CHAP. XV.

## EXCURSIONS IN THE ALPS.

THE weather for two or three days previous to my arrival at Kefmark had been very rainy and ftormy, and fome people in the neighbourhood had been killed by the lightning; and when I arrived at Kefmark I had but fmall hopes of having weather proper for an Alpine excurfion; but the next morning was the lovelieft imaginable. The Alps, which I had never yet feen, from the clouds in which they had always been enveloped, when I was in other refpects in a fituation of feeing them, appeared in all their towering majefty, and juft above me. Now my hopes of a rich harveft of Alpine plants began again to revive : I immediately went to Nehre, the feat of Mr. Horvath, the deputy lieutenant, only a couple of miles from Kefmark, to plan the expedition ; and that very evening I went to Rokus, a village juft at the foot of the Alps, accompanied by a good provifion of ham, beef, bread, wine, brandy, \&cc. \&cc. the beft efcort I could take with me, a prefent from Madame Horvath, with full expectation of afcending in the morning.

Happinefs, fay the moralifts, which depends on our outward cirsumftances, is always uncertain; and that, I fay, the moft fleeting


of all, which depends on conftant weather in a mountainous country. I was hardly at Rokus before it began to rain : the next morning it did the fame: I waited however patiently, though I was only in a poor peafant's cottage, till the evening, when finding the weather not to clear up, I returned to Nehre.

To my great vexation this weather continued near a week: the mornings were often fair, but towards noon the clouds began to gather round the mountains, and in the afternoon a violent form enfued: but this weather was not peculiar to this alpine fituation ; in diftant parts of the country the fame prevailed. The moff general wind was what is here called an Hungarian wind, that is the fouth wind, and this is the harbinger of rain: the north wind is called the Polifh wind, and is confidered as a harbinger of dry weather. I paffed my time, whilft waiting for fair weather, at Mr. Horvath's at Nehre, and at Mrs. Berzevitzy's at Lomnitz; and fometimes at Kefmark, where I had always a hearty welcome at the Rector Potnakinfky's, and at Mr. Paul Methlin's.

The probability of a fine morning induced Mr . Horvath one day to make a large fhooting party. We fet off by moon-light, in three or four carriages, and reached the ground at day-break: we were after roe, but the firft marks our fportfimen obferved were the marks: of a bear; and as it had rained laft night, from the frefhnefs of the impreffions they knew it muft have been here only a few hours ago.

As we were near twenty frong, and had ball and flugs with us, we -were not alarmed.

The morning being fine, I foon left my companions, and with a guide I fet off for the Green Lake (Grüne See) which lies amongft thefe Alps. This is frequently vifited by the curious, as it is of pretty eafy accefs; horfes come and pafture here. We afcended through ravines and vallies, and pine forefts, for about two or three hours. The firft hills we came to were formed of great loofe blocks and fragments of granit ; but at the lake, the boldeft craggy rocks of granit rife and form an amphitheatre, and fhut up the valley. The lake has obtained its name from the colour of its water, which has a greenifh caft. I had hardly begun to botanize when a thick mift with rain came on; and though the road is by no means dangerous, or difficult to find, yet on account of thefe pefts of Alpine travellers, it was as much as we could do to find our way back again. My companions had had but poor fport: they had only killed a fox, and feen two or three hares. In coming down the hills I found a party of peafants, fome with guns, others with hatchets. They informed me they were in fearch of the robbers from the other fide of the Alps. In joke I told them, I thought they would have but a poor chance with fuch a defperate gang: John Bull like, they replied, "The weakeft of our party thinks himfelf able to encounter half a dozen of them." So then it is the fame in Hungary as it is with us? - Yes, juft the fame, whether thou art a Chinefe or a Briton -..-Hence patriotifm. In the evening we returned to Nehre.

In two or three days the weather cleared up, and I returned again to Rokus, with the intention of immediately entering the mountains: but no guides were to be had. But the next morning, having arranged every thing for a flay of two or three days, I fet out, accompanied by my fervant, two guides, and a man and horfe to carry provifions, \&cc. taking with me a common barometer, which 1 had. bought at Kefmark, to meafure fome of the principal peaks of thefe Alps.

Soon after leaving the village, we entered a large wood chiefly of firs : after traverfing this, we came amongtt rugged rocks, and the firft was a fand-ftone, which I fhall call for the prefent Alpine Sandftone: it had no regular ftratification, as in common fand-ftone; but it had a tendency to divide into beds, fomething like fchiftus: it was in fome parts as coarfe as a pudding-ftone, and in others as fine: almoft as a granulated quartz : the beds were almof horizontal : its. height I eftimated at one hundred yards : larch trees were common here. We then came to lime-ftone rocks, which extend a great way, forming the external ridge, or outward covering, as it were, of the Granitic Alps : they form the Iron Door, and the Fleijch Bank; the latter of which is reprefented in the $\gamma$ th plate. We then turned off to: the left, and got amongft granits : the path now began to grow very dangerous for our horfe; yet we arrived fafe at the Green Lake, but: not till the afternoon, though the peafants call the diftance only three hours. I had not time to botanize chemin faifant, and in the animal

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world we faw nothing, except the Papilio Apollo, and the Leptura 4-maculata.

I chofe our abode about a hundred yards from the lake; under an immenfe block of granit which had fallen down from the rocks above, and was furrounded with other blocks; thefe ferved to keep off fome of the roughnefs of the weather. It was fortunate enough for us, that plenty of the Pinus Pumilio, here called Krumbolz, grows in abundance. Whilft my attendants were occupied in cutting this for fuel, having firlt determined the height of our fituation, which I found to be about 874 yards above Rokus, and 1684 above the level of the fea*, I made a botanical excurfion.

The

* In making thefe calculations, I have followed Mr. De Luc's method, as far as it was applicable; but as thefe obfervations were made without a thermometer, neither the expanfion and contraction of the mercury, nor the temperature of the atmofphere, could be attended to ; yet, for reafons which will foon be affigned, a temperature of 10 degrees of Reaumur has been fuppofed.

From the obferyations of Baron Gordon, as mentioned in page 326 , it appears that the medium height of the barometer at Leutchau is $25^{\prime \prime} 1 \mathrm{I}_{\frac{1}{2}}^{\prime \prime \prime}$ Paris meafure, that is $3^{11 \frac{1}{2}^{1 / \prime \prime}}=3^{11}, 5^{\prime \prime \prime}$ : now eftimating the height of the barometer at the Mediterranean at $28^{\prime \prime}=336^{\prime \prime \prime}$, the catculation ftands thus, Logarithm $33^{6}=2,5263393$

$$
311,5=2,4934581
$$

Difference - 0,0328812 . This then multiplied by 10000 gives 328,812 as the uncorrected height of Leutchau above the Mediterranean ; that is 328 toifes and $\frac{8}{10}$ omitting the $\mathrm{r}_{00 \mathrm{Iz}}^{13}$, this is 328,8 toifes.


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The Alpine plants I found (but not all in this excurfion) were the Primula minima; Szeertia perennis; Soldinella alpina; Gampanula alpina; Gentiana punctata; Saxifraga Aizoon, bryoides, autumnalis, rivularis,
.This height, which I call the uncorrected, would be the true height, that is, it would reguire no correction, if the medium temperature between Leutchau and the Mediterranean were $16 \frac{3}{7}$ of Reaumur : but this would be a very improbable fuppofition; it is therefore better to confider it at temperate beat, which is 10 degrees of Reaumur. Now Mr . De Luc deducts, for each degree of Reaumur under $16 \frac{3}{4}, \frac{1}{2 \frac{1}{3}}$ of the whole height of the uncorrected, and adds $\frac{1}{215}$ for each degree above $16 \frac{3}{4}$; we muft therefore here deduct the 215 th part of 328,8 toifes taken 6 and $\frac{3}{4}$ times : $\frac{1}{215}$ of this height is $=1,54$ toifes, and $6 \frac{3}{4}$ times this is $=10,39$ or $10 \frac{30}{100}$ toifes.

Uncorrected height $=328,8 \mathbf{r}$
$\begin{aligned} & \frac{6 \frac{3}{4}}{215} \\ & \text { True height } \ldots-318,42 \\ &=10,39 \\ & \text { therefore } 318 \frac{4}{10} \text { or } 318 \frac{2}{5} \text { toifes. }\end{aligned}$
In the fame manner the other heights are calculated; for example, at the greatelt height the mercury flood at $5^{\prime \prime} 7^{\frac{3}{\prime \prime \prime \prime \prime}}$ lower than at Leutchau, or $67^{\frac{3}{4} \prime \prime}=67^{\prime \prime \prime}, 75$


$$
\begin{array}{rr}
\text { Logarithm } \begin{aligned}
& 311,50=2,49345^{81} \\
& 243,75=2,3869446 \\
& \hline
\end{aligned} \\
\text { Difference } 1065,135
\end{array}
$$

The uncorrected height therefore in round numbers, as the $\frac{T_{1}}{T_{0}}$ is here of no moment, is 1005 toifes, from which $\frac{6 \frac{3}{4}}{215}$ of it muif be deducted, ${ }_{2}^{2} \frac{1}{5}$ is $=4,95$ toifes $=42050$ toifes, 63 times this is $=33,4$ toifes $33: \frac{4}{0}$ or $33 \tau^{40}$
Yy

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rivularis, oppofitifolia, cafpitofa; Silene acaulis; Geum reptans; Aconitum Napellus; Anemone alpina छ narcififfora; Ranunculus rutafolius, glacialis छ alpefris; Bartfia alpina; Pedicularis verticillata; Cardan mine petrea; Soncbus alpinus; Cacalia albifrons; Gnaphalium alpinum ; Tulfilago alpina; Cineraria cordifolia; Doronicum auffriacum; Viola biflora; Veratrum album. At night I returned to my rock, where I found my attendants fitting by a moft comfortable fire.

A good fire was very neceffary ; for though this was the fourth of Auguf, yet within a hundred yards of my rock, a great deal of fnow was ftill remaining, and we had no fraw, nothing but the bare ground to lie on. I fell afleep amidt the relation of ftrange tales, with which my guides entertained my fervant. "Here, Mr. Frank," faid they, "at the top of yon rock which is called the Carbuncle Rock, was a precious ftone of this name, of an immenfe value, and which fhone like a ftar in the firmament; many afcended the rock in vain; juft where it was placed the rock was quite inacceffible ; at laft it was fhot down.-Indeed!!-There in that direction lies a treafure; but a fpell is laid upon it, fo that nobody can find it.-Surprifing ! ! And in that there is a remarkable hole, from which, if a fone is


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thrown in, a vapour arifes which is foon followed by a dreadful form, which makes the very mountains tremble.-Good God !!-Upon that mountain grows a plant, which now nobody can find, which turns copper into gold.-Impoffible!!-And there on yon craggy rock I was once caught in a fog, and was obliged to remain fhivering with cold for many hours, till the wind difpelled it."

My bed did not induce me to lie longer than nature required; and as the morning promifed a fair day, I was defirous to be off, to make the moft of it. The whifting of the Marmot, if it did not wake me, was the firf found I heard. Taking my fervant, and one guide, and fome provifions, I fet out, leaving the other guide to cut fuel, and watch my provifions, \&c. I afcended by a fmall cafcade into a higher valley, where fill more fnow was lying; I then turned off to the left, to fee if it were practicable to afcend the great Kefmark Peak. I came to the foot of fome rocks, which by the aid of a good guide I think might have been climbed : but my guide happened to be an uncommonly bad one; in a ftorm of hail and rain, accompanied by thunder and lightning, which came on whilft I was there, he ran off, and I never fooke to him, and hardly faw him, till I returned to my rock, where I found the fcoundrel warming his nofe. -The further and higher I went, the more fnow I found ; one fteep floping valley, which led up to fome very high rocks, was quite filled up with fnow. While I was looking at this, and confidering whether, by the aid of irons to my feet, I could not get up, I faw

$$
\mathrm{Y}_{\mathrm{y} 2} \text { fomething }
$$

fomething move brifkly upon the frozen fnow, and I called to my fervant to look at it, thinking it was a Marmot : foon it fopped, and I then knew it was only a fone, which had flid down from the rocks above. A few minutes after another came down, but witt greater velocity: I faw it begin to bound, and come towards us; I called to my fervant to ftay where he was, as he was fafe, fitting under the oppofite fide of a great block of Granit, Not underftanding me, he got up and came towards me: he now faw his danger, but not time enough to avoid it : the ftone, or rather the fragment of rock, made a dreadful bound, and lit upon the very block under which he. had been fitting, and from thence, broken in pieces, it flew in all directions : fome of the fragments juft went over his head. Left by my guide, and my botanical boxes full, and my dram bottle empty, I thought it time to come down. The greateft height I had reached this day was 559 yards above the Green Lake. In this ramble I chiefly met with the fame plants I did the day before; but the Ranunculus. glacialis and rutafolius and the Cardamine petraa grew here more luxurioufy.

The next morning I fent away my timid unfaithful guide, and gave orders for another to come up; and then leaving my fervant to cut wood, and take care of the boufe, I fet off with the other guide for the calcareous rocks which are above the FlejchBank, and are a continuation of thofe I found in my road to the Green Lake, and are reprefented in the 7 th plate. The fine


## Lendon. Published by GG\& I.Robinson Paternoster Now July 1 izac.

floping bank, covered with verdure, which lies under thefe rocks, is called the Fleifch-Bank, from the quantity of oxen that are paftured upon it during three or four of the fummer months. Here I found feveral rare plants, as the Cnicus pygmaus, Hypocbar is belvetica, Leontodon aurcum, Hieracium alpinum, Andryala lanata; and at the top the Hedyfarum obfcurum, Phaca frigida, Afragalus alpinus $\xi^{\circ}$ veficarius; and in a fhady place, clofe under the rocks, the Cortufa Mattibioli, and Centauria montana; and on the rock itfelf, fome beautiful fpecimeris of Wulfen's Lichen tartareus.

I had now a full view of the lime-ftone rocks : but I could neither fee any mark of ftratification, nor any petrifactions; they were formed of one thick bed of compact light-grey lime-ftone; and according to my barometrical meafurements, about twenty-fix yards thick. In one place it was pretty r'egularly divided into four or five beds ; but thefe divifions, or figns of ftratification, only extended a few yards : between thefe beds were four or five thin beds of black filex, running parallel to each other; but thefe likewife were only of a few yards extent, and were fometimes intercepted in their courfe by the limeftone. -Though there was very little danger or difficulty in climbing to the top of thefe rocks, yet my guide would not venture ; but as he told me at firft that he was no Chamois-hunter, I could not find fault with him. It will appear fomething uncommon, and perhaps improbable, that a cockney fhould be a better climber of Alps than thofe born juft at their foot: but fo it happened; I was obliged.
to leave my guide here at the bottom of the rocks; and telling him that by figns with my hat I would indicate to him which way he fhould go to meet me, I climbed up by myfelf. I got well paid for my trouble. On the top, befides enjoying a beautiful view of Galicia, I found fome more Alpine plants, the Saxifraga cafia in great abundance; Diantbus alpinus, Cberleria fedoides, Dryas octopetala, Senecio abrotanifolius, and a moft luxuriant fpecimen of the Licben elegans of Mr. Link *, the miniatus of Hoffman. Though towards the Green Lake, that is towards the weft, the cliffs form a perpendicular wall; yet on the other fide there is from the very top a moft pleafing floping bank covered with verdure.

Having faid as long as my time would pernit, I made my figns to my guide, and then defcended on the fame fide I came up. In a ravine I found fome foft argillaceous fchiftus; this feemed to me to form the Fleifch-Bank; but it was not fate, the Ardefia tegularis, but rather fomething of the nature of Sbale, being foft and friable. Now was this depofited againft the lime-ftone rocks,-or were thefe fuperimpofed to the fchiftus?-This is of importance in Geognofy, and prefently we fhall be able to decide the queftion.-I I could never fee any thing of my guide till I was quite at the foot of the bank, and then I efpied him juft where I had left him. I conjectured at firft, when I did not fee him, that he had done like my other guide, run

[^0]away; but now I had reafon to believe he had miftaken my fignals. I waited in hopes he might efpy me, but to no purpofe, and at laft I went home. It foon grew dark, and I got amongft the Krumholz; and here I thought I muft have paffed the night. No one who has not made a trial, can form an idea of the difficulty of making one's way through this, and the confequent tardy progrefs. The branches of this tree extend many yards in all directions juft along the ground : they are fometimes fupported by the unevennefs of the foil, fometimes by blocks of fone, and fometimes by branches of the fame; fo that one muft often get down between them, at other times walk upon them. At laft, however, overwhelmed with fatigue, I reached my roek; which in this fituation I valued no lefs than an inn, and which I now began to confider as my home; but my guide never made his appearance till next morning. He had fortunately his hatchet with him, and without this you never fee a man here ; fo much fo, that in another part of thefe mountains, Mn. Haquet fays, they dance with them in their hands, and in the midif of the dance throw them up in the air, and catch them again with great dexterity. With this he had cut himfelf fome of the Krumholz; and with the tinder made fromia. fungus, which they likewife always carry with them to light their pipes, he had kindled a fire, and paffed the night comfortably; and the only thing he miffed was-my brandy.

The next day I fpent in repofing.my\{elf, in drying the plants I had collected, and in walking about my own domains. At the bottoms
of the great rock, $b$, which is the Kefmark Peak; it is faid there is a vein of Lapis Lazuli: I went there, but found the place quite covered with fnow. - - In the evening, Grofs Hans (Great John) the beft guide and Chamois-hunter in the country came to me, and the next morning we fet out upon fcaling one of the moft difficult peaks, the White Lake (Weife Sce) Peak. I climbed up with my barometer, though in many places it was hardly acceffible but to chamois. The bunters of thefe animals know the paths they take in thefe Alps, and fet traps for them : one of thefe we found; it was like a large fox-fteel-trap: but they only fet them in the clofe of the year, when the fnow prevents any one from vifiting thefe mountains except themfelves, otherwife they might find a man in them inftead of a chamois, as fometimes Treafure-hunters and Simplers come here. Lakes, though common enough in every alpine country, are what appear moft remarkable to guides. I was firft conducted to the Red Lake ; higher up to the New Lake : this was quite frozen up and covered awith fnow : we croffed this, and then climbed the high and very natrow ridge of rocks which feparates the valley of the Red Sea from that of the Flock Sea: we then reached the peak. The day was delightful: I had a fine view from hence of the furrounding alps: thefe are fo much higher than the mountains to the eaft and weft, which form part of the Carpathian chain, that they feem to be only one huge clufter of alps. I had a fine view likewife of Galicia: it is commonly reported, and given as an indication of their great height, that from thefe alps, Cracow may be feen in the north, and Erlau in
the fouth. I imagine they ought to have faid, that from thefe two diftant cities thefe mountains may be feen; and this would be very probable. From Lyons I have feen Mont-Blanc; but no one ever faw Lyons from Mont-Blanc. Though my barometer told me I was now 628 yards above the Green Lake, yet the Kefmark Peak ftill rofe much above me: I could plainly fee the higheft part I had reached the firft day, and this appeared on a level with the middle of the Kefmark Peak; if fo, the height of this Peak, which is on this fide a perpendicular rock, will be 1152 yards above the Green Lake, and 2836 above the level of the fea. At the very top of this White Lake Peak, I found the Papilio Urtica, and feveral of the Stratiomys nigricans whifking about with great velocity. We defcended by the Schactners Groote. This is a fhoulder of the peak, and thus far all is granit; but to the eaft of this the granit is covered by fand-ftone of different degrees of finenefs, from granulated quartz to almoft pudding. ftone. Above this, further to the eaft, the fand fone is covered by the primitive limeftone; the Durlberg is a continuation of the fame, and this is likewife lime-fone. Neither in the fand-ftone nor lime-ftone, was there any appearance of ftratification or petrifactions. This ridge, which runs parallel with the Fleifch-Bank, has its perpendicular cliffs, like this, facing the Green Lake. Upon the granit rocks I found little, except fome luxuriant fpecimens of the Lichen tauricus $\mathcal{O}$ nivalis, and fome of the Alpine Ufirece. I think it was here where I found that rare plant, the Gentiana frigida, figured in the I 3 th plate. On the calcareous rocks I colkected the Androface villofa \& pantiflora, with the Draba aizoides \&f birta.

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At fome diffance I efpied a deep ravine. Thefe fmall fcratches in the fkin of our globe, often fhew us a little of its texture; they are therefore eagerly fought for by Geognofifts : I made up to it, and it folved the doubts which had arifen in my mind the fecond day on my finding the fchiftus. I entered it about one-third from the bottom, and, afcending, the firft thing I obferved was an immenfe thick bed or ftratum of foft fhattery argillaceous fchiftus; then a thick fratum or two of the primitive fand-ftone, and then more fchiftus; and when I reached the great clifts, which I expected to find of lime-ftone, I found again my primitive fand-fone, and forming a bed that I cannot eflimate at lefs than a hundred yards in thicknefs; and then above this came the great lime-ftone rocks: thefe beds of fand-ftone and lime-ftone were no ways ftratified; they were beds or ftrata themfelves. From hence it is moft probable that the fehiftus,
which I found the fecond day, and which I conjectured to form the flefh bank, really lay under the primitive limeftone and fupported it.

I afcended to the higheft part of the calcareous rocks with my barometer ; but- by fome misfortune the obfervations I made here. were loft : yet I recollect they made thefe rocks about the height of the White Lake Peak, that is, about two thoufand three hundred yards above the level of the fea; and as the Weiden-Graben or brook, which runs at the foot of the Fleijch-Bank, is rather lower than the Green Lake, fo there is an immenfe bed near 700 yards thick of fratified rock.

Before I fet out in the morning, I had given orders to my fervant to take my baggage to the Kefmark Kofobar, where I intended to pals the night; and I had bid adieu to my rock, adieu for ever:an adieu for ever, to a prifon, would fadden the pleafures of regained liberty, and caft a gloom over the foul reprieved from death. Objects of affection would now crowd upon the mind; and the chains would be thanked that they had not been fo heavy, and the floor that it had not been fo hard. In gratitude I had tried to engrave my name upon my rock, but it was of granit; or I would moreover, as the only tribute my grateful heart could pay, have recounted in its praife the chilling rains it had protected me from, and the bleak winds it had warded off, and I would have declared it to be the kindeft amongt rocks. The ftiff necks, and fore hips and fhoulders,

I now forgot, and I reluctantly left my alpine cave. How fortunate it would be for us, whillt in this jangling jarring world, could we but view the failings of thofe friends amongtt whom we live, with the fame charitable eye we do our parting or abfent ones! Then peace would be oftener within our dwellings.

I defcended the mountain again, and directed my fteps towards the Kofchar. In my road there, at the foot of the Fleifch-Bank, my guide fhewed me the remains of an ox, which had been grazing in fome of the fteeper parts, and had fallen down and was killed: and not far from thence were the remains of another which had been killed by a bear about a fortnight ago : this was, I think, the third which had been deftroyed this fummer by thefe animals. Yet the herdfmen are never attacked, though they ftay out with their herds the whole fummer through : the night they pafs, as my guide did, amongft the krumholz, or by the fide of fome rock, where they make a fire ; this is always agreeable in fuch a high fituation, and fometimes indifpenfably neceffary. The chronicles of thefe alps record, that even in the midf of fummer, fuch fevere weather fometimes happens, as proves fatal both to the cattle and their keepers. Snme years ago, about this feafon of the year, one or two people were frozen to death here; and on the fourth and fifth of Auguft of the year 1724 , eight-and-fifty horfes were frozen. My guide pointed out to me two or three places, where the people of the neighbouring towns and villages had been mining; they are all convinced that thefe alps are very rich in mines and precious ftones.

In the evening I reached the Koocchar, and there I found my retinue. This is a fimall wooden hut in the midft of a wood, built in the Swedifh manner; that is, with balks whofe ends are let into one another, fomething in the manner of, what carpenters call, dovetail work : it was only about fix yards long, and three broad, and divided into two apartments, but by no means weather tight. In the firft apartment the head fhepherd, who is only a poor common peafant, lives, and makes the cheefe; the other is the magazine where it is kept till it is fent to Kefmark, which is every week. The bufinefs of the dairy is very fimple; the fheep ate driven home thrice a-day to be milked, and each milking is immediately made into cheefe, for no butter is made. The runnet is poured upon the milk whilf it is warm, which is prefently after beaten together, and foon after this the head fhepherd gropes together with both his hands all the curds. This appeared to be a difficult bufinefs, and lafted near half an hour ; the curds then form one great mafs, and are taken out together and put into a cloth, and hung up, but no preffure is ufed. The whey which remains is boiled, and acquires fome confiftence, and this forms the food of the fhepherds, and their only food for the whole feafon; they have not even bread. After the fhepherd and his men had eaten their fupper, the men, of whom there were four or five, left the hut, and went and flept under fheds round the fold. We likewife laid ourfelves upon the floor and flept. In the night the head fhepherd got up two or three times and hollowed to his men, to fee whether they were upon the watch; who

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always anfwered, to fhew that they were upon their duty. Great vigilance is requifte againft the wolves, and with all thefe precautions thefe animals had carried off three fheep this fummer. The day had been rather fhowery, and at night we had a form of thunder and lightning, accompanied by a heavy rain. In the morning I took one of the horfes feeding here, and tranfported my baggage to Rokus; and there I got another to Kefmark, where I paffed a couple of days to dry my plants, and to repofe myfelf; and then on Wednefday the $14^{\text {th }}$ of Auguft I fet out again to afcend the Lomnitz Peak, the higheft of the whole Carpathian chain.

I left Kefmark about noon, and tranfported the provifions, \& c. to Alt Waldorf, where I engaged two chamois-hunters and a frefh horfe. Though this village is quite at the foot of the alps, yet I think we were two or three hours on the march before we entered them, and it was nearly dark before we got to the GlatJein (fmooth-ftone). The path now became too rough and feep for the horfe, we therefore took off the baggage and fent the horfe home; and we refolved to pafs the night here à la belle étoile. We had not even a good rock under which we could creep. The barometer gave our prefent height at 583 yards above the laft village. The firft thing the guides did was to fell a fir tree; for we had not yet afcended as high as the region of the Krumbolz, and there was foon a fire big enough to roaft an ox. As thefe were new guides, I had to hear nearly the fame ftrange Atories of inacceffible gold-mines, concealed treafures, \&cc. \&cc. as
from my laft: but comparing their accounts with thofe of Mr. Sauffure, they feem to be better rewarded for the dangers they expofe themfelves to in purfuit of the cbamois than the hunters of the Switzer Alps. One day's fuccefsful fport is more advantageous to them than a fortnight's or three week's labour; this is owing to there being fome opulent nobility in the neighbourhood of thefe alps. In the morning my attendants took my baggage on their fhoulders, and proceeded to the end of the Klein-Koblbach, where there is an immenfe block of granit, well known to the chamois and gold hunters, and here we depofited it ; for this was now to be our fleltering-place. But a dreadful accident here befell us, though no hare had croffed the road: my fervant, who had taken charge of two or three large wooden flafks of liquor, juft as he was going to take them off his fhoulders, let one flip; it fell on a rock-burf-_and its precious contents, which were to have fupported us under our fatigues, and to have revived our worn-out fpirits, were gone-for ever. A dejected look was vifible in the countenances of every one of us. The perpetrator of the horrid deed had ferved againft the Turks, and exclaimed, though a catholic, it was to be fo, it was decreed it fhould be fo. Gloomy fatality, friend of floth and vice, and enemy to every active virtue, afforded me no comfort, but fill appeared to me with its ufual odious mien.

After repofing myfelf a little, and obferving the height of my barometer, which gave our prefent elevation at $17^{89}$ yards above the level
level of the fea, I made a tour with one of my guides to the Five Lakes. Thefe lie in a valley we came to after we had afcended the rocks which fhut up the one I had chofen for my refidence : they were thawed, though a good deal of fnow lay ftill unmelted. I found nothing new in botany; I faw once or twice the Certbia muraria, and heard the Marmot: all is granit here. In the evening I returned to my rock, where I found a comfortable Krumbols fire to fit by. I had not long been here, and was engaged in looking over, by the light of my fire, the few things I had collected, when I heard myfelf addreffed in German, with High, well and nobly BORN ! -In fuch a folitary cell, and fo remote from the world, and at night, to receive a vifit, and to be addreffed with fuch titles ! ! ! ——Though no fairy tale was floating in my brain, yet I could not conceive the bleffed found to come but from fome aërial meffenger fent to hail me King of Persia. On looking up, I faw not one but three--not ambaffadors from heaven, but three poor devils with haggard looks and tattered clothes.-Ah ! how often do the outward fenfes, careful guardians over the wanderings of the mind, correct its errors and reprefs its wanton freaks! Thefe were neither botanifts nor chamois-hunters, but golc-hunters, and by trade fhoe or cbifin makers, from Kefmark, and all more or lefs tinctured with Alchymy, who were begging for permiffion to take fhelter under my rock, and to warm themfelves by my fire. The intrepidity and conftancy of thefe men are furprifing; they are even bolder than the chamois-hunters. - Thefe poor fellows, like thofe gloomy moral-

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ifts who conceive virtue to exift in fuffering, and in the performance of fome galling tafk which nature unwillingly performs, and are regardlefs of the little offices of kindnefs dictated by our own hearts, have had the misfortune to believe that mines and treafures are only found in the moft inacceffible parts of the rocks : the higher thefe are, the more they are covered with fnow, and expofed to ftorms, and, what is the moft dangerous of all, to mifts and fogs, the more eager they are to examine them: they honefly confeffed to me, that they had vifited thefe Alps, and with the fame views, for the laft twelve years, and had met with nothing, or next to nothing, and that they were about fifty pounds out of pocket; but, like Alchemifts, they hoped at laft to fucceed. Falfe reafoning, on final caufes, has in fome degree led to this: thefe mighty works of God, they fay, have not been created for nothing; and then, ignorant of their importance in the œeconomy of Nature, attribute to them an office for which they were never defigned, that of producing gold, filver, and precious ftones.

The wind at night was very violent, and roared tremendoufly amidt this world of rocks : the fleecy clouds fled rapidly acrofs the moon, the friend of the benighted traveller, and cheerer of this dreary folitude : yet, though thus fecluded from the world, we were not fad, but free from care and forrow; we thought and talked only of the fufferings of others. And chielly of the chamois-hunter, who, in the eagernefs of purfuit, had perhaps been led amongft the craggy
precipices of the impending rocks, and now benighted, farved with hunger and cold, and worn out with fatigue, muft wait there, even deftitute of his ufual clothing, which he had thrown afide to facilitate his courfe, if life fhould ftill hold out this dreadful trial, till a brighter luminary fhould arife to guide his fteps acrofs the hideous chafms, which now furround him with all their horrors, when, perhaps, with the rifing fun, fogs and mifts would come on, and cover him in ftill greater darknefs: and of the poor deluded goldfeeker, who, in fearch of unexifting treafures, might now be finking in a half-thawed lake, or, fallen into fome great cavern, muft now bid an eternal farewell to his vifionary projects. Nor did the fuffering botanif, who might be loft, and now wandering amidft this world of ruins; or who in reaching at the fuppofed nondefcript, and falling from thefe towering battlements of heaven, might now be groaning out his laft breath amidft thefe unpitying rocks, without a . fingle friend to condole with him in his diftrefs, not fhare our commiferation. And thus we made our fituation enviable by comparing it with that of others harder than our own : nor was my lot fo hard; I led the life of the hunting ftate; my toils over, I fat with my companions in fatigue by the fide of a cheerful fire, and caroufed over a pot of hot grog. One of my guides having fhot a Marmot, it was roafted, and it added to our feaft. How fweet are the fmalleft comforts of life when we lead an active hardy life!

In the morning I had purpofed to fcale the Lomnitzer Peak, but the

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the violence of the wind would not allow fuch a dangerous expedition to be attempted. I could therefore fare one of my guides: I fent off the moft active in the morning to go down for another fupply of brandy for my attendants, and with a letter to Mrs. Berfevitzy for fome wine. Brandy, corn brandy, is to be bought every where; but good wine, in fmall quantities, is hardly to be bought any where : the good lady not only fent me a provifion of good wine, but likewife of ham, tongue, and cold veal ; and I contented my felf with botanizing on the ridge of rocks which feparates the two great vallies, the great and the little Kahl-bach; but I had very little fuccefs. This ridge of rocks forms precipices on both its fides, as well towards the great as the little Kahl-bach: it is compofed of nearly vertical leaves, which lean towards the head or end of the valley, that is to the N. W. ; and the rocks on the other fide of the valley have the leaves likewife in the fame direction. The gold-hunters: had courage enough to fet out in the morning in queft of treafure; but they foon found the weather too boiterous, and came back, and I found them on my return fitting at my fire.

The next morning the weather, though by no means very fine, was much better ; and as I could afford to lofe no more time, I determined to attempt to afcend the Lomnitzer Peak, with which, none in the whole Carpathian chain, except the Krivan, can in regard to height enter into competition. I took my barometer with me and bo:h my guides, and left to my fervant the care of my boufebold

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concerns. We afcended the rocks on the right of our valley, by ferambling up a ravine in fome places filled with loofe fones; we were, from the difficulties we met with, obliged at times to help one another, and the barometer incommoded me greatly. In lefs than two hours we reached the top of the rocks which formed the right fide of our valley; but when there we feemed no nearer. Here we were on a flope, which feemed to reach almof to the top: it was covered with great loofe blocks of granit. The clouds now began to collect about the foot of the mountain, and fome fleeces afcended towards us : this made us halt, and confider whether it was prudent to go further: I infifted on afcending to the top of the flope, as we could, I thought, have found our way down again, though enveloped in mifts and clouds. We accordingly continued our journey: when arrived there we halted again; for my guides were very unwilling to go further, for fear of the clouds rifing up to us. After we had baited, and a heart-cheering dram had paffed round, I infifted on afcending to the top; but it feemed to fly from us, or rather to grow 'up -before us. When we had reached the peak, this was fo fteep, that, to get up, we were obliged fometimes to wind round it, and fometimes to defcend, and then climb up the moft craggy precipices, and fometimes walk upon the moft dangerous fhelves of the rock: but at laft we reached the fummit, and with my barometer in good order. 1 believe, I may fafely fay, this was the firft that ever was upon it. I found it 1091 yards above our rock, from whence we fet out in the morning; 2024 yards above the great valley from whence thefe Alps arife; and 2880 yards above the level of the fea.

Afcertaining the height of this mountain, was all I reaped from this laborious and dangerous expedition; for the clouds, which kept increafing, entirely deprived us of the fine and extenfive view we muft otherwife have had from this elevated fituation. This peak was compofed of grey granit, like the rocks at bottom, but with a fmall admixture of a greenifh black terreous fubftance; except a few Lichens, it afforded me very little. The fineft fpecimens of the Senecio incanus, and Arnica Doronicum, I found here, but not at the top; and the Krumbolz ceafed to grow four or five hundred yards (perpendicular height) below the fummit : I met with no fnow in all this day's journey. The clouds rifing higher and higher, made my guides more and more clamorous to defcend ; and indeed they had reafon, for at beft it was a perilous undertaking, and without good guides impracticable.-The chamois-hunters even, when caught in a mift amongft thefe precipices, are often obliged to wait hours together until the weather clears up, or a favourable blaft difpels for a while the hovering mifts. We defcended nearly by the fame way we had afcended, and in our way we heard the goldhunters, in fome deep chafm, hammering, at the rocks. My guides hollaed to them, and they anfwered; but we could not fee one another on account of the mift: we reached our rock in lafety in good time. Soon after the gold-hunters returned, with hungry ftomachs and empty bags.

I made many enquiries of thefe guides, as weil as of my laft,
to know whether there were any Alpine Quadrupeds except the Marmot and the Chamois in thefe Alps, and they faid there were none. The latteranimal is here commonly called Stein Bock; though Gems is the proper denomination in German, which is the common language of thefe parts : and as Stein Bock is the German appellation for the Gapra Ibex, Mountain-Goat, fome have fuppofed that this animal was really an inhabitant of thefe Alps. This is the opinion of Mr. Windifh, the Hungarian geographer; and Mr. Zimmerman, in his very ingenious Tabula Zoologica, has fallen into the fame error; nor is the Antilope Saiga ever found in this part of the Carpathian chain, as far as I could learn.

On the Krumbolz, which grew near our rock, I found a fmall caterpillar ftriped with black and green; it was in great abundance, and had in fome places devoured almof all the leáves of thefe trees. Are not thefe the worms pretended to be generated from fnow, mentioned by fome Hungarian authors? As Bell, for inftance, in his Prodromus Hungaria, who, fpeaking of thefe very Alps, fays, "Hanc perpetuis obfitam nivibus videas, quas ex fitu, vermium quoddam genus concipere, afferunt, qui viderunt." I brought fome away with me, with a view to examine them accurately; but, alas ! as it often happens in fuch tours, they were loft. - The next morning I returned to Kefinark: in defcending I faw a great many of the Turdus torquatus, Ring Ouzel, amongtt the Krumbolz.



[^0]:    * Annal. der Natur-Gefch.

