to this fountain of genuine Jewish learning to study Jewish history, Talmudic jurisprudence, Hebrew language, and the vast Jewish literature from the Bible down to the works of the New York Ghetto poet."

A provisional programme of the lectures for the first year has already been published, and the officers of the University may be addressed at the Bible House, New York City.

## SUGGESTIONS TOWARD A THEORY OF GRAVITATION.

To the Editor of the Open Court:

A distinguished English physicist has recently brought forward evidence that the atomic theory does not adequately account for the ultimate constitution of matter; a conclusion that has long been advocated by me as essential to a solution of the problem of gravitation.

In view of the evident trend of investigation in that direction it has occurred to me that this might be a favorable time to lay the matter before the public of *The Open Court*. The following is a brief synopsis of my argument:

- I. Recent discoveries in physical science tend to show that the atomic theory, in so far as it pronounces upon the ultimate constitution of matter, is unfounded. With due regard for scientific caution, we cannot go beyond the statement that matter acts as if it were composed of atoms; but further than this their existence is experimentally unproven, and it seems probable that their distinctive characters will remain forever unknown.
- II. With our conception of matter thus qualified, we may say that ether is a rarified kind of matter. This conclusion is widely disputed, but we cannot escape it without doing violence to logic, inasmuch as whatever possesses attributes of matter must be matter. The main objection to it is that matter is composed of ultimate particles and ether is not; but it is equally permissible and somewhat more consistent with the present trend of investigation to regard the atom as a center of concentration of properties inhering in ether, and continuous with it.
- III. Given a universe as above constituted and assuming the existence of a tendency to contraction at its periphery, we would then have a condition capable of effecting the phenomenon of gravitation within its mass. All solid bodies located therein would be subjected to an equal pressure on all sides except the side opposite an adjacent body, upon which side each body would be relieved of the pressure to an extent varying with mass and proximity. The result would be the establishment between the two bodies of a line of least resistance along which each body would tend to move.
- IV. This is, in substance, the theory of Le Sage; but he provided for his pressure by a system of "transmundane particles" that violated the consistency of nature. If, instead, we postulate a body of matter without discontinuity, we obviate the difficulty that made Le Sage's hypothesis intolerable. If this explanation is accepted, an adequate physical cause of gravitation will have been attained, but the problem of adjusting this conception, and the mechanism it involves, to the preconceived order of nature will raise fresh difficulties in many directions.

NEW YORK CITY. GEO. S. SEYMOUR.

## AN AMERICAN EDITION OF LOTI'S BOOK.

The Story of  $\alpha$  Child by Pierre Loti is a book that has become famous in its original form, which is in French, and needs not our praise to recommend it. The