

ays meeting of the third annual conference of the  
mic Society of Scotland, at Dunkeld, have been  
to October 17, 18, and 19.

Scientific and Literary Review for September, 1877.  
house of the Spined Soldier-bug as a newly discovered  
the Colorado beetle. In the "Fourth Annual Report  
toxious, Beneficial, and other Insects of the State  
(1873)," Mr. Riley speaks of this insect as "now  
own for its efficiency in thinning out the ranks of  
est." Mr. Riley also figures two other Hemiptera of  
Scutelleridae as enemies to this beetle—the Ring-banded  
bug and the Dotted-legged Plant-bug (*Euschistus pun-*

from Naples has been received announcing an increase  
Mount Vesuvius. The glow of fire in the crater  
that it can be distinctly seen from Naples at night.

number for August 9 we briefly noticed the ascent  
Mons. Wiener of the mountain Illimani, one of the  
if not the highest—of the Bolivian Andes, which forms  
object from the city of La Paz, and was formerly  
on the authority of Mr. Pentland) to have an altitude  
as than 24,200 feet. M. Wiener, however, makes it  
ly 20,112 feet, while Mr. Minchin, as we have already  
places its altitude at 21,224 feet. If the latter esti-  
correct, Mons. Wiener has, we believe, not only made  
st ascent which has been made in the Andes, but has  
a greater altitude than has hitherto been reached on the  
of Asia, and in Asia has only been beaten by Mr.  
who some years ago got to a height of 22,300 feet in  
As the recorded ascents to the height of 21,000  
extreme low, we shall be glad to hear further par-  
respecting Mons. Wiener's exploit, and more especially  
he experienced much exhaustion through the rarefaction  
of the air. Practised mountaineers who have climbed to a  
17,000 to 18,000 feet have been of opinion that even  
altitudes there is a very important and perceptible dimi-  
of the bodily powers, and think it probable that the  
25,000 or 26,000 feet will be found to be about the  
which can be reached on foot. As a set-off to this  
we may mention the facts that hunters in the Himalayas  
pursue their game at heights exceeding 20,000 feet  
experiencing any notable inconvenience from the low  
atmospheric pressure, and that natives living on the base of  
Mount Teheran, often ascend to its summit to gather  
from its crater without any great difficulty. The height  
of Illimani, there is reason to believe, also exceeds 20,000  
feet, though it has never been accurately determined. If  
such severe work can be done with impunity at such alti-  
tudes, it seems not unreasonable to suppose that much greater  
heights might be attained by men who had previously accu-  
stomed themselves to life at high altitudes. Astronauts, anyhow,  
need not fear that life can exist at 30,000 feet above the level of  
the sea, and that at 25,000 feet, and upwards, one may positively  
live if sufficiently warmly clad. That such is the case  
is only remarkable, for "travellers in the air" have expe-  
rienced comparably more rapid variations of pressure and tem-  
perature than mountain-climbers. Mr. Glaisher, on his memo-  
rable ascent on September 5, 1862, left the earth at 1 P.M., and  
in an hour shot up to a height of 30,000 feet. At this  
height the temperature of the air was 59°, and at its greatest  
it was one degree lower! Mountaineers experience  
such extreme variations as these. They rarely ascend  
more than 1,000 feet per hour, never so much as 15,000  
feet, and become to some extent acclimatised as they  
ascend. On the whole we are inclined to think that

man will not rest until he has at least attempted to reach the  
loneliest summits on the earth, though we will venture to assert  
that it will be long before anyone crushes down the snow on the  
summit of Mount Everest.

Since we last noticed the progress of the great Government  
Map of Switzerland several further instalments of it have been  
issued. In all 108 sheets have been published out of the 120  
which will compose the map. Amongst the more recent and  
published sheets the following will especially be found useful by  
English travellers in Switzerland:—La Chaux de Fonds, Thun,  
Engelberg, Wassen (embracing the Tullis district), Guttanen  
(with the basin of the Gault glacier), and St. Maurice (giving  
the country round Fontresina). The whole of the sheets as yet  
published are most admirably drawn, and reflect the highest  
credit on those who have been concerned in their production;  
and the celerity with which they are issued makes us desire that  
a little more life could be infused into our own topographical  
departments.

PETERMANN'S *Mittheilungen* for October will contain a long  
paper, embodying the results of considerable research, on the  
German and Latin Elements among the Population of the South  
Tyrol and Venetia. A new map of a large portion of Costa  
Rica will show the results of the surveys of Gabo, Collins, and  
Martinez. A letter from Dr. Schweinuth describes his journey  
through the Arabian Desert of Egypt, from Helwan to Keneh,  
between March 28 and May 18 of this year. He has obtained,  
besides important topographical data, much valuable information  
as to the geological and botanical conditions of the region.

THERE is on view at present at the Alexandria Palace an  
interesting collection of fourteen Nubians with a number of  
animals, comprising six ostriches, six gazelles, five elephants,  
twenty-one racing dromedaries, three rhinoceroses, two hunting  
dogs, two Abyssinian spotted donkeys, four buffaloes, two zebras,  
monkeys, &c. Some specimens of *Cynopithecus gelada*, which  
are said to live from 7,000 feet to 11,000 feet high in the  
Abyssinian hills are expected to follow. The European who  
organised and accompanied the caravan for Messrs. Rice and  
Hagenbeck, says that the men from the different tribes speak  
different patois, so that he very often cannot understand them,  
and they cannot understand one another. The different districts  
in which the various animals were captured does not, therefore,  
seem to be known to the present owners. As to the men, they  
have been interrogated as to their ages and the tribes to which  
they belong. There are four Hadendoes aged fifteen, twenty-  
three, twenty-three, and twenty-five. The characteristic manner  
of dressing the hair is well seen in the three men, but the lad  
does not seem to have adopted yet the artificial arrange-  
ment. They are all tall, fine men. There are two Hallengas  
from Cassala, aged twenty-two and twenty-four. The general  
style of trimming the hair is much the same as of the Hadendoes,  
but the "fringe" is much longer and stands away from the  
head more. There are three of the Beni-Amer tribe, one of  
whom, aged twenty-four, having fallen ill in Paris, had his hair  
cut off; the "old man," aged thirty-two, wears a close white  
cap, and he alone of the party can read and write; while the  
third retains his hair in its original state. Of the remaining six  
men of the fourteen each represents a different tribe, and they  
all differ in appearance and style of hair arrangement from those  
tribes already mentioned. There is a Djaalein, aged twenty-  
six; a Homran, aged nineteen, who has the three rhinoceroses  
under his special care, and which follow him and lick his  
hand like pet lambs; a man, aged twenty-seven, from Amara,  
near Suakim; and a Takroui, twenty-five, who has twice been  
to Mecca, the only one of the party who has; and the Bara  
"boy," who claims to be twenty-one. He has the negro hair  
and lips, and a very contented look. All the men seem happy,

and sing, laugh, smoke, and go through the mimic war, dromedary  
racing, and their representation of crossing the desert with great  
delight.

In a letter to yesterday's *Times* Mr. Henry Jevia, of Livoni,  
gives some interesting data to show that there is probably some  
connection between sun-spots and the number of wrecks posted  
each year on Lloyd's List as Bores. His data are for two complete  
cycles of eleven years, 1855-1876, and the results Mr. Jevia has  
worked out along with Dr. Hunter. Dividing the eleven years  
as nearly as the number will allow, into three parts, and taking  
the percentages of losses posted, Mr. Jevia finds a coincident  
minimum period of four years at the extremities of the cycle, a  
maximum period of three years in the centre of the cycle, and  
an intermediate period of the four years lying between the maxi-  
mum and minimum periods. Mr. Jevia expresses the hope that  
the great practical importance of the theory of the connection  
between sun-spots and weather will lead to a full and exhaustive  
examination of all the evidence bearing upon it.

THE exhibition of the Photographic Society of Great Britain  
will be opened by a *demonstration* on Tuesday evening, October  
2, at 5, Pall Mall, East.

In a paper presented recently to the philosophical faculty at  
Heidelberg University, Herr Richard Bornstein has published  
his investigations on the influence of light upon the electric resist-  
ance of metals. Mr. Willoughby Smith had found that the  
electric resistance of platinum, and in a much smaller degree that  
of tellurium also, increases under the influence of light. Herr  
Bornstein has now made the interesting discovery that this prop-  
erty also belongs to platinum, gold, and silver, most probably  
to all metals, in fact. The electric current, according to Herr  
Bornstein, diminishes the electric conducting power, as well as  
the sensitiveness towards light, of its conductor, but after  
cessation of the current, soon gradually returns to their former  
values.

ROCK crystal seems to be growing more and more in favour  
amongst technical men on account of the stability of its physical  
properties. At the August meeting of the Bonn Society of  
Naturalists it was reported that the directors of the Imperial  
Mint of Germany have recently ordered of Herr Stern, at  
Oberstein, several absolutely correct normal weights made of rock  
crystal, which are to be used for the control of gold coins. These  
weights have the great advantage that it is unnecessary to  
determine the specific gravity of every weight, and in the case of  
measures to find the thermal coefficient of expansion of every  
measure, as both are as near constant as possible. They have  
been found the same in all the specimens of rock crystal yet  
examined, viz., specific gravity at 0° C. = 2.6500 (reduced to  
water at 4° C.); coefficient of expansion for 1° C., parallel to  
the axis, 0.00000750 inch, *i.e.*, seventy-five ten-millionths of  
an inch.

At the same meeting Prof. von Rath read a report from Dr.  
Th. Wolf, the state geologist to the South American republic  
of Ecuador, in the province of Esmeraldas (the northernmost  
province of the republic, and on the rain of ashes which,  
coming from the north-east, *i.e.*, from the volcanic interior,  
fall along the whole *littoral* of Guayaquil between June 26  
and June 30. Dr. Wolf, after giving a general geological  
description of Esmeraldas (in the auriferous sands of which  
he discovered platinum), adds the following general remarks.—  
Of all provinces of Ecuador Esmeraldas is the most uniform in  
its relief and geological structure. It reaches from the coast of  
the Pacific to the foot of the Andes. A great part of the pro-  
vince is quite flat, particularly in the north; another part is  
traversed by low mountains, the highest points of which scarcely  
reach 500 or 600 meters; the average height of the hills, how-  
ever, is only 50-70 meters. The province is a magnificent