viz., in an equation where only the ratios of a, b, and c, occur; the ratios being numbers. Thus, if $b=\beta a$, and $c=\gamma a$, we might have

$$\text{numerical value of } C = f(\beta, \gamma).$$

But this is altogether a different thing from saying that C *itself*, the angle properly so called, the inclination of a and b to one another, can be expressed in terms of a, b, and c. Now, if C itself (not its numerical value, but the absolute angle) is determined by a, b, and c; and if, nevertheless, it cannot in the nature of things be expressed in terms of a, b, and c; Legendre's demonstration, the very foundation of which is that a quantity which is determined by certain others, can be expressed in terms of them, falls to the ground.

Should it be maintained that C (the angle itself) may be expressed in terms of the numbers β and γ, *a right angle being understood to be the unit of measure*; or more fully thus:

$$C = \text{right angle} \times f(\beta, \gamma);$$

I reply that in the same manner the line c, in Legendre's reasoning, may be expressed in terms of A, B, C, *some line* L being understood to be the unit *of* linear measure; thus:

$$. = L \times f(A, T, C).$$

ON A NEW SPECIES OF AGELACRINITES, AND ON THE STRUCTURAL RELATIONS OF THAT GENUS.

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Introductory Notice.—The accompanying figure represents, on a somewhat enlarged scale, the upper side of the undescribed species of Vanuxem's rare and interesting genus *Agelacrinites*, referred to in a late number of the *Canadian Journal*. As there stated, the species in question was discovered amongst some Lower Silurian fossils, from the Trenton Limestone of Peterborough, Canada West, collected by Mr. W. M. Roger, of the University of Toronto. It is dedicated to the able palæontologist of the Geological Survey of Canada, whose