CHAOCIPHER

By J. F. BYRNE

On November 18, 1953, The writer received a book entitled "Silent Years An Autobiography with Memoirs of James Joyce and Our Ireland" by J.F.Byrne. I received this book for review from Farrar, Straus and Young publishers of 101 fifth Ave., New York City; and they expressed the desire to see this review published in "The Cryptogram" the official organ of the American Cryptogram Association; of which I am the official Editor.

In this respect, I encountered an unexpected difficulty from the ACA publisher, Mr. W. C. Bell III who, in a letter dated 3 December 1953 wrote as follows in the fifth and final paragraph:

"We are always in the midst of problems - and the book "Silent Years" is one of them. We have a J?F.Byrne from New York City as an ex-member (Didn't pay his dues) and who is approximately twenty-two years old and has the same address as the reported author of "Silent Years". (After my personal conversation with J.F. Byrne, he informed me that his son belonged to either the ACA or the NYCS - He was not sure which) So far, Farrar, Straus and Young have not unraveled the doubts in my mind as to just what the hell is going on. Contests suggest puzzles and I am an anti-puzzle man as far as the ACA is concerned. But if you will re-analyse the proposition in the chapter on Chaocipher, you will see that Byrne does not offer a \$5,000 prize ... His prize is a maximum of \$5,000, funds to be derived from a three months royalty collection. Personally, I do not feel that the guy represents (This is a cipher consideration only, I do not know the rest of the book or the validity of its contents) a healthy outlook. There are thousands like him that just can't give up a bad idea mainly because they have ideas of grandeur associated with the importance of their brain-child. True, some people have made a fortune on one-idea but most of us do not. I had the galley proof on the chaocipher and it appears to me that the book was written with the prime idea of taking a crack at a "class" group which in this case is the cipher experts. You can't tell me that you can run a gaunlet of experts with a thumbs down negation 100% and still insist that the idea is good. Actually the ACAand the NYCS are placed in the same light as the Washington Experts, with the hope, of course, that somebody in the two organizations might champion the cause. The great failing in the "Cipher inventor" class is that anything that is not recognisable mother language is good. Use to have an average of about two systems per week arrive at this point but not anymore. Not since I started sending out "retainer" invoices for \$50.00 before any consideration will be given to their brain-child. Believe me, a "Please disregard" letter bounced into our mail box in a hurry"

This letter, of course, indicated to me that Farrar, Straus and Young had also contacted the publisher and since he wouldn't do anything, there was absolutely nothing that I could do in respect to writing a review. The fact also remains that Mr. Bell and I did not see eye to eye on a great many things insofar as the organization's magazine was concerned.

Getting back to the book itself: The cover containing information about Mr. Byrne related the following facts concerning the author:

"John Francis Byrne was born in Dublin, in the seething political era when Ireland was battling for home rule. Along with James Joyce, he attended Belvedere College and University College, both in Dublin, and he completed his education at Dublin University. In 1910 Mr. Byrne came to New York, where he was a reporter, editorial writer, and daily columnist, contributing at different times to the Daily News Record, the New York Times, Poor's Manual an the Wall Street Journal. He has also written for numerous magazines and newspapers abroad.

Mr. Byrne is the inventor of the "Chaocipher", samples of which are included in Silent Years. Mr. Byrne is of the opinion that this cipher, which has been examined by the Department of Defense, cannot be "Broken", and he challenges the reader to do so." It was, of course, the final chapter titled "Chaocipher" that intrigued me most and en

It was, of course, the final chapter titled "Chaocipher" that intrigued me most and en December 4, 1953, I wrote to Mr. Byrne at 1114 New York Ave., N.Y.City and asked if it would be possible for him to give me the chance to observe a demonstration of his machine cipher. On December 11, 1953, I received a reply to my letter and Mr. Byrne stated that he would be delighted to grant my request and went on to say that I would be astounded by its simplicity; and also, no less, by its astounding multiplicity.

In the third paragraph of this letter dated Dec.12, 1953, He added: "I would want you, however, to give me prior assurance that you regard this whole matter as being for the present strictly confidential. The reason for this does not consist in my fear of com-

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promising anything; but only because of the fact that I have never yet even applied for a patent for my device or system - a fact for which I am glad for at least two big reasons. Unfortunately, I do not have, and never had a "spare", and I want you to know that my enciphering device is also my deciphering device - one and the same. "

In the fourth paragraph, he went on to write: "I am having a talk about this matter to morrow, Friday, afternnon with Mr. Roger Straus, who is, as you might know, also interested in cryptography. Rosario Gandela also was much interested since two years ago, and I had given him a galley proof of my chapter on Chaocipher in "Silent Years" about nine weeks before his recent death. I am sedning this by special delivery, and wo ld like you to write me as soon as you can. If it suits you, I would be glad to come to have a pre-

liminary talk with you for a half hour or so any afternoon in the preferably near future." For some reason or other, our correspondence did not resume until March of 1954 at which time Mr. Byrne wrote that the time period for the solution of his cipher had now expired and no one had submitted a solution. He was still interested to know whether or not some reference to his book and chaocipher would appear in the ACA magazine. He also stated that some persons have manifested interest in the development and promotion of the Chaocipher device. Among the most interested of these are two extremely bright and educated young men, one of whom is a graduate cum laude, in physics, of Williams College and also a graduate of M.I.T., and is now in the electronics department of Varian Associates in California. (Two months later - on May 18, 1954 - I received a letter from one Mr. Howard N. Smith of 41 Reesevelt Circle Pale Alto, California who requested that he be admitted as a member of the American Cryptogram Association and also requested information as to the following: Is it theoretically possible to devise a cipher which would be absolutely indecipherable to anyone lacking the exact key ? Has such a cipher ever been invented ? Or is the problem similar to the problem of perpetual motion in physics ? He also wanted to know whether there were any men in the Northern California area, or on the West Coast who might be interested or considered expert or near-expert in the matter of cibers and cryptography --- During my conversation with Mr. Byrne on May 24, 1954, it so turned out that he had already discussed his Chaocipher with this Young man and one af his associates and that he had found to his satisfaction that Mr. Smith did not have the proper attitude in regard to the cipher. As Mr. Byrne stated: The first thing he wanted to do after seeing the Chaocipher demonstrated was to check with the Navy Department to see if the cipher was invulnerable to decipherment. This person, of course, must also be the one Mr. Byrne referred to above "two extremely bright and educated youn men")

Our proposed meeting did not come off as expected. Mr. Byrne left for Alameda, California to visit his son in March; however, he wrote in a letter dated March 27th that he would communicate with me upon his return to New York. He wrote: "I regret that our personal contact has been so long delayed, and I deplore the fact that this is due to the misfortunate error of the wrong number of my address given in my first letter to you. (This explains our long bilence regarding correspondence.) Until we meet, then, and for long afterwards I hope, Yours very sincerely, J.F.Byrne."

In a letter dated April 3, 1954, Mr. Byrne wrote: "In addition to this definite question I would like to ask you another which has, of course, to be hypothetical. And this question is whether or not, in the event of your being interested in the domonstration I would give you, you would be in a position to do anything, or have any one or more of your friends or acquaintances do anything tewards the practical development and promotion of my chaocipher device and system for business, literary, or home purposes, or for any other purpose ? It should scarcely be necessary for me to say explicitly here, that I would, of course, be willing to give you some such interest in the final financial settlement as would be mutually agreeable to both of us."

In answer to this letter dated April 6th, 1954, I wrote: "In regard to my keeping your invention confidential; you have my word of honor upon that point; however, let me be fair and advise you that; at the present time, I haven't any finances with which to subsidize the Chaocipher. As a matter of fact, I am just beginning to get started myself, after some twenty-years of fooling around with ciphers". I also informed him that "if you are able to obtain financial aid for your project out on the West Coast, do so, as you can see from the above, I'm a mere probable; whereas someone out there might be of definite assistance to you."

This letter of mine must have impressed him very much for he wrote back immediately to this effect: "I think your latest letter was forthright, honest, and honorable, and I will be glad to have our get-togeher at your earliest convenience."

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On May 3, 1954 Mr. Byrne wrote to me that he was back from California, after a long and tiresome journey by train, with several stopovers. He also added that he was looking foreward eagerly to that long deferred get-together or ours. He also added: "Never at any time had I any thought of your investigg any money of yours in my chaocipher. That is not, and never was, any part of my idea".

After this lette r I talked long distance to mr. Hyrne and we arranged several dates for our proposed getagether; however, one thing or another cropped up to prevent us.

Finally, on May 24, 1954, Mr. Byrne and his wife arrived at my home at 4:40 in the afternoon. We spent a pleasant two hours together discussing the Chaocipher and he very cordially presented to me a copy of his original manuscript "Chaocipher - the Ultimate Elusion", autographed. He also autographed my copy of his book "Silent Years". He told me much about his meetings in washington, but could not elaborate on this as he had been sorn under eath to keep certain information strictly confidential. He is no longer interested in promoting the cipher machine for military or diplomatic purposes. Instead he is desireus of interesting some "toy manufacturer" in the development and promotion of his machine.

I was rather disappointed that he had not brought his chaocipher machine along with him but, as he explained, it is heavy and cumbersome and that I would eventually see it at a later date when he would demonstrate its principles to me. He did, however, show me blueprints of his machine which were, however, lost upon me as I do not read blueprints. He did tell me, though, that the arrangement was similar to a typewriter and that two wheels with the alphabet (thoroughly mixed) arranged upon its perimeter was the main part of his machine.

Mr. Byrne and his wife left on the 6;54 bus for New York City and it was tentatively arranged that I come up to see him at his apartment at some near future date.