the exhausted and now unsatisfying air. Further warning there was none, till the elements commenced their fearful conflict and heaven's artillery burst loud and awful on the ear. 'The blackened sky like a thick ceiling stood;' bolts of livid fire sprung from this cloudy rampart, and ran along the ground, dragging their chariots of thunder in their train, and sweeping all before them. The atmosphere, now still more rarefied by the lightning, and scarce fit to support life, stood aloof, like the Red Sea of old, on the right hand and on the left, ready to pour down at the appointed signal: and on it came—a mighty, rushing wind. In a moment every boat was driven from the shore, and dashed one against another, into the midst of the now foaming Ganges. The roar of the hurricane, the wild and savage yells of the native boatmen—their loud imprecations and frantic gestures; the open jaws and fierce eyeballs of the aligators, as they prowled around for the expected prey; and all rendered vivid by the flashing lightning, made it appear as if hell and its demons, with Phlegethon and its boiling waters, had rushed into the vacuum and were wrestling for their victims. How many became so I know not. It shortly ceased, and all was silent save the murmur of the stream; but some had sunk to rise no more; and many a stately mast and tree that had proudly cast their shadows to the setting sun made low obeisance to the dawning of the morn

How wonderful! the living liquid air.
When from its place it rushing onward flies,
Till nicely poised the balance be, and there,
From the quiv'ring scales, the zephyrs gently rise.

From Hogg's Instructor.

WAR AND PEACE.

It may be glorious, great, and good, to meet
the ruthless foe
That would usurp our liberties—our birthright overthrow;
It may be noble and divine the tyrant to withstand,
Who would dishonour and profane our own loved fatherland;—
A sacred duty it must be the despot's will to brave,
For man should never tamely wear the fetters of a slave.

But who may know how deeply earth hath drunk life's crimson flood,
When to the Juggernaut of war men gave their living blood;
When 'neath the idol's chariot-wheels they lowly bent them down,
And sought by human sacrifice the glory of renown?
Ah! who may know the ruin wrought the wreck of manhood's power,
Nor mourn the fearful ills that cloud the battle's awful hour?

The 'leagur'd wall, the famish'd foe, the breach and clashing steel,
The cannon's roar, the victim's groan, the pangs the dying feel,
The savage shout, the virgin's shriek, the look of wild despair,
The dark revenge that slays the child, and mocks the old man's prayer,
The orphan's wail, the widow's tear—all mingle in the strife,
Where slaughter triumphs and exults, with demon passions rife.

It is not well that man should scorn humanity's degree,
That bids the nations stand unawed, unchain'd unlorded—free:
Why should he nurture warlike dreams of conquest and of might,
And bid defiance to the laws of God-created RIGHT?
Unworthy aims inflame his heart, and urge him madly on,
To seek for power, for pomp, and state—a sceptre, crown, and throne.

More noble he who seeks to be toward his fellow just,
Who seeks the needy all—to raise the lowly from the dust;
Whose soul is bent on deeds of love; whose heart divinely glows,
To succour the oppres'd, and soothe the bosom's bitter throes;
Who longs for days when battle's rage and angry feuds shall cease,
When earth shall glory in the reign of universal peace!

What though the ear of peace may hear no victor's loud acclaim?
It leaves no country desolate, no cities wrapt in flame!
What though it list not to the shouts that bid the conquerer hail?
It knows not of the hearts that break with grief's untimely wail!

Yet hath it triumphs nobler all, and treasures richer far,
Than trophies by the victor won on reeking fields of war!

Peace comes with blessing and with joy, to crown the land with smiles;
Peace scatters plenty on the shores of ocean's countless isles;
Peace calms our passions all, and stills their tumult wild to rest,
And wakens feelings in the soul—the noblest and the best!
Peace makes the weary troubled heart with glowing gladness thrill,
While softly all its accents fall, and whisper 'Peace, be still!'

Peace smiles, descending pure from Him who 'spake and it was done,'
To fan religion's vital spark effulgent as the sun;
Peace beckons wisdom, truth, and love with smiles into her van,
To win achievements great and good for virtue and for man!
Peace brings to light what knowledge yields—those precious priceless gems,
That shine more bright than jewell'd crowns or regal diadems!

Then science works her mighty spells, and wonders are revealed,
And nature's ancient mysteries are all unveil'd, unseal'd;
Earth stoops to man's dominion then—and then, as with a rein,
He binds at will its giant strength, nor heeds its struggles vain.
His high behest the light'ning hears, and at his mandate proud,
To be his fetter'd slave it comes from out the thunder cloud

Then too, with all her fairy train, Art gladly comes, and lo!
The marble and the canvass seem with breathing life to glow;
The workman piles his subtle task with deep and cunning skill,
And things of beauty, rich and rare, are fashioned to his will;
And while the vessel flings its sails upon the swelling breeze,
With treasures won from foreign lands, and stores from distant seas.

War is a fiend of hideous form—a demon fierce and wild;
Peace is an angel robed in light, all beautiful and mild!
One is the harbinger of dark and desolating wrath;
One makes a paradise serene to blossom round its path!
One ever wears a boding frown that brooks no look benign;
But peace can claim from sacred love a token and a smile

More than a conqueror is he who scorns to be the slave
Of feelings that pollute the heart, and passions that deprave;
And more, ay, more than victor he who will not basely kneel
Before the shrine of avarice, his neighbour's right to steal;
To none has nature proffer'd right with despot pride to soar;
The poor and needy all are men, and monarch's are—no more.

From Chambers's Edinburgh Journal.

RISING AND SINKING OF LAND IN NORTHERN EUROPE.

In the temperate regions of the earth, we are so accustomed to associate the idea of perfect stability with the ground on which we tread, that we are prone to incredulity when told of upheavals of the land, which cannot be immediately referred to the action of volcanoes or earthquakes. And when travellers have witnessed one of the latter convulsions for the first time, their description of their sensations presents a singular mixture of bewilderment and alarm, jostling long-settled convictions. Startling, however, as may be the phenomena of earthquakes, the subsidence or elevation of hills, draining or formation of lakes, diversion of rivers, they only represent on the sudden what has in all time been effected by the slow and silent, though not less sure, operations of nature in various parts of the world. They have heard or read of beds of marine shells being found at elevations or places far remote from the sea, or of ancient vessels dug up far below the soil; but these things have been conveniently referred to the Deluge, or some sudden inundation, under the impression that since those events no farther commotion has happened. But the observations of scientific men testify to the alterations continually going on over large portions of the earth's surface, not less remarkable than those due to the violence of earthquakes.

Mr Lyell was the first to make it popularly known in this country, in his 'Principles of Geology,' a work which we are greatly pleased to see published in a seventh edition, abounding with sound and comprehensive views likely to do good service to the cause of geological science. This writer directed attention to the gradual elevation of the land in Sweden and adjacent portions of the north of Europe; and a summary of his observations, as amplified in the new eddition, will serve to convey an idea of what is known of this interesting phenomenon.

We may premise that instances of upheaval and submergence are more general than is commonly supposed. Many changes of level are to be traced in the valley of the Rhine. In Sicily, shells, identical with those now existing in the Mediterranean, are found at a height of three thousand feet above the sea level. Calabria presents similar appearances. The latter country, it is thought is slowly rising a point not yet determined, owing to the comparatively short period during which observations have been made. In the bay of Baiae, fish are now caught on certain parts of the coast, which, in 1807, were dry land: the depression goes on at the rate of one inch in four years.

Places on the coast of Asia Minor are slowly increasing their distance from the sea; and according to Von Hoff, a German writer, the island of Tahiti gains in height every year. Mr Darwin has shown that the bed of the Pacific Ocean has undergone frequent upheavals and depressions, the coral reefs being some times elevated into mountain ranges, at others sunk fathoms below the level at which they were formed. In 1822, a portion of the South American continent, equal in extent to the British isles, was raised; and similar movements are still going on. To turn to our own country: The town of Brighton once stood, where the chain-pier is now built, on a beach which the sea had abandoned for ages. In Shetland and Cornwall great changes have occurred within the memory of man. Evidences of upheaval are apparent on some parts bordering the estuary of the Clyde. In the Isle of Arran a circle of inland cliffs is distinctly visible. A large portion of Lincolnshire was once covered by the sea, where cattle now graze; while on the opposite coast of Yorkshire, towns which were busy ports in the fourteenth century, are now covered by the waves. At one part of the Norfolk shore there is a depth of water sufficient to float a frigate, where, fifty years ago a good a cliff fifty feet in height.

Many other facts might be adduced, were more required, to prove the existence of constant change. The results may appear small when compared with the agencies at work, and the long ages required to produce them; yet when looked at as the means by which nature provides for the duration of her empire we shall find reason to estimate them at their full value.

About the beginning of last century, Celsius, a celebrated Swedish naturalist, gave it as his opinion that the waters of the North and Baltic seas were slowly subsiding, the decrease amounting to nearly four feet in three hundred years. The fact he showed had been noticed by ancient writers, according to whom Scandinavia was formerly an island, but towards the ninth century had become part of the continent by the retreating of the waters. In common, however, with the early astronomers, who were deceived by *apparent* motions of the stars, so these writers, and Celsius himself, were deceived by the apparent subsidence of the sea. The speculations gave rise to a controversy, in which it was argued that as there was no proof of a rising of the ocean in other regions, there could be no sinking in the north. Playfair suggested that the appearances were due rather to an elevation of the land—an opinion confirmed by VonBuch, who, after exploring Sweden in 1807, expressed his conviction 'that the whole country, from Fredericksha11 in Norway to Abo in Finland, and perhaps as far as St. Petersburg, was slowly and insensibly rising.' This declaration from so eminent an authority led to a more critical examination of the subject. Marks had been chisselled in the rocks on various parts of the Baltic shores, to serve as an index of the water-level. These were inspected by a commission in 1820-21, and a report was presented to the Royal Academy of Stockholm, in which the water, subsequently to the incision of the marks, was clearly demonstrated; at the same time new marks were made.

In 1834, Mr Lyell set out for Sweden, to convince himself, by actual observation, of the truth or falsehood of the theory advanced. He first visited the famous castle of Calmar: the bases of two projecting towers were once washed by the sea, but now they are above the sea-level, having risen four feet in as many centuries. He also examined the marks cut by direction of the commission in 1820-21, and found them in cases from four to five inches above the surface of the water, which, when first cut, they exactly indicated; and after careful consideration of the facts, and enquiry among the most eminent Swedish engineers, assured himself that the evidence in favour of a rise of the land was altogether conclusive! The absence of tides in the Baltic, and the peculiar configuration of the coasts of Sweden and Norway, render the determination of the upheaval a comparatively easy task. On reference to a map of those countries, a range of small islands will be seen a short distance from the mainland, and following its indentations; these Islands, locally termed skar (*skair*), are rocky and precipitous, and by repelling the violence of the waves, leave the space within comparatively calm. The natives take advantage of this circumstance for their short coasting voyages; and by passing frequently through the intricate channels, become perfectly acquainted with every rock. Notwithstanding the slowness of the upward movement, it is sufficient to derange the navigation: channels are narrowed, twisted, or altogether filled up. Rocks which formerly were sunken, are now several feet above the surface of the water, and, by the resort of sea-birds and other accumulations, in time are converted into islands. As the process goes on, the hollows between dry up, and become pastures surrounded by fir-clad cliffs. Instances of this transformation have occurred within the memory of living witnesses, both on the eastern and western coasts of Sweden. With regard to this change, Mr Lyell observes 'My attention was frequently called to low pastures from one to three miles inland, where the old inhabitants or their fathers remembered that boats and ships had sailed. The traveller would not have suspected such recent conversions of sea into *terra firma*; but there are few regions where a valley newly gained from the sea may so rapidly assume an air of considerable antiquity. Every small island and rock off this coast is covered with wood; and it only requires that the intervening channels and fiords should dry up, and become overspread with green turf, for the country to wear at once an inland aspect, with open glades and plains surrounded by well-wooded heights.'

While rowing to examine a marked rock forty miles to the north-east of Upsal, the boatmen pointed out rocks, from one to two feet above the water, which when boys, they remembered to have been below the surface; and a channel then nearly dry, as one through which heavily laden boats once passed. So accustomed are they to the natural evidences of the rise, that they detect them without reference to the artificial marks, but attribute the change rather to subsidence of the sea than to elevation of the land. At Lofgrund, a mark cut in a rock in 1731 was found to be nearly three feet above the present water-level. In the sixteenth century, the port of Gothenburg was twenty miles higher up the firth on which it is built than the place where it now stands, and, according to appearances, the waters are still retiring. At Gefile, Mr Lyell states, preparations were being made to remove the harbour nearer to the sea, in consequence of the increasing shallownes of the water. At some parts of the coast both of Sweden and Finland, reports are current among the villagers of wrecks and anchors dug up at places far in the interior; and the grass crops of meadows near the sea are said to be increasing with the gradual elevation of the land. Mr. Lyell travelled across Sweden from the east to the west coast, on the summit-level, and found everywhere the same appearances as on the coast. The whole country affords incontestible evidence of upheaval, but varying in different districts, being greatest towards the north, where the rise has been from six huadred feet, near Christiana four hundred feet, and at Uddevalla two hundred feet. The elevation however, has been neither uniform nor continuous; what is now rising was once sinking, interrupted by long intervals of rest. Near Uddevalla, on the western coast, on removing a shelly stratum from a mass of gneiss more than one hundred feet above the sea-level, barnacles were found clinging so firmly to the surface, that portions of the newly-exposed rock came away on detaching them.

Other zoophytes were also met with in considerable numbers, of the same peculiar dwarfish structure as these at present existing in the Gulf of Bothnia. The finding of similar shells at places seventy miles from the sea in the interior of the country, divests the instance here referred to of anything like an accidental character; and proves most satisfactorily, that this portion of the continent has lain for a long period below the sea, while accumulations have formed above it. Perhaps the most interesting act noticed by Mr Lyell, is the discovery of a wooden fishing hut, at a depth of sixty four feet beneath the surface of the soil, during the excavations for a canal to unite Lake Maeler with an inlet of the Baltic. The structure was about eight feet square; the walls crumbled away on exposure to the air, but the floor-timbers remained sound. There was a rude stone fireplace in the centre, with fragments of half-burnt wood, and outside, a heap of wood piled up for fuel: not a particle of iron appeared to have been used in the construction of this singular building. It was compactly buried in fine sand; on which coarse gravel and large boulders in wavy strata were super-imposed. It has been shown that the submergence, if caused by a sudden inundation, would have left the boulders, as the heaviest portion of the materials, at the bottom, instead of where they are now found, at the surface—a position in which they have been deposited by floating ice. And we learn from this remarkable fact, that since the building of fishing-huts in Sweden, the land where the canal is dug has sunk during a period long enough for the deposition of strata sixty-four feet in thickness by the sea, and subsequently been raised to its present elevation.

Observations on this interesting phenomenon have been made in Sweden for about a century and a half, and we see no reason to doubt their correctness. They are still carried on under the direction of Berzelius, and other members of the Royal Academy of Stockholm, with a view to determine the direction of the upheaval. As yet, the evidence is in favour of an oscillation, or see-saw motion from south to north. In 1749, Linnæ measured the distance of a large stone from the wa-