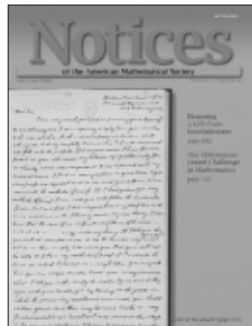## About the Cover

Out of the Groove

<p align="right">Madras Port Trust Office
Accounts Department.
27th February 1913.</p>

Dear Sir,

I am very much gratified on perusing your letter of the 8th February 1913. I was expecting a reply from you similar to the one which a Mathematics Professor at London wrote asking me to study carefully Bromwich's Infinite Series and not fall into the pitfall of

divergent series. I have found a friend in you who views my labours sympathetically. This is already some encouragement to me to proceed with an onward course. I find in many a place in your letter rigourous proofs are required and so on and you ask me to communicate the methods of proof. If I had given you my methods of proof I am sure you will follow the London Professor. But as a fact I did not give him any proof but made some assertions as the following under my new theory. I told him that the sum of an infinite number of terms in the series $1 + 2 + 3 + 4 + \cdots = -1/12$ under my theory. If I tell you this you will at once point out to me the lunatic asylum as my goal. I dilate on this simply to convince you that you will not be able to follow my methods of proof if I indicate the lines on which I proceed in a single letter. You may ask how you can accept results based upon wrong premises. What I tell you is this. Verify the results I give and if they agree with your results, got by treading on the groove in which the present day mathematicians move, you should at least grant that there may be some truths in my fundamental basis. So what I now want at this stage is for eminent professors like you to recognize that there is some worth in me. I am already a half starving man. To preserve my brain I want food and this is now my first consideration. Any sympathetic letter from you will be helpful to me here to get a scholarship either from the University or from Government.

With respect to the mathematics portion of your letter…

This is the beginning of the second letter from Ramanujan to G. H. Hardy. The first, one of the most famous of all documents in the history of mathematics, had been written on January 16, and Hardy had replied from Trinity College, Cambridge, on February 8. The beginning of the first letter seems unfortunately to have disappeared, although its content has been preserved. Hardy commented in a note written July 23, 1940, "I have looked in all likely places, and can find no trace of the missing pages of the first letter, so I think we must assume that it is lost. This is very natural since it was circulated to quite a number of people interested in Ramanujan's case."

Both letters as well as other relevant items can be read in Bruce Berndt's account in *Ramanujan—Letters and Commentary*, published by the AMS. The idea of making this cover came from Ken Ono's article in this issue (pp. 640–51).

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<p align="right">—Bill Casselman, Graphics Editor
(notices-covers@ams.org)</p>