pen to a comet having sucn an abuormal light and heat during
orbit as that of the comet of 1680 the outburst in 1866 must have orbit as that of the comet of
[generally known as Newton's destroved nll living rreatures
comet] and that he considered
the consequences might be full
trom the face of each one of those the consequences might he full worlds. It is equally certain
of danger to this earth. Yet he that if at nuy time a great comet, ong, as he judged, from the |should by the wwift rush of it ing, as
addition o
solar fires. the real danger lies not from the oxceeding that with which as may exist in a comet's head cess of lustre and of heat wat acand nucleus, but from the con-
version of the momentum of the swiftty rushing mass of the
comet into heat, the thermal equiral
energy. et to be thiry sevenn years, the
relocity of the nearest to the sun seond. As to
300 miles per
the mass of the comet's head wo know that the relatively insi nificant comet of 1866. called
Temple's, which required a tel escope to make it visible. i
followed by millions of million of meteoric masses, and that
when our earth passes through this system of meteors, thoug
they enter her atmosphere with per second. they are converted into glowing
passing through
If we densely aggre densely aggregated the meteoric
masses must be which form the nuclens, head, and train (not
tail. bisा-extendu) of the comet of 1843, how much larger the relocity at the time of their final absorption could not be less
than ten times that with which the November meteors enter the
earth's atmosphere, it will be evident that the danger of which
Sir Isaac Sir I saac New ton spoke so im-
presively in his celebrated letter is by do meane altogether
fanciful, I have, for my own the periodical increase of such stars as Mira (the wonderful the ship Argo, is due to the motion of some large comet fol-
lowed by a meteoric train about these two stars. I will go so far as to express
my belief that if ever the day is to come ' when the hearens shall
dissolve with fervent heat, 'the
cause of the cat cause of the catastrophe will he
the downfall of some great cmat

I belierc the passage even of
the head of a comet over the little harm, for if the shower ot meteoric masses were rery dense
the meteors themselves being of the largor sort, and so able to break their way through the might kill a few of the earth's
inhabitants or eren many hunn
dreds. But there would be no widespread destruction of life.
But it would be altogether otherwise, I beliere, if a comet of
the larger sort fell into or were absorbed by the san.
The danger would lie in the sun's own might; not in the
comet or its attendant train. The bodies forming the head, nuculd fall in immense numbers with enurmous velocity, and each with mighty momentum Possibly, and in my opinion
probably, their most destructive probk would be accomplished
welow that surface, under thc still more stupendons attractive energy of that smaller because
more condensed orb within, which I take to be the true
ruling centre of the solar system. ruling centre of the solar system. It might well be that the
effects thus produced would be be
but transient. In a few weeks, possibly in a few days or eren hours, the sun, excited for a
while to intense heat and
splend splend
unual
lustre. indeed, was the nature Such, indeed, was the nature so-ralled " new star" in the
Northern Crown. For a day or two it shone out with several
hundred times its usual lustre, and doubtless it poured forth
uring those few days several hundred times its ussual heat. its lustre diminished. and after as it had shone belore for hunninth magnitude star only. plants circling around th remote sun, and if the ord:nary
light and heat of that orb sufficed light and heat of that orbsumite

