nights with my thermo-electric pile, and satisfied myself that this
instrument is eminently fitted to examine "the mixed action of our
atmosphere and stellar space," as regards radiation. My observa-
I still preserve my little observatory on the roof of the Royal Institu-
tion, in the hope of being able to carry out the idea expressed in a
note at the page referred to. Until this has been done, any opinion
of mine on the questions raised by my distinguished correspondent
M. Buys Ballot, would be of little value; but I am glad to see the
subject in such excellent hands. It also gives me pleasure to find
that M. Poey has recently turned the thermo-electric pile to account
in examining the atmosphere of Havana. This zealous observer
thinks that his observations regarding the action of aqueous vapour
are diametrically opposed to mine; I, however, entertain a strong
hope that M. Poey himself will eventually clear up the apparent dif-
fERENCE. The experiments demonstrative of the action of aqueous
vapour on radiant heat of low refrangibility are, in my opinion, per-
fectly conclusive.—JOHN TYNDALL.

ON CALORESCENCE.

To the Editors of the Philosophical Magazine and Journal.

Gentlemen,

While the changing of the ultra-red rays of the spectrum of the
electric light into a complete luminous spectrum agrees so far with
the phenomena of fluorescence, that in both cases the change of
period is wrought by the intermediation of ponderable substances
which alter the rate of oscillation, still the fact that the one class of
effects is produced in bodies at ordinary temperatures, while the
other class requires the temperature of incandescence for their pro-
duction, introduces a marked distinction between them. Instead,
therefore, of the two words "negative fluorescence" provisionally
adopted by me in an article in the January Number of the Philoso-
phical Magazine, I would propose the word Calorescence to express
the rendering of bodies luminous by the heat of the ultra-red rays.

JOHN TYNDALL.

A LETTER FROM JOHN DAVY, M.D., F.R.S., ADDRESSED TO THE
EDITORS OF THE PHILOSOPHICAL MAGAZINE, IN CONTINUA-
TION OF A FORMER ONE, AND ACCOMPANIED BY DOCUMENTARY
EVIDENCE CONTRIBUTED BY SIR JAMES SOUTH, F.R.S., AND
BENJAMIN Gompertz, Esq., F.R.S., IN REPLY TO A CERTAIN
CHARGE MADE BY CHARLES BABBAGE, ESQ., F.R.S., AGAINST
THE LATE SIR HUMPHRY DAVY WHEN PRESIDENT OF THE
ROYAL SOCIETY.

Gentlemen,

Referring to my letter to you of the 20th October, published in
the Philosophical Magazine for December in reply to certain