

highly trained sense of truth to report a remark made by Dr. Humphrey Newton, his Secretary, that Sir Isaac "never had any communion with dogs or cats."

Let us, however, turn back to the broad highway of more profitable investigation. Newton's earlier studies were turned to optics, and with prisms he made many experiments. He discovered the composition of white light, and the different refrangibility of the rays that compose it, as shown in the spectrum. The success which attended his researches in optics was very great, although they were preserved only in oral lectures until in 1672 he presented an account of them to the Royal Society. Thus a new volume was opened in optical science by experiments in a dark room, a hole cut in the shutter, a prism and a screen presided over by this young high priest of science. But it ever is that the hour of the birth of a new discovery is the hour of the birth of battle, and his theories were strongly opposed by the eminent English natural philosopher, Robert Hooke; by Lucas, Mathematical Professor at Liege; and by many others. In fact, many refused to believe in the very existence of such a thing as a spectrum. He carried on the discussion with great courtesy and patience, but to his sensitive mind they gave him such pain that he wrote to a friend,— "I see I have made myself a slave to philosophy, but if I get free of Mr. Lucas' business I will resolutely bid adieu to it eternally, excepting what I do for my private satisfaction, or leave to come out after me; for I see a man must either resolve to put out nothing new, or to become a slave to defend it." It was in these days that his neighbors used to see young Newton blowing soap bubbles in his garden and pursuing them with all the eagerness of a child at play, and they were in doubt as to the perfect mental equilibrium of this strange young gentleman. But he was worshipping at the altar of science, and laying the foundation of truths upon which later generations of equally earnest seekers builded.

It is impossible within the compass of this paper to dwell at length on Newton's contributions to optical science. He was in a certain degree the pioneer and helped to release the thoughts