Author unknown. *Logos Magazine*, June 1902, pp. 3-6. Likely a reprint from another publication.

(On the copy of this article in Gates's files, he has made strikeouts and corrections. His strikeout are included here, and his corrections appear in smaller type within the brackets immediately following.)

## RESEARCH.

"Professor Elmer Gates, who has come into prominence by reason of his successful experiments in the field of microscopy [Gates: psychology], has a large and well equipped laboratory at Chevy Chase, near Washington. It is the largest psychological laboratory in the world. Here his experiments have been carried on for several years, some of his studies having been begun twentytwo years ago. His latest achievement is an instrument that magnifies 300 times more than the present microscope, which magnifies 10,000 diameters, while the new instrument of Professor Gates magnifies 300 times that, which is 3,000,000.

"The discoverer has provided a way to make invisible objects [because too small to be seen by ordinary microscope] visible by an improved process of photo-microscopy, which reveals that which the modern microscope cannot show. This is destined to play a most important part in the science of psycho-physical research. Professor Gates is fortunate enough to have a wealthy friend who has appropriates \$25,000 a year to further his work. [Gates: Made all my own money—of the half a million spent in research only 11,000 have been donated.]

"When Professor Gates was asked for a short statement of his great invention he wrote the following:

"If the markings of structures on the real image of the present microscope are too close together they are photographed on the sensitive plate as one object. If less than the ten-thousandth of a millimeter apart the markings are coalescent on the plate. Now, I introduce a second specially constructed microscope to view a small part of this image and further magnify before photographing it, thus getting these markings far enough apart to photograph separately. This requires special photographic conditions of absolute darkness, from which dark heat, luminous rays <del>and ultra</del> <del>violet rays</del> are excluded [Gates: & only ultra violet rays allowed to pass]. It thus opens an ultra-microscopic range of study.'

"Professor Gates will apply his invention to medical research and to bacteriology, physiology and histology. He has decided not to patent the instrument." ... [At this point the editor of *Logos* gives a long quote from Van der Naillen's "In the Sanctuary" and adds his own metaphysical comments.]...

A strong force brought to bear upon a negative center or upon a material substance prepared in a certain way, immediately starts chemical changes in it and sets other causes to operate, which may act along similar or dissimilar lines, producing other effects, like or totally unlike the first.

I will state the point in view in this way: Plates prepared as Professor Gates prepares them are very sensitive and quickly respond to enveloping influences. Should the operator's mind be strong and penetrating and centered in a specific idea, the plate might reflect back his dominant thought, instead of the original negative substance. It would, of course, portray a substance picture pertaining to the subject matter—but the electric force of the one potent idea in the operators mind might re-polarize the atoms of the so-called it invisible original substance and cause it to appear on the sensitive plate *not as it originally* was *but as the mind so holds it to be*! [Gates: So far all attempts to photograph mental images have failed.]