $35.00 |
| COCKTAIL GLASSES | " 7.50 | " 5.50 |
| BOWELS 8" | " 38.50 | " 28.50 |

## Male and Female

Sir,—I am interested in listing all the actions which, generally speaking, are performed differently by men and by women. The best example, probably, is the striking of a match: men strike towards themselves, while women do it away from themselves.

I would be grateful for further examples.—Yours faithfully,

Newark J. H. MEEDS

*

Sir,—When I was a Judo instructor I always used to ask trainees to stand on their heads at the first interview. Those who swayed towards the left ear were nearly always women, and those who swayed towards the right ear, nearly always men. The test was 99 per cent. infallible.—Yours, etc.,

S.W.5. KATHLEEN NOTT.

The new Soviet airliners are comfortably equipped and have pretty air hostesses in contrast to the "bucket-seat" Dakotas that have been flying this route since 1950.—France-Presse.

# HELP

## THE

# Scholarship Fund

To date $7,000 have been set aside for the Hong Kong University Medical Society Scholarship Fund. Please become a subscriber to Elixir NOW

## Every Dollar Helps a Scholar


*Sluggish Pupil.*

## NOTES AND NEWS

**PRIZES:—May 1957**

Aw Boon Haw Prize in Obstetrical and Gynaecological Pathology: Dr. Donald Chan Pui Chee.

Anderson Gold Medal: Mr. Lai Kai Sum.

Ho Fook and Chan Kai Ming Prize: Mr. Lai Kai Sum.

Digby Memorial Gold Medal in Surgery: Miss Fung Pui Wai.

Gordon King Prize in Obstetrics and Gynaecology: Mr. Lai Kai Sum.

The C. P. Fong Medal in Medicine was not awarded this year.

**APPOINTMENTS:—**

Dr. Arnold Hsieh as Assistant Lecturer in the Department of Physiology.

Dr. C. C. Gruhzit as Lecturer in Pharmacology.

Dr. Ma Lin as Assistant Lecturer in Chemical Pathology.

**GIFT:—**

The University has received a grant of $107,000 from the H.K. Jockey Club for the purchase of equipment for the Research Laboratory of the Department of Medicine.

---

**Answers in H.K.U. Matriculation Examination.**

"Robert Louis Stevenson amazed the world when he invented the first railway train."

* * *

"The eighteenth century was the Age of Reason, and people cared for nothing but fashions and meeting in coffee-houses."

* * *

"In *The Rape of the Lock* Belinda spends hours in the toilet".

* * *

"In *The Rape of the Lock* we have epic simile, personification, alliteration and probably some more."

* * *

An essay on a world tour: "England offer fog and mist and a glimpse of the Royal Family . . . . France and its perfumes, Rome and the Pope, these together with the scenery should be first-rate . . . . I think a visit to Australia to see the kangaroos would do me good."

* * *

Emilia asks Desdemona who hurt her. "She replies "Onbody, it was me."

* * *

"People drew up charts for reform, so they were called Chartists".

* * *

On Nancy's repentence in *Oliver Twist* which the candidate finds unconvincing: "Even the good thief in the Gospels who repented, we have no guarantee he would not have become a bad thief again had he been allowed to live longer on this sinful world."

* * *

"When people knew that the Duchess had a child they did not know she was married, so they called her a trumpet."

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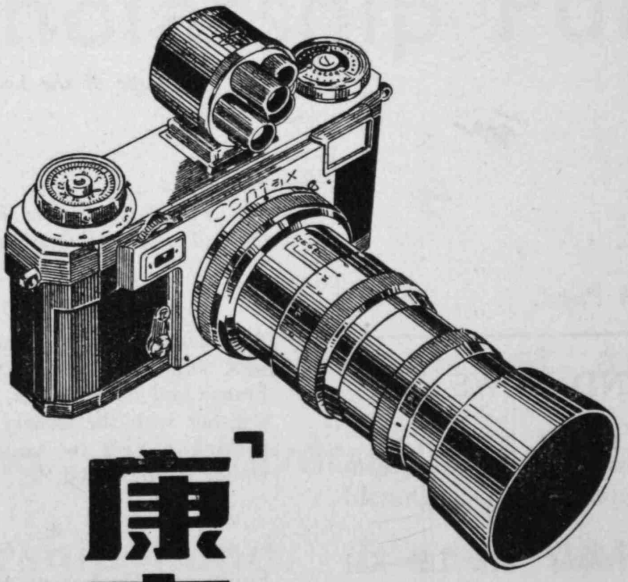


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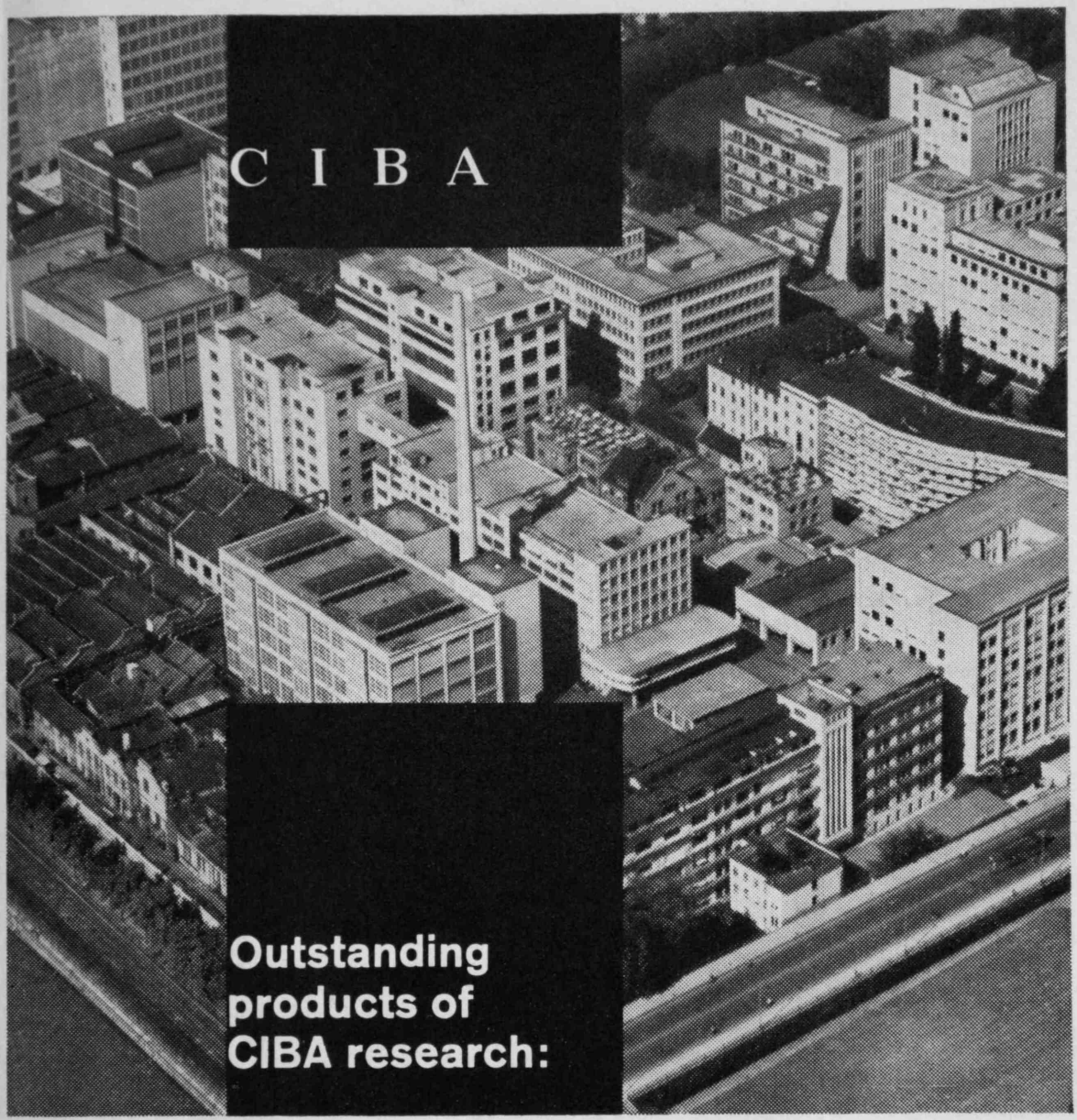


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# *Physiological aspects of convalescence*

A Common feature in illness, injury or shock, is the loss of weight, strength and appetite. Clinical observation shows that the body sustains a considerable protein loss due to the excessive catabolism of body protein—resulting in a negative nitrogen balance. The dietetic aspect of convalescence is, therefore, an important factor in restoring nitrogen equilibrium.

During the early stages of recovery, patients frequently suffer from loss of appetite. This may be further aggravated by pain in swallowing or inability to retain food. In such cases, care should be taken to include in the diet foods of high protein value which are palatable and easy to assimilate.

*Brand's Essence of Chicken is a first-class protein of animal origin. Being partly hydrolised, it is capable of easy ingestion, digestion and absorption. It is extremely palatable and may be taken either as a jelly or a liquid. It is an ideal means of supporting convalescence and restoring a positive nitrogen balance.*


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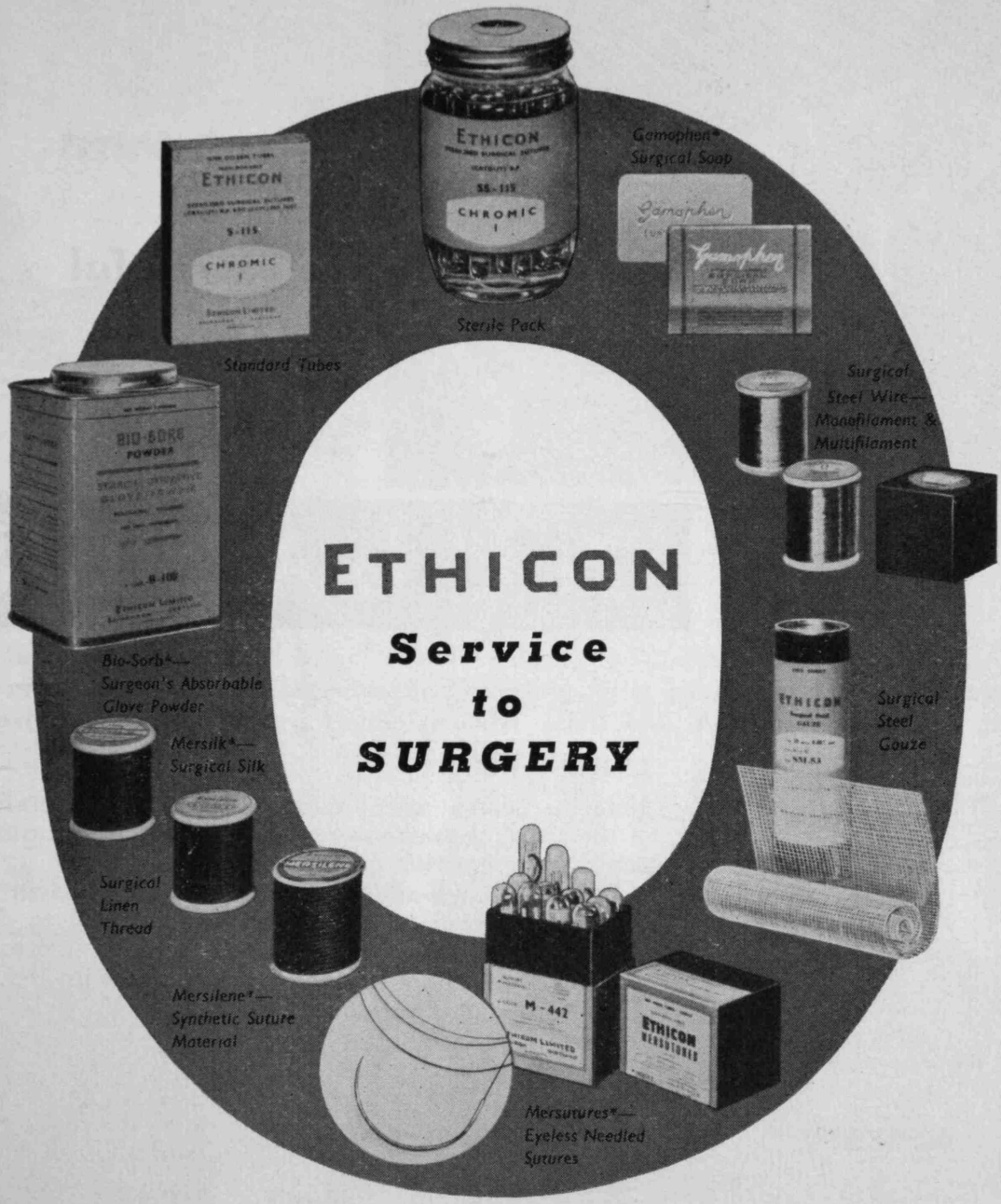


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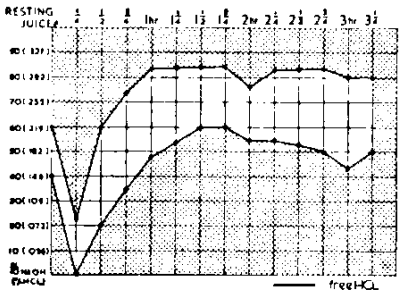
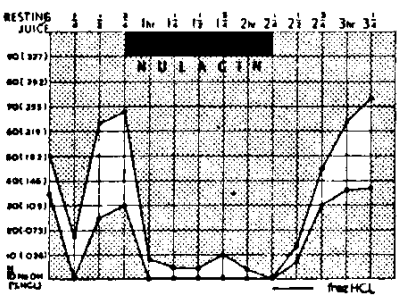
# The key to successful peptic ulcer treatment

# NULACIN

NULACIN effectively controls gastric acidity. The value of Nulacin in the treatment of peptic ulcer and the prevention of relapse has been confirmed by clinical studies in Great Britain, Australia, the U.S.A. and India. Nulacin tablets are palatable and convenient.



**GASTRIC ANALYSIS** *Superimposed gruel fractional test-meal curves of five cases of duodenal ulcer.*




**GASTRIC ANALYSIS** *Same patients as in Fig. 1, two days later, showing the striking neutralizing effect of sucking Nulacin tablets (3 an hour). Note the return of acidity when Nulacin is discontinued.*

## INDICATIONS

Nulacin tablets are indicated whenever neutralization of the gastric contents is required: in active and quiescent peptic ulcer, gastritis, gastric hyperacidity.

Beginning half-an-hour after food, a Nulacin tablet should be placed in the mouth and allowed to dissolve slowly. During the stage of ulcer activity, up to three tablets an hour may be required. For follow-up treatment, the suggested dosage is one or two tablets between meals.

Nulacin is available in dispensary packs of 25 tablets and handy tubes of 12.

Nulacin tablets are prepared from whole milk combined with dextrins and maltose, and incorporate Magnesium Trisilicate 3.5 grs.; Magnesium Oxide 2.0 grs.; Calcium Carbonate 2.0 grs.; Magnesium Carbonate 0.5 grs.; Ol. Menth. Pip.q.s.


**BIBLIOGRAPHY**

The Control of Gastric Acidity, *Brit. Med. J.*, 26th July, 1952, **2** : 180-182
Medical Treatment of Peptic Ulcer, *Med. Press*, 27th February, 1952, **227** : 195-199
Notes on Remedial Agents, *Med. Rev.*, September, 1952, **46** : 162
Discussion on Peptic Ulceration, *Proc. Roy. Soc. Med*, May, 1953, **46** : 354
The Effect on Gastric Acidity of "Nulacin" Tablets, *Med. J. Aust.*, 28th November, 1953, **2** : 823-824
Control of Gastric Acidity by a New Way of Antacid Administration, *J. Lab. Clin. Med.*, 1953, **42** : 955
Further Studies on the Reduction of Gastric Acidity, *Brit. Med. J.*, 23rd January, 1954, **1** : 183-184
Clinical Investigation into the Action of Antacids, *The Practitioner*, July, 1954, **173** : 46
Management of Peptic Ulceration in General Practice, *Med. World*, December, 1954, **81** : 591-601
Ambulatory Continuous Drip Method in the Treatment of Peptic Ulcer, *Amer. J. Dig. Dis.*, March, 1955, **22** : 67-71
Notes on Remedial Agents, *Med. Rev.*, October, 1955, **49** : 142
Antacids in Peptic Ulcer, *The Practitioner*, January, 1956, **176** : 103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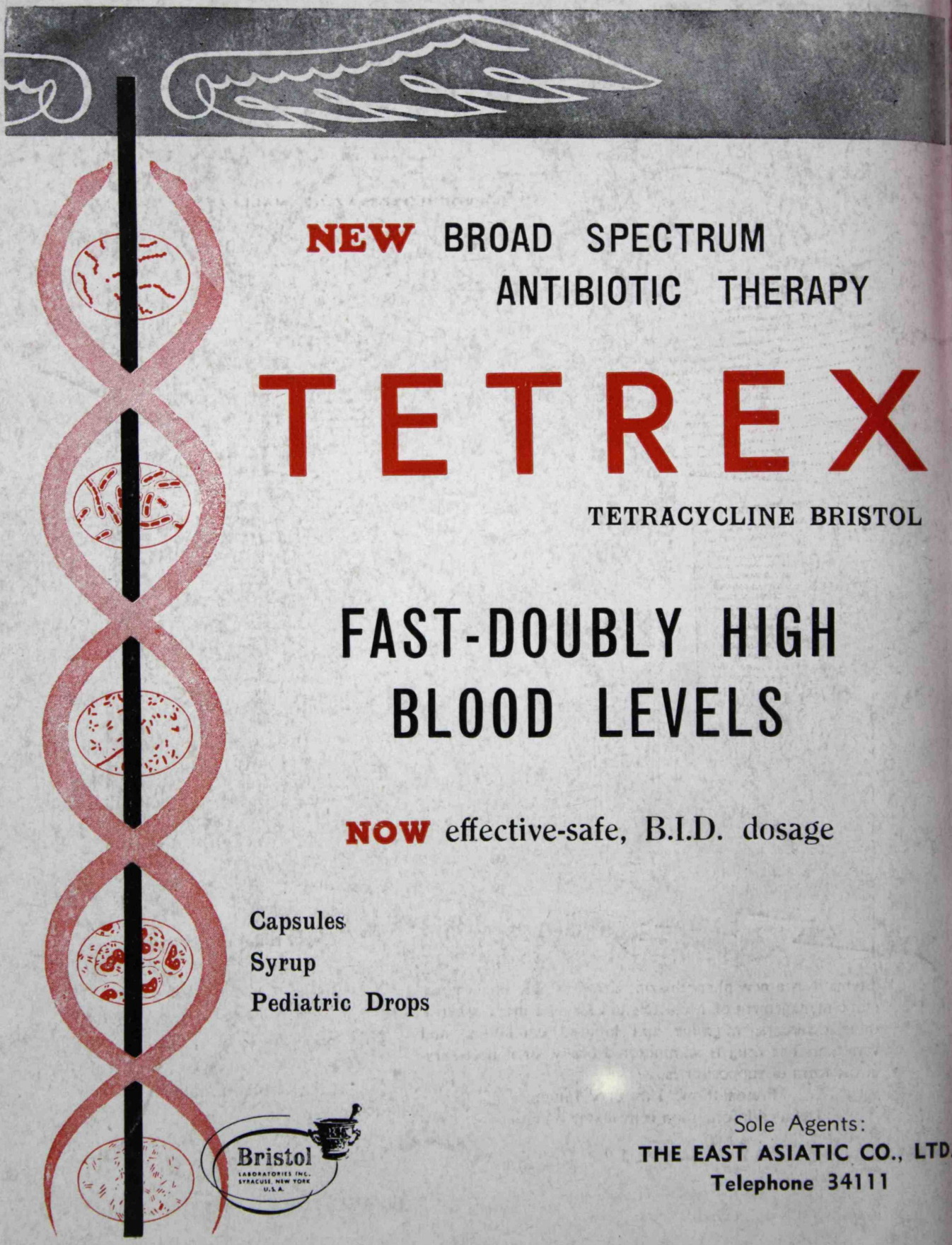

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