#### **BOOK REVIEWS**

### "Coin Games and Puzzles" by Maxey Brooke

Published by Dover Publications, \$2.00 approx.

As enjoyable as the author's other book "Tricks Games and Puzzles with Matches" which I reviewed in Parabola Vol. 10 No. 3.

Most of these coin puzzles need the diagrams in the book to explain them, although they are not complicated, so I won't quote any examples here. But take my word for it they're as entertaining as the match tricks; I've tried some of them. The author suggests that a mastery of some of them will make you the centre of attention at parties — well, maybe, but I'm sure your friends will want to borrow the book from you!

## "Exploring Mathematics on your own" by W.H. Glenn and D.A. Johnson Published by Dover Publications, \$2.65

When I recommend a book, particularly to new or younger readers of Parabola, as I do this one, I worry that I may be sounding condescending, which I think is the worst sin a reviewer can commit. What I hope I am saying is that for those unfamiliar with the topics covered, this is an excellent introduction to them. I hasten to add that our more mathematically sophisticated readers may also find this book useful and enjoyable and give them a new viewpoint on many matters.

The chapter headings should give you a good idea of the contents:— Understanding Numeration Systems; Number Patterns; The Pythagorean Theorem; Sets, Sentences and Operations; Topology; Fun with Mathematics. There are plenty of problems to be solved (with answers), diagrams, stories and at least two limericks!

# "Recreational Problems in Geometric Dissections and How to Solve them" by Harry Lindgren. Published by Dover Publications, \$2.10

What is the minimum number of pieces that a regular octagon can be cut up into such that they can then be reassembled into a square? Surprisingly the answer is 5, as far as is known. This uncertainty could only be cleared up by a rigorous mathematical proof of the impossibility of 3 or 4 parts being sufficient. But you don't need to be an experienced mathematician to tackle dissection problems; they form a fascinating hobby for anybody even if they have only a minimum knowledge of mathematics.

The book not only discusses all the standard types of dissection, illustrated by numerous diagrams, but also contains more than 50 problems for the reader to solve, together with solutions to each one. Finally let me point out that the author who is certainly the leading world expert on the subject follows it purely as a hobby; his job is that of patent examiner for our own government at Canberra.

### "Mathematical Puzzles for Beginners and Enthusiasts" by G. Mott-Smith Published by Dover Publications, \$1.85

There are close on 200 puzzles and solutions in this book covering a very wide field from logic to number and board games, though the bulk are on more traditional mathematical areas. The standard of the book is well up to that of similar collections reviewed in Parabola. If you tackle our Parabola problems, you will like these.

#### "More Fun with Figures" by J.A.H. Hunter

#### Published by Dover Publications, \$1.05

This is similar to this author's earlier book "Fun with Figures" reviewed in Parabola Vol. 10 No. 2. The publisher's description tells us that Mr Hunter ran a regular newspaper feature and these are good examples of such problems. Here's a missing figure problem in a multiplication sum.

### "My Best Puzzles in Mathematics" by Hubert Phillips ("Caliban")

Published by Dover Publications, \$1.35

Caliban is a well known problem setter in England where he has published such brainteasers regularly in papers like the Daily Telegraph and the Evening Standard so you may wish to try some of them on your parents, too. You can assure them that they don't need to know calculus or other H.S.C. mathematics to solve the problems: pencil, paper and a sharp mind will be quite adequate. For example:—

"You want a train for Greenleaf?" said my host. "I haven't a timetable, unfortunately. All I can tell you is that, if you like to take a chance, the odds are 7 to 3 in favour of the next train from the down platform being a Greenleaf train."

I made further enquiries and found that the down trains ran alternately, to Greenleaf and to Blackthorn. There was a train every half-hour to Greenleaf, and a train every half-hour to Blackthorn.

At what time did my train leave for Greenleaf?

The answer is in the book!

M. Greening



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