The 400th anniversary of the birth of William Gilbert of Colchester, who—as Priestley so quaintly wrote in 1767—"may justly be called the father of modern electricity, though it be true that he left his child in its very infancy," occurs this year. It is therefore fitting to reproduce his likeness at this time in commemoration of this anniversary.

The only contemporary portrait of Gilbert known to exist at the present time is a small panel painting discovered by the late Silvanus P. Thompson. It was used by Charles Singer to illustrate an article entitled "Dr. William Gilbert (1544-1603)" which was published in the Journal of the Royal Naval Medical Service for October, 1916.

An original portrait, probably painted by Cornelius Jansen and bearing the date "1591. aetatis 48" is mentioned by Hearn in his Letter Containing an Account of Some Antiquities between Windsor and Oxford, with a List of the Several Pictures in the School Gallery Adjoining the Bodleian Library, 1708, p. 33. This is probably the painting which Gilbert is said to have ordered made of himself for presentation to the University of Oxford. A manuscript entry at Oxford, however, states that it was removed as decayed in 1796. There remains only a poor engraving by Clamp, made in 1796, and not true to the original portrait in several details. However, this engraving, which is reproduced in Fig. 2, has preserved something more of Gilbert's outward appearance than his pointed beard, ruff, and high hat. "The keen straightforward searching glance, the twinkling play of good-humored sarcasm, ready to vent itself on all 'old wives' gossip' and 'foolish vanities,' the frank, fearless, open countenance, intolerant only of shams and frauds—all these characteristic traits of the man are not untraceable in the portrait."

Arthur Ackland Hunt made use of Clamp's engraving for his well-known historical painting of Gilbert showing his experiments on electricity to Queen Elizabeth and her court, which is here reproduced in Fig. 3. This painting was presented by the Institution of Electrical Engineers and Science Monthly
Engineers to the Corporation of Colchester on December 10, 1903, the 300th anniversary of Gilbert's death.

The charming word picture of Gilbert given by Thomas Fuller in his History of the Worthies of England (1662) is worth quoting in its entirety in this connection. The quaint and witty style is characteristic of Fuller who states that his information came from a near kinsman of Gilbert's. Fuller wrote as follows:

"William Gilbert was born in Trinity Parish in Colchester, his Father being a Counsellour of great Esteem in his Profession, who first removed his family thither from Clare in Suffolk, where they had resided in a Gentile Equipage some Centuries of Years."

"He had (saith my informer) the Clearness of Venice Glass without the Britteness thereof, soon Ripe and long lasting in his Perfections. He Commenced Doctor in Physick, and was Physician to Queen Elizabeth, who Stamped on him many marks of her Favour, besides an Annual Pension to encourage his Studies. He addicted himself to Chemistry, attaining to great exactness therein. One saith of him that he was Stoical, but not Cynical, which I understand Reserve'd, but not Morose, never married, purposely to be more beneficial to his Brethren. Such his Loyalty to the Queen, that, as if unwilling to survive, he dyed in the same year with her 1603. His Stature was Tall, Complexion Chearful, an Happiness not ordinary in so hard a Student and retired a Person. He lyeth buried in Trinity Church in Colchester, under a plain Monument."

"Memorie: Tombe at Mecca is said strangely to hang up, attracted by some invisible Load-stone, but the Memory of this Doctor will never fall to the ground, which his incomparable Book De Magnete will support to Eternity."

Gilbert's contributions to science have been admirably summed up by Silvanus P. Thompson, the chief authority for his life and work as follows:

"Gilbert's renown rests not on his eminence as a physician, but on his achievements in the foundation of the twin sciences of electricity and magnetism. He is beyond question rightly regarded as the father of the Electrical Science. He founded the entire subject of Terrestrial Magnetism. He also made notable contributions to Astronomy, being the earliest English exponent of Copernicus. In an age given over to metaphysical obscurities and dogmatic sophistry, he cultivated the method of experiment and of reasoning from observation, with an insight and success which entitles him to be regarded as the father of the inductive method. That method, so often accredited to Bacon, Gilbert was practicing years before him."

Thompson's papers and lectures on Gilbert are all of great interest. Unfortunately, many of them were privately printed and are not readily available. It may be of value, therefore, to list them here. They include the following titles:


William Gilbert, and Terrestrial Magnetism in the Time of Queen Elizabeth. A discourse before the Royal Geographical
experimenti~

Much with the mere mechanics of a world organization or There remains, however, the most crucial question of

great magnet; the Earth; a new Physiology, demon-

nete

entation

nations which at the close of this war will
desire of all nations. Great and to prevent aggression. The experience of the past

carly and the prestige to provide the rest of the world with collective security. If these three nations hold together,

and work together, they can guarantee that no aggres-
sor nation or group of aggressors shall challenge the

preservation of peace for many years to come. If they
do not hold together and work together during the years
follo~ing the close of the war, then no paper guarantees

for the maintenance of peace will much avail.

This is a stark reality of the present world situation,
and one which in its importance outweighs all the others.

To insure that the United Nations shall stay united will
require large concessions from all of them, and not least
from ourselves; but our willingness to do whatever is
required should be in keeping with the magnitude of the
disaster which must result if unity fails.

But while the initiative and the leadership in forming
a world organization must be supplied by joint action of
a few dominating powers, it seems equally clear and
essential that the responsibility for the prevention of
future aggression must be assumed in the long run by all
the peace-loving nations of the earth and not by any
single group of them. To this end it is necessary that the
world organization shall have an assembly or great
council in which all eligible nations are represented,
and equally represented. They should have equal
representation because all nations, whatever their size
or importance, are equal in their rights at international
law. A full recognition of this fundamental principle
marks the corner-stone of any world organization
which sets out to establish and maintain a reign of law
and justice among the nations.

One should hasten to point out, however, that there is
no inconsistency between equality of rights and
inequality of power and influence. Nations, like states,
can have a wide disparity in population, resources and
prestige while nevertheless maintaining a fundamental
equality in all their rights and privileges. In the sister-
hood of American states, New York and Rhode Island
are far from being equal in stature; but in their rights
as states, under the Constitution and the laws, they are
on a plane of guaranteed equality. It is to the everlasting
credit of those who framed the Constitution of the
United States that by a great compromise they succeeded
in devising a plan whereby the equality and the ineq-

ualities of the states could be harmonized in the same
structure of federal government. Americans should have
no difficulty, therefore, in reconciling themselves to a
form of international organization which accords equality
of representation to all member nations in one council
while denying them this privilege in the other. We have
been familiar with that working arrangement for over
150 years.

There remains, however, the most crucial question of
all. How shall a world organization, whatever its form,
make its decisions effective? This goes to the heart of
the whole problem, for no international body can hope
to prevent aggression unless it is given the physical power
to prevent aggression. The experience of the past thirty
years, if it has proved anything, should be enough to
demonstrate that neither treaties, covenants, nor solemn
pledges of non-aggression suffice to guarantee the preser-
vation of peace when gangster nations set out to take
the law into their own hands. If the world is to have a sur-
cease from international banditry during the next genera-
tion it will be because we have shown ourselves able to
create, somehow or other, the means of promptly and
desirably meeting force with force whenever an aggres-
sor nation resorts to force. No realistic view of the
world in which we live can lead to any other conclusion.

Participation of the United States in such an inter-
national force, moreover, is not a matter of choice but of
necessity. Without such participation our adherence to