



Gold-Bugs

EDGAR ALLAN POE established the short story as a definite and accepted form in English literature, and *The Gold Bug* is without doubt one of his most effective short stories. If there be, in this callous age, any young persons who have not yet read this thriller, let them do so at once and learn thereby what thin stuffs their favorite vintages of present-day mystery stories are after all.

But where Poe's gold-bug led the seekers in his story to buried wealth, the real gold-bugs that crawl and fly about our fields nowadays are destroyers of buried wealth. For one of the most troublesome enemies of the sweet potato crop is a most attractively spotted, gold-glittering little beetle about a third of an inch long. Together with its squashy, maggot-like larvae, it is found on the leaves of sweet potatoes and their relatives the morning-glories and the bind-weeds, feeding greedily.

They live through the winter as adults in dry, sheltered places, under bark or trash. They come out of hibernation rather late, and are found feeding on the plants during the earlier part of the summer.

Without doubt, the sacred scarab of Egypt would have had to look to his place in the sun, or rather to his place as the sun, had this second cousin of his, more nearly sun-colored than himself, been a resident in the Nile valley during the time of the Pharaohs. The gold-bug, however, is an American insect, as the vegetable he infests is also American, so that he missed his chance for quasi-divine honors.

Science News Letter, August 15, 1931

The first printed arithmetic was an Italian work published in 1478.

LINGUISTICS

Talks Over Telephone Made Up Largely of Word Repetition

First Study of Wire Conversations Reveals Sounds Most Used and May Aid in Improving Transmission Apparatus

ONE THOUSAND people spoke, using 80,000 words, of which only 2240 were different. And of these different words, 819 were used only once. Thus 99 per cent of 80,000 words of conversation was made up of only 1421 words used over and over again many times.

Thus might be summarized findings of a study of the words and sounds of telephone conversation reported in the *Bell System Technical Journal*. Obviously this study, conducted by Norman R. French, Charles W. Carter, Jr., and Walter Koenig, Jr., points an accusing finger at the diminutive vocabulary of the average American, even when 500 different people pool their resources of speech. But it does more than that.

This is the first study of the frequency of speech sounds in oral English, the scientists believe. Written matter has been analyzed before and the results of these past researches supply interesting material for comparison with the study of oral speech. There is also another reason for the research. By finding what sounds are repeated most frequently, telephone engineers may work toward improving their transmission.

Observations were made on typical

toll conversations in New York City. During one week the person listening in recorded verbs only, the next week nothing but nouns, and the third week adjectives and adverbs only. Data was taken on 500 conversations each week.

Apparently, over the telephone people talk about themselves more than about any other subject, for more than 7500 of the 80,000 words were the pronouns "I" and "you." In fact, 121 different words which constitute the minor parts of speech form more than half, 45,000, of the total occurrences.

Strangely, more words of Latin origin are used in conversation than in writing. Of the 100 most frequently used words of conversation, 11 are of Latin origin as compared with only two from the first 100 written English. Twelve active verbs such as "get," "see" and "know" occur among the 50 most used words of conversation, yet are absent from the first 50 words of written English.

More than four-fifths of the conversation words were naturally monosyllables, largely a result of the frequent repetition of the minor parts of speech, of which 95 per cent are monosyllables.

Science News Letter, August 15, 1931

CONVENIENCE COUPON

for New or Renewal Subscription to *Science News Letter*

Send this coupon to Washington while you are thinking of it.

Science News Letter,
21st and Constitution Avenue,
Washington, D. C.

Please start renew my subscription to SCIENCE NEWS LETTER. I am enclosing remittance as checked below:

- 2 years, \$7
 1 year, \$5

Name _____

Street Address _____

City and State _____

If this subscription is a renewal, check here