

The Shakespearean Ciphers Examined.

An analysis of cryptographic systems used as evidence that some author other than William Shakespeare wrote the plays commonly attributed to him. William F. Friedman and Elizabeth S. Friedman. Cambridge University Press, New York, 1957. xvii + 303 pp. Illus. \$5.

The Friedmans have attempted a scientific examination of an irrational cult. That is at once the strength and the weakness of their book.

An astonishing number of people, most of them educated and many of them distinguished scholars, have denied that Shakespeare wrote the plays attributed to him by his fellow actors Heminge and Condell and by many others of his contemporaries. Yet a few of the witnesses, like the first important one, Robert Greene, were so hostile that they would have missed no opportunity to reveal a hoax had they suspected its existence. Why has their testimony been disputed? The idolatry of Shakespeare's extreme admirers during the 19th century inevitably produced sceptics who pointed out that the idol was only a simple country boy from Stratford who could not possibly have possessed the supernatural wisdom claimed for the author of the plays. But the sceptics themselves needed a faith. Looking for a more suitable candidate for apotheosis, they lighted upon Francis Bacon, whom they supposed the founder of modern science and the wisest man of his age. The Baconian hypothesis is, in its way, a minor heresy thrown off by the modern worship of science. But other claimants have also been advanced—the Earl of Oxford, Queen Elizabeth, and most recently, Christopher Marlowe.

This denial of Shakespeare's authorship is fundamentally a faith held in defiance of evidence that scholars trained in historical research find thoroughly convincing. But the Baconians, too, sought for evidence to support their faith; and, since Bacon had himself described an extraordinarily good cipher based upon the use of two fonts of type in the same text, they have looked for ciphers, as well as acrostics and anagrams, in the works of Shakespeare and Bacon. Different type faces undoubtedly appear there, as they do in almost all Elizabethan books. Proponents of the ciphers have claimed to find not only revelations that Bacon (or others) wrote the plays but also various historical revelations, often scandalous, and even other plays concealed as cryptograms in the folio text of Shakespeare. These claims the Friedmans study in the light of their expert knowledge and experience (they are among the most distinguished living cryptologists), and they easily demonstrate that the so-called ciphers meet

none of the tests imposed by a good cryptologist and are so loosely conceived that they could produce any result subconsciously desired by their proponents. As a scientific examination of evidence, this book is devastating, and it would settle the controversy forever if a faith could be destroyed by rational arguments.

But the faith itself is, to the student of human behavior, more interesting than the spurious ciphers developed to buttress it. The Friedmans furnish only glimpses into the minds of the decoders. All of them invite curiosity as to their mental processes; one, at least, betrays, in the revelations that she detected, symptoms of sexual pathology. A fuller discussion of the human phenomena behind the alleged cryptograms would have made the book, for one reader at least, more interesting and more significant as a contribution to learning.

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The World Beneath the Waves. Gilbert Doukan. Translated by A. and R. M. Case. De Graff, New York, 1957. 356 pp. Illus. \$6.

This volume is a comprehensive compendium in which are described the efforts of man to penetrate beneath the waters, both of the shore and of the open ocean, and there to carry on various activities. The major emphasis is on skin diving and hunting, and the locale is chiefly Italy and France. The translation has been done well, and the coverage is thorough. Among the subjects is the history of diving, without and with apparatus, from the first man who ducked his head beneath the surface to Cousteau and Gagnan, with their modern, self-contained diving gear. Special submarine pursuits such as archeology and photography are also considered.

Throughout the book there is evident an attempt to keep the actual hunting and killing of fish in reasonable perspective and to stress the acquisition of scientific facts of behavior and life histories. This is so obviously desirable an approach that the author's emphasis is hardly needed. The matter is well summed up in a brief quotation from J. M. Peres: "Yes, it is interesting to dive deeply, of course, but we are still so ignorant of what happens between zero and thirty feet! We should begin by making a meticulous study of this superficial coastal zone; there alone there is plenty of work ahead of us for a long time to come."

As an example of the thoroughness of treatment we may take the section on venomous organisms. This is divided into

coelenterates (with the accent on medusae), echinoderms, and fishes. The creatures themselves, their method of inflicting injury, the symptoms, relative danger, and subsequent treatment are discussed in detail.

After an account of the habits of sharks and the relative danger of their attack, the author ends with a quotation from Cousteau: "It is impossible to guess how a shark will react; the more one sees of them, the less one knows them, and one mistrusts them more and more. By constantly worrying them in their own world, divers are asking for trouble. I am expecting to hear of an accident any day now, and it certainly won't be long before one happens."

In the course of hundreds of dives I have never been attacked and only rarely threatened, but I heartily concur in the final words of the author—"Beware of the sharks!"

On the whole, the volume is a welcome improvement over the majority of the numerous books on skin diving. It is well balanced, clearly written, and worth being read by those who are desirous of descending beneath the waters and those who are curious to learn of the apparatus by which man has made this possible.

The reader is grateful for an abundance of line cuts and for adequate indices, one of scientific names.

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The Space Child's Mother Goose. Verses by Frederick Winsor. Illustrations by Marian Parry. Simon and Schuster, New York, 1958. 45 verses and a glossary of terms. \$3.50.

A little knowledge of the vocabulary of science and technology plus an unatrophied delight in *Mother Goose* are positive indicators of a pleasant encounter with the space child's version of a number of old favorites.

The first verse gives the flavor of the volume.

Probable-Possible, my black hen,
She lays eggs in the Relative When.
She doesn't lay eggs in the Positive
Now
Because she's unable to Postulate
How.

Or perhaps you will like better

Möglich-Warscheinlich, mein'
Schwartzhenn',
Legt ihr Ei in das Relativwenn.

More examples: the mouse on the Möbius strip opens up possibilities unknown to the mouse on the clock; anyone who has ever bounced a youngster on his knee to "This is the way the