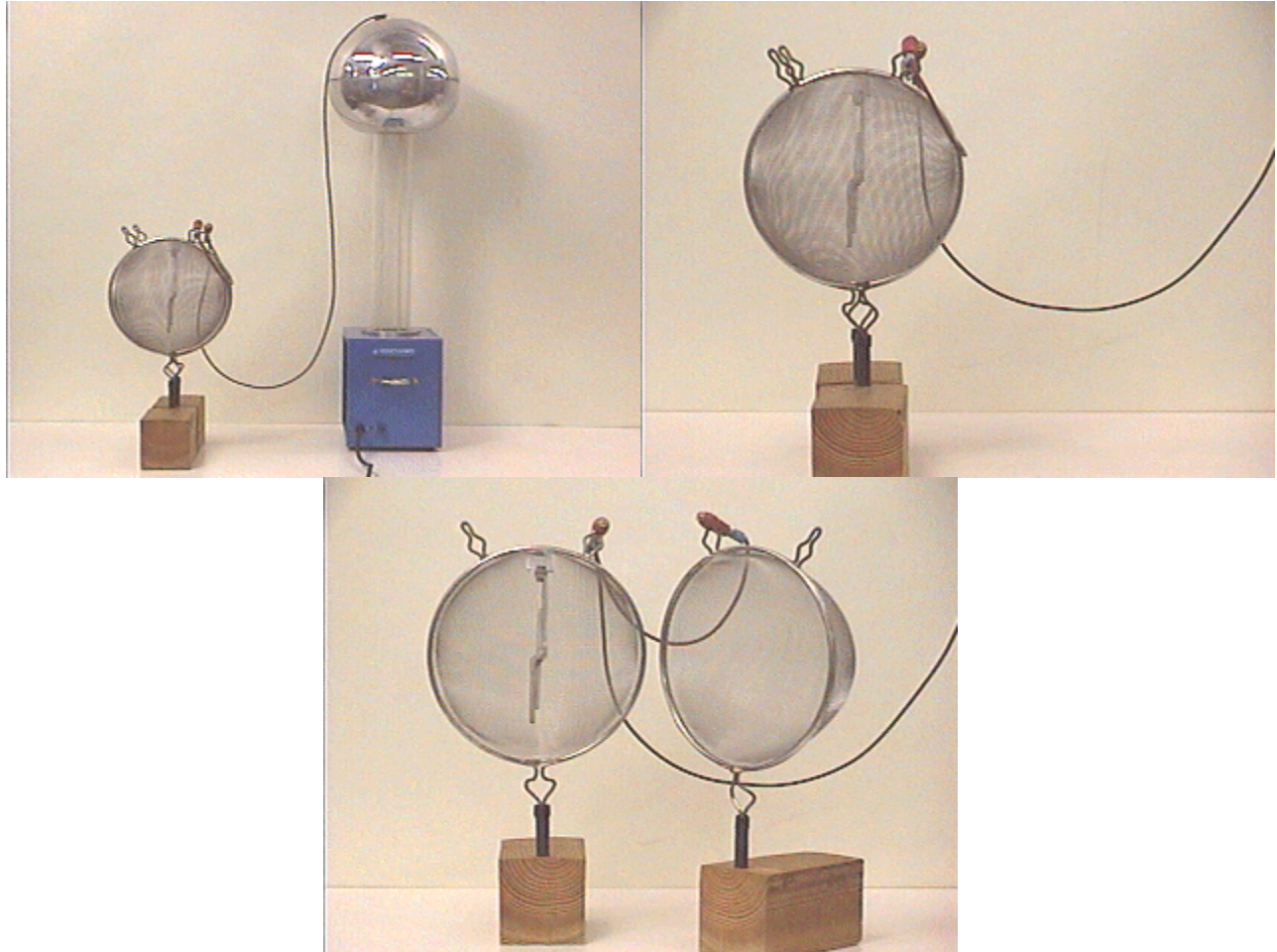


Question #189

Shown below is an unusual Faraday cage constructed from two sieves. An electroscope is attached to the sieve at the rear, as seen in the photographs at the center and the right. These photographs were taken with **no charge** on the system.



Now the van de Graaff generator is turned on for a few seconds, charging the Faraday cage system. The electroscope continues to indicate no charge - it remains in its upright position, as seen in the center photograph.

When the sieves are separated, as seen in the photograph at the right, *but with the system charged*, what will happen?

- (a) The electroscope will indicate charge.
- (b) The electroscope will stay as it is.
- (c) Something else will happen (specify what).

Click here for [Answer #189](#) after May 24, 2004.

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For questions and comments regarding the *Question of the Week* contact [Dr. Richard E. Berg](#) by e-mail or using phone number or regular mail address given on the [Lecture-Demonstration Home Page](#).