

A

DESCRIPTIVE POEM:

ADDRESSED TO

TWOLADIES*,

AT THEIR RETURN FROM VIEWING THE MINES NEAR WHITEHAVEN.

BY DR. DALTON.

WELCOME to light, advent'rous pair!
Thrice welcome to the balmy air
From fulph'rous damps in caverns deep,
Where fubterranean thunders fleep,

* Miss Lowthers, daughters of the late Lord Lonsdale.

From fulph'rous damps, &c.] The coal mines near Whitehaven are greatly infested with fulminating damps; large quantities of them being frequently collected in those deserted works, which are not ventilated with perpetual currents of fresh air: and, in such works, they often remain for a long time, without doing any mischief. But when, by some accident, they are set on sire, they then produce dreadful explosions, very destructive to the miners; and bursting out of the pits with great impetuosity, like the sirey eruptions from burning mountains, force along with them ponderous bodies to a great height in the sire.

Or,

(24)

Or, wak'd, with dire Ætnæan found,
Bellow the trembling mountain round,
Bellow the trembling mountain round,
Till to the frighted realms of day
Thro' flaming mouths they force their way;
From bursting streams s, and burning rocks,
From nature's fierce intestine shocks;
From the dark mansions of despair,
Welcome once more to light and air!
But why explore that world of night
Conceal'd till then from semale sight?
Such grace and beauty why consine
One moment to a dreary mine?
Was it becanse your curious eye
The secrets of the earth would spy,
How intervein'd rich minerals glow,

How bubbling fountains learn to flow?

Or rather that the fons of day
Already own'd your rightful fway,
And therefore, like young Ammon, you
Another world would fain subdue?

From burfling streams, &c.] The coal in these mines hath, several times, been set on sire by the sulminating damp, and hath continued burning for many months; until large streams of water were conducted into the mines, and suffered to fill those parts where the coal was on which there are instances near Newcastle, and in other parts of England, has continued burning for ages. But more mines have been ruined by iaundations.

What tho' fage Prospero attend, While you the cavern'd hill descend, Tho', warn'd by him, with bended head You shun the shelving roof, and tread With cautious foot the rugged way, While tapers strive to mimic day? Tho' he with hundred gates and chains The Dæmons of the mine restrains g, To whom their parent, jealous earth, To guard her hidden stores gave birth, At which, while kindred furies fung, With hideous joy pale Orcus rung; Tho' boiling with vain rage they fit Fix'd to the bottom of the pit, While at his beck the spi'rits of air With breath of heaven their taints repair; Or if they feek superior skies, Thro' ways assign'd by him they rise, Troop after troop at day expire In torments of perpetual fire;

B The damons of the mine restrains, &c.] In order to prevent, as much as possible, the collieries from being filled with those pernicious damps, it has been found necessary carefully to search for those crevises in the coal, from whence they issue out; and at those places, to confine them within a narrow space; and from those narrow spaces in which they are confined, to conduct them through long pipes into the open air; where being set on sire, they consume in perpetual slames, as they continually arise out of the earth.

Tho?

(26)

Tho' he with fury-quelling charms
The whole infernal host disarms,
And summons h to your guarded sides
A squadron of etherial guides,
You still, when we together view
The dreadful enterprize and you,
The public care and wonder go
Of all above and all below.

For at your presence toil is o'er,
The restless miner works no more.
Nor strikes the slint i, nor whirls the steel
Of that strange spark-emitting wheel,

h And fummons, &c.] Those who have the direction of these deep and extensive works, are obliged to use great care and art in keeping them continually ventilated with perpetual currents of fresh air; which afford the miners a constant supply of that vital sluid, and expel out of the mines damps and other noxious exhalations, together with such other burnt and soul air, as is become poisonous and unsit for respiration.

i Nor strikes the stint, &c.] It having been observed by Mr. Spedding, who superintends these collieries, and to whom the author here gives the name of Prospero, that the sulminating damp could only be kindled by stame, and that it was not liable to be set on fire by red-hot iron, nor by the sparks produced by the collision of stint and steel, he invented a machine, in which, while a steel wheel is turned round with a very rapid motion, and stints are applied thereto, great plenty of them to carry on their work in close places, where the stame of a canvention of this fort, the working of these mines, so greatly annoyed cable.

Which, form'd by Prospero's magic care,
Plays harmless in the sulphurous air,
Without a slame dissusses light,
And makes the grisly cavern bright.
His task secure the miner plies,
Nor hears Tartarian tempests rise;
But quits it now, and hastes away
To this great Stygian holiday.

Agape the footy collier stands,
His axe suspended in his hands,
His Æthiopian teeth the while
"Grin horribly a ghastly smile,"
To see two goddesses so fair
Descend to him from sields of air.
Not greater wonder seiz'd th' abode
Of gloomy Dis, infernal god,
With pity when th' Orphean lyre
Did every iron heart inspire,
Sooth'd tortur'd ghosts with heavenly strains,
And respited eternal pains.

But on you move k thro' ways less steep. To lostier chambers of the deep,

Whose

k But on you move, &c.] The reader may suppose that he hath entered these mines by the opening at the bottom of a hill, and hath already passed through a long adit, hewn in the rock, and arched over with brick, which is the principal road into them for men, and for horses; and which, by a steep descent, leads down to the lowest vein of coal.

Whose jetty pillars seem to groan
Beneath a ponderous roof of stone.
Then with increasing wonder gaze
The dark inextricable maze,
Where cavern crossing cavern meets,
(City of subterraneous streets!)
Where in a triple 1 story end
Mines that o'er mines by slights ascend.
But who in order can relate
What terror still your steps await?
How issuing from the sulphurous coal
Thick Acherontic rivers m roll?
How in close center of these mines,
Where orient morning never shines,

coal. Being arrived at the coal, he may suppose himself still to descend, by ways less steep, till, after a journey of a mile and a half, he arrives at the prosoundest parts of the mine. The greatest part of this descent is through spacious galleries, which continually intersect other galleries; all the coal being cut away except large pillars, which, in deep parts of the mine, are three yards high, and about twelve yards square at the base; such great strength being there required to support the ponderous roof.

I A triple story, &c] There are here three strata of coal, which lie at a considerable distance one above another. The mines wrought in the author to the different stories of a building.

m Thick Acherontic rivers, &c.] The water that flows from the coal is collected into one stream, which runs towards the fire-engines. This sive, that it quickly consumes iron.

Nor the wing'd zephyrs e'er resort,
Infernal darkness holds her court?
How, breathless, with faint pace, and slow ,
Thro' her grim sultry realm you go,
Till purer rising gales dispense
Their cordials to the sickening sense?

Your progress next the wondering muse Thro' narrow galleries pursues; Where earth o, the miner's way to close, Did once the massy rock oppose:

In

n How, breathless, with faint pace; and slow, &c.] Those who descend into these mines, find them most close and sultry in the middle parts, that are most remote from the pits and adits, and perceive them to grow cooler the nearer they approach to those pits which are sunk to the deepest parts of the mines; down which pits, large streams of fresh air are made to descend, and up which, the water is drawn out, by means of fire-engines.

o Where earth, &c.] The vein of coal is not always regularly continued in the same inclined plane, but, instead thereof, the miners frequently meet with hard rock, which interrupts their further progress. At such places there seem to have been breaks in the earth, from the surface downwards; one part of the earth seeming to have sunk down, while the part adjoining has remained in its ancient situation. In some of these places, the earth may have sunk ten or twenty fathoms, or more; in other places, less than one fathom. These breaks, the miners call Dykes; and when they come at one of them, their first eare is to discover whether the strata in the part adjoining be higher or lower than in the part where they have been working: or, (to use their own terms) whether the coal be cast down, or east up. If it be cast down,

In vain: his daring axe he heaves,
Tow'rds the black vein a passage cleaves:
Dissever'd by the nitrous blast,
The stubborn barrier bursts at last.
Thus urg'd by hunger's clamorous call,
Incessant labour conquers all.

In spacious rooms once more you tread, Whose roofs p with sigures quaint o'erspread Wild nature paints with various dyes, With such as tinge the evening skies.

A different scene to this succeeds:

The dreary road abruptly leads

Down to the cold and humid caves,

Where hissing fall the turbid waves.

Resounding deep thro' glimmering shades

The clank of chains your ears invades.

Thro' pits prosound from distant day,

Scarce travels down light's languid ray.

High on huge axis heav'd, above,

See ballanc'd beams unweary'd move!

they sink a pit to it; but if it be cast up to any considerable height, they are often-times obliged, with great labour and expence, as at the place here described, to carry forwards a level or long gallery through the rock, until they again arrive at the stratum of coal.

P Whose roofs, &c.] These colours, with which the free-stone roof the mines is beautifully variegated in many places, and which have other, and other earthy substances.

While pent within the iron womb?
Of boiling caldrons pants for room,
Expanded steam, and shrinks, or swells,
As cold restrains, or heat impells,

And,

9 While pent within the iron womb, &c.] The author hath here taken occasion to celebrate the fire-engine, the invention of which does fuch honour to this nation. - He has endeavoured to describe, in a poetic manner, the effects of the elastic steam, and the great power of the atmosphere; which, by their alternate actions, give force and motion to the beam of this engine, and by it, to the pump-rods, which elevate the water through tubes, and discharge it out of the mine. It appears, from pretty exact calculations, that it would require about 550 men, or a power equal to that of 110 horses, to work the pumps of one of the largest fire-engines now in use, (the diameter of whose cylinder is seventy inches) and thrice that number of men to keep an engine of this fize constantly at work. And that as much water may be raised by an engine of this fize kept constantly at work, as can be drawn up by 2520 men with rollers and buckets, after the manner now daily practifed in many mines; or as much as can be borne up on the shoulders of twice that number of men; as is faid to be done in some of the mines of Peru. -So great is the power of the air in one of those engines.

There are four fire-engines belonging to this colliery; which, when all at work, discharge from it about 1228 gallons every minute, at thirteen strokes; 1,768,320 gallons every twenty-four hours. By the four engines here employed, nearly twice the above-mentioned quantity of water might be discharged from mines that are not above sixty or seventy fathoms deep, which depth is rarely exceeded in the Newcastle collieries, or in any of the English collieries, those of Whitehaven excepted.

The reader may find an account of Savery's engine in Harris's Lexicon Technicum.—Many great improvements have been made to it fince,

And, ready for the vacant space, Incumbent air refumes his place, Depressing with stupendous force Whate'er refists his downward course, Pumps mov'd by rods from ponderous beams Arrest the unsuspecting streams, Which foon a fluggish pool would lie; Then spout them foaming to the sky. Sagacious Savery! taught by thee Discordant elements agree, Fire, water, air, heat, cold unite, And listed in one service fight, Pure streams to thirsty cities send, Or deepest mines from floods defend. Man's richest gift thy work will shine; Rome's aqueducts were poor to thine! At last the long descent is o'er; Above your heads the billows roar r:

High

and are daily making; several of which are related in the Philosophical Transactions. The best account of it, its various improvement and uses, is, I think, in Dr. Desaguliers's course of experimental philosophy, vol. 11.

one hundred and thirty fathoms, and are extended under the fea to places where there is, above them, sufficient depth of water for ships of large burden. These are the deepest coal-mines that have hitherto been wrought; and perhaps the miners have not, in any other part of the globe, penetrated to so great a depth below the surface of the sea; the

High o'er your heads they roar in vain;
Not all the surges of the main
'The dark recess can e'er disclose,
Rocks heap'd on rocks th' attempt oppose:
'Thrice Dover's cliff from you the tides
With interposing roof divides!

From such abyse restor'd to light,
Invade no more the realms of night.
For heroines it may well suffice
Once to have left these azure skies.
Heroes themselves, in days of yore,
Bold as they were, atchiev'd no more.
Without a dread descent you may
The mines in their essects survey,
And with an easy eye look down
On that fair port and happy town.

Where late along the naked strand
The fisher's cot did lonely stand,
And his poor bark unshelter'd lay,
Of every swelling surge the prey,
Now losty piers their arms extend,
And with their strong embraces bend
Round crowded sleets, which safe defy
All storms that rend the wintry sky,

very deep mines in Hungary, Peru, and elsewhere, being situated in mountainous countries, where the surface of the earth is elevated to a great height above the level of the ocean.

VOL. I.

D

And

And bulwarks beyond bulwarks chain:
The fury of the roaring main.
The peopled vale fair dwellings fill,
And length'ning streets ascend the hill;
Where industry, intent to thrive,
Brings all her honey to the hive;
Religion strikes with reverent awe,
Example works th' effect of law,
And plenty's flowing cup we fee
Untainted yet by luxury.

These are the glories of the mine! Creative commerce, these are thine! Here while delighted you impart Delight to every eye and heart, Behold, grown jealous of your stay, Your native stream shis charms display, To court you to his banks again; Now wind in wanton waves his train, Now spread into a chrystal plain; Then hid by pendent rocks would steal, But tuneful falls his course reveal, As down the bending vale he roves Thro' Yanwath woods, and Buckholme's groves; Whose broad o'erspreading boughs beneath Warbling he flows, while zephyrs breathe. Here foftly swells the spacious lawn, Where bounds the buck, and skips the fawn,

Four native stream, &c.] The river Lowther.

Or, couch'd beneath the hawthorn-trees, In dappled groups enjoy the breeze.

Amid yon funny plain, alone,
To patriarchal reverence grown,
An oak for many an age has stood
Himself a widely waving wood,
While men and herds, with swift decay,
Race after race, have pass'd away.
See still his central trunk sustain
Huge boughs, which round o'erhang the plain,
And hospitable shade inclose,
Where slocks and herds at ease repose!

There the brown fells afcend the sky, Below, the green inclosures lie; Along their sloping sides supine The peaceful villages recline:

On azure roofs t bright sun-beams play, And make the meanest dwelling gay. Thus oft the wise all-ruling Mind Is to the lowly cottage kind, Bids there his beams of favour sall, While sorrow crowds the losty hall, That this may fear his awful frown, And grateful that his goodness own.

If, grown familiar to the fight, Lowther itself should less delight,

t On azure roofs, &c.] The houses of this country are covered with a beautiful blue flate.

Then change the scene: to nature's pride, Sweet "Keswick's vale, the muse will guide.

The

u Sweet Kefwick's vale, &e.] This delightful vale is thus elegantly described by the late ingenious Dr. Brown in a letter to a friend. "In my way to the north from Hagley, I passed through Dovedale; and, to say the truth, was disappointed in it. When I came to Buxton, I visited another or two of their romantic scenes; but these are inferior to Dovedale. They are all but poor miniatures of Keswick; which exceeds them more in grandeur than I can give you to imagine; and more, if possible, in beauty than in grandeur.

" Instead of the narrow slip of valley which is feen at Dovedale, you have at Kefwick a vast amphitheatre, in circumference above twenty miles. Instead of a meagre rivulet, a noble living lake, ten miles round, of an oblong form, adorned with a variety of wooded islands. The rocks indeed of Dovedale are finely wild, pointed, and irregular; but the hills are both little and unanimated; and the margin of the brook is poorly edged with weeds, morafs, and brushwood. But at Keswick, you will, on one fide of the lake, fee a rich and beautiful landskip of cultivated fields, rising to the eye in fine inequalities, with noble groves of oak, happily dispersed; and climbing the adjacent hills, shade above shade, in the most various and picturesque forms. On the opposite shore, you will find rocks and cliffs of stupendous height, hanging broken over the like in horrible grandour, some of them a thousand feet high, the woods climbing up their steep and shaggy sides, where mortal foot never yet approached; on these dreadful heights the eagles build their nestern build their nests; a variety of water-falls are feen pouring from their summits, and turn the fummits, and tumbling in vast sheets from rock to rock in rude and ter rible magnificence. rible magnificence: while on all fides of this immense amphitheatre the lofty mountains rife. lofty mountains rife round, piercing the clouds in shapes as spiry and tantastic as the very roll. fantastic as the very rocks of Dovedale. To this I must add the free and suld Instrumed a quent The muse, who trod th' inchanted ground, Who fail'd the wonderous lake around,

With

equent and bold projection of the cliffs into the lake, forming noble bays and promontories: in other parts they finely retire from it, and often open in abrupt chasms or clefts, through which at hand you see rich and uncultivated vales, and beyond these, at various distance, mountain rifing over mountain; among which, new prospects present themselves in mist, till the eye is lost in an agreeable perplexity.

Where active funcy travels beyond fense, And pictures things unfeen.

Were I to analyfe the two places into their constituent principles, I should tell you, that the full perfection of Keswick consists of three circumstances, beauty, horror, and immensity united; the second of which alone is found in Dovedale. Of beauty it bath little; nature having left it almost a defert : neither its small extent, nor the diminutive and lifeless form of the hills, admit magnificence; but to give you a complete idea of these three perfections, as they are joined in Keswick, would require the united powers of Claude, Salvator, and Pouffin. The first - should throw his delicate funshine over the cultivated vales, the scattered cots, the groves, the lake, and wooded islands. The fecond should dash out the horror of the rugged cliffs, the steeps, the hanging woods, and foaming water-falls; while the grand pencil of Pouffin should crown the whole with the majefty of the impending mountains.

" So much, for what I would call the permanent beauties of this aftonishing scene. Were I not afraid of being tiresome, I could now dwell as long on its varying or accidental beauties. I would fail-round the lake, anchor in every bay, and land you on every promontory and island. I would point out the perpetual change of prospect: the woods, rocks, cliffs, and mountains, by turns vanishing or rifing into view: now gaining on the fight, hanging over our heads in their full dimen-

D 3

(38)

With you will hafte once more to haif The beauteous brook of Borrodale.

From

fions, beautifully dreadful; and now, by a change of fituation, affurning new romantic shapes, retiring and lessening on the eye, and insensibly loing themselves in an azure mist. I would remark the contrast of light and shade, produced by the morning and evening fun; the one gilding the western, the other the eastern side of this immense amphitheatre; while the vast shadow projected by the mountains buries the opposite part in a deep and purple gloom, which the eye can hardly penetrate: the natural variety of colouring which the several objects produce is no less wonderful and pleasing: the ruling tincts in the valley being those of azure, green, and gold, yet ever various, arising from an intermixture of the lake, the woods, the grafs, and corn-fields: these are finely contrasted by the grey rocks and cliffs; and the whole heightened by the yellow streams of light, the purple hues, and misty azure of the mountains. Sometimes a ferene air and clear sky disclose the tops of the highest hills: at others, you see the clouds involving their summits, resting on their sides, or descending to their base, and rolling among the vallies, as in a vast furnace; when the winds are high, they roar among the cliffs and caverns like peals of thunder; then, too, the clouds are feen in vast bodies sweeping along the hills in gloomy greatness, while the lake joins the tumult, and tosses like a sea: but in calm weather the whole scene becomes new; the lake is a perfect mirror; and the landskip in all its beauty: islands, fields, woods, rocks, and mountains, are feen inverted, and floating on its furface. I will now carry you to the top of a cliff, where, if you dare approach the ridge, a new scene of astonishment presents itself; where the valley, lake, and islands, feem lying at your feet; where this expanse of water appears diminished to a little pool amidst the vast and immeasurable objests that furround it; for here the fummits of more distant hills appear

From favage parent, gentle stream! Be thou the muse's favourite theme: O foft infinuating glide Silent along the meadow's fide, Smooth o'er the fandy bottom pass Resplendent all thro' sluid glass, Unless upon thy yielding breast Their painted heads the lilies rest, To where in deep capacious bed The widely liquid lake is fpread.

Let other streams rejoice to roar Down the rough rocks of dread Lodore x, Rush raving on with boisterous sweep, And foaming rend the frighted deep, Thy gentle genius shrinks away From fuch a rude unequal fray; Thro' thine own native dale, where rife Tremendous rocks amid the skies,

beyond those you have already scen; and rising behind each other in fuccessive ranges and azure groups of craggy and broken steeps, form an immense and awful picture, which can only be expressed by the image of a tempestuous sea of mountains. Let me now conduct you down again to the valley, and conclude with one circumstance more; which is, that a walk by still moon-light (at which time the distant water-falls are heard in all their variety of found) among these inchanting dales, open such scenes of delicate beauty, repose, and solemnity, as exceed all description.

* Of dread Lodore, &c.] A very high cafcade here falls into the lake of Derwentwater, near where Borrodale-beck (or brook) enters into it, as described above.

D 4

Thy

Thy waves with patience flowly wind, Till they the smoothest channel find, Soften the horrors of the scene, And thro' confusion slow serene.

Horrors like these at first alarm, But foon with Tavage grandeur charm, And raise to noblest thoughts your mind: Thus by thy fall, Lodore, reclin'd, The cragged cliff, impendent wood, Whose shadows mix o'er half the flood, The gloomy clouds, which folemn fail, Scarce lifted by the languid gale O'er the capp'd hill, and darken'd vale; The ravening kite, and bird of Jove, Which round th' aëreal ocean rove, And, floating on the billowy sky, With full expanded pennons fly, Their fluttering or their bleating prey Thence with death-dooming eye furvey; Channels by rocky torrents torn y, Rocks to the lake in thunder borne, Or fuch as o'er our heads appear Suspended in their mid career,

Thannels by rocky torrents torn, &c.] For an account of an extraordinary storm in a part of this country, called St. John's vale, by which numerous fragments of rocks were driven down from the mountains along with ferted in the Continuous water, fee a letter from Cockermouth, inferted in the Gentleman's Magazine of October, 1754.

To start again at his command,
Who rules sire, water, air, and land,
I view with wonder and delight,
A pleasing, tho' an awful sight:
For, seen with them, the verdant isses
Soften with more delicious smiles,
More tempting twine their opening bowers,
More lively glow the purple slowers,
More smoothly slopes the border gay,
In fairer circle bends the bay,
And last, to six our wandering eyes,
Thy roofs, O Keswick, brighter rise
The lake and losty hills between,
Where giant Skiddow shuts the scene.

Supreme of mountains, Skiddow, hail!

To whom all Britain finks a vale!

Lo, his imperial brow I fee

From foul usurping vapours free!

Twere glorious now his fide to climb,

Boldly to scale his top sublime!

And thence—my muse, these slights forbear,

Nor with wild raptures tire the fair.

Hills, rocks, and dales have been too long

The subject of thy rambling song.

Far other scenes their minds employ,

And move their hearts with softer joy.

For pleasures they need never roam,

Theirs with affection dwell, at home.

Thrice

Thrice happy they at home to prove
A parent's and a brother's love,
Her bright example pleas'd to trace,
Learn every virtue, every grace,
Which lustre give in female life
To daughter, fister, parent, wife;
Grateful to see her guardian care
A tender father's loss repair,
And, rising far o'er grief and pain,
The glories of her race maintain.

Their antient feats let others fly, To stroll beneath a foreign sky, Or loitering in their villas stay, Till useless summers waste away, While, hopeless of their lord's return, The poor exhausted tenants mourn; From Lowther she disdains to run To bask beneath a southern sun, Opens the hospitable door, Welcomes the friend, relieves the poor; Bids tenants share the lib'ral board, And early know and love their lord, Whose courteous deeds to all extend, And make each happy guest a friend. To smiling earth the grateful main Thus gives her gather'd streams again In showers on hill, and dale, and plain.

O may the virtues, which adorn
With modest beams his rising morn,
Unclouded grow to perfect day!
May he with bounty's brightest ray
The natives chear, enrich the soil,
With arts improve, reward their toil,
Glad with kind warmth our northern sky,
And generous Lonsdale's loss supply.



EPISTLE

TO THE

Right Honble. the Lord Viscount BEAUCHAMP.

WRITTEN IN THE YEAR MDCCXXXV-VI.

BY THE SAME.

MY LORD,

"HAT is Nobility?" you wish to know,
The real substance stripp'd of all its show:
And can you then the honest freedom bear
Of truths I ought to tell, and you to hear?
Or shall I say—" Such beauty, birth, estate,
"Must make their owner lov'd, and make him great!
"Above