It may be observed upon these experiments.

First, That the advantages of cylindrical, over conical wheels moving on smooth hard roads, appear in these to be the same as in Mr. Cumming's experiments, name y as three to two.

Secondly, That on gravel roads the difference between conical and cylindrical wheels is not nearly so great

as upon smooth roads.

Thudly, That on rougher roads, where the stones do not give way, there is scarcely any difference between the cylinder and the cone.

The causes of these different results are obvious; on sandy and gravelly

roads the materials give way, and tecede from the smaller part of the conical wheels as Mr. Cumming's bars recede: and on stony roads only, cylindrical sections of the conical wheels touch the stone, the rest of the cone does not bear upon the road.

Upon the whole, I return to my former proposition, and do give it decidedly as my opinion, that nothing but an experiment in large, upon a real road with real waggons drawn by hoses, can ever determine the relative advantages of cylindrical, conical, or narrow wheels, to the satisfaction either of philosophical enquirers or the public.

BIOGRAPHICAL SKETCHES OF DISTINGUISHED PERSONS.

The following character of Doctor Haliday appeared in the Belfast News Letter, immediately after his death. To those who were acquainted with the worth of the man, no apology is necessary for inserting this well merited eulogium and tribute to his memory. It appears with nuck propriety in a Magazine published in a town, which he so long adorned by the urbanity of his manners, his high professional skill, and, the soundness of his political principles.

It would be very acceptable to us, if any of his relatives, or others, would furnish us with further particulars of his life. We have heard he left in manuscript a tragedy founded on the story of Lucius Junius Brutus. We should gladly publish it in our pages, if we had permission.

1801, aged 72, Alexander Henry Haliday, M.D. A gentleman, who, for the space of half a century, it lustrated his native town of Belfast, by a coaracter distinguished for private worth, consistent public spirit, much elegant accomplishment, and high professional reputation.

Of all the liberal professions, that of medicine is perhaps the most liberal. No one which, in a more eminent degree, commines the useful and the

amiable qualities, the solid talents which dignity, and the sweet courtesses, which decorate character. No one which supplies more ample opportunity of forming a true estimate of human life, of appreciating the weakness and the worth of human nature. No one, which, in a political point of view, has maintained, amidst the selfishness of sects, and the intrigues of factions, a more virtuous independence and dignified impartiality. The general remark has never had a truer application, than in the life, conduct, and conversation of Doctor Haliday.

Of his professional merits, the profession itself must supply the most adequate judges, but the public at large, may perhaps form as true an estimate, from the long popularity, which, as a practitioner of physic, he possessed, not merely in his native town, but throughout the whole province of Ulster; a popularity, neither made, nor maintained by any sinister arts, by the patronage of the higher ranks, nor by the puffing of the lower, but the well earned fruit of an excellent education, engrafted on an excellent understanding. His successful and extensive practice was the natural and necessary result of, a shrewd and sagacious intellect, always kept in a state of the highest cultivation by the habit of reading and

réflexion, by joining the inquisitiveness of the student to the experience of years, and especially by a disposition of mind which desired to keep pace with the progress of science, and the medical art, and never from pride, or indolence, rejected improvement under the myidious name of innovation.

His exterior announced intrinsic worth His art of healing commen-ced with infusing the faith of being healed. He possessed a mild and gracious dignity of manner, which commanded respect, while it conclusted confidence. How often has his presence instilled hope into the heavy heart!-How often have those black, and ill-omen'd ideas, that evil genius which strangely haunts even the most virtuous minds, felt the influence of his aspect, and fled from the benig-nity of his smile! How often have affectionate relatives, when bereft, of all other hope, looked out with a last anxious hope, for a visit from Dr. Haliday! In propriety, in probity, in assiduty, in natural ability, and acquired endowment, few have better sustained the comprehensive character of an accomplished physician.

His talents and attainments were far from being confined within the circle of his profession, though they were never allowed to interfere with his duties His powers in conversation so generally admired, were the product of a great sociability of nature, and a quick discernment, rendered still more acute by native wit, lively without libertinism, and sportive without sarcasm. His wit was a salt that highly seasoned the pleasures of the table without any corrosive malignity. He loved to play with words, as Scipio and the good Lælius are said to have diverted themselves with pebbles. In fact, he possessed all those various, and versatile qualities which render conversation interesting and delightful, good sense, facility of thought, taste, fancy, a knowledge of the world, a turn for agreeable anecdote, a happy frivolity, an easy and graceful vivacity. A man of such a mind and such manners naturally became the real resident representative of his native town. On every public occasion, when Belfast wished to place itself in the most respectable point of view to visitors distinguished by rank, station, or talent, Dr. Haliday at the head of the table, was in his appropriate place, and his guests, however eminent, never failed to find in the physician of a dountry town, an urbanity of manners, a variety of information, a happy and opportune wit. a just fone and timeing in whatever he said, which set him, at the least, on a level with those who possessed patents of dignity, or high official situation.

Thomas Hollis purchased the Bed on which Milton died, and sent it as a present to Dr. 'Akenside,' with a hope that it hight prompt him to write an ode to the sublime asserter of British liberty. Dr. 'Haliday seems to have occupied the bed of Akenside. He wrote several poems with similar vigour of sentiment, and fire of public spirit, but it might be added, with the same, if not greater harshides of diction and ill-constructed stanza. Politics and poetry are seldom in happy conjunction, and he seems to have argued in verse, and reasoned in rhyme, rather more than is suited to poetry, and particularly to the poetry of the Lyre.

In his political principles he was a genuine Wing; not understanding by that denomination, the mere faction-ary of a powerful party, but the hearty hater of arbitrary power, whe-ther exercised by individuals or by parties; the zealous yet judicious advocate of civil and religious treedonr; the strong upholder of those popular principles which form the living spirit of the British constitution, and, which, at different periods, have called forth all the heroism of British story. It was at the civic commemoration of those illustrious epochs, in which Halidy gave his head and heart to the social celebration, while he supported at the same time the just pierogatives of the crown, as perfectly compatible with the original and ultimate sovereignty of the people It the British constitution be a medium between republicanism and despotism, I will not scruple to assert that Haliday approached nearer to the former extreme. Nurtured under the phi-

losophy of Hucheson, and early inspired by the poetry of Akenside, the study of the former gaves him that chastity of the moral sense which binds political and personal duty in the same strict tie of honesty and honour; and the divine muse of the latter, threw that sacred flame of liberty into his breast, which burned while he continued to exist. the principles of civil and religious liberty he lived, and in them he died. They were the bond of his youthful friendships, and they consolidated the attachments of his maturer years. These were the associating principles of Maclaine, Bruce, Wight, and Plunket, the principles of the venerable Camden, and the amiable Charlemont, of the untitled Stewart, and the unpensioned Burke. These were the principles which gained him the confidence and correspondence of that great and good man, Henry Grattan, and the same principles led him to regard Charles Fox as the tutelary genius of the British constitution.

Dr. Haliday's character was completed by what is perhaps to be deemed the best man's best praise; the grace and goodness of domestic life, its uniform chearfulness, its mestimable equanimity. To a most airiable woman, he was a husband at once pointe and tender, affectionate and respectful; to his dependents, a kind protector; and to all his relatives a guide and guardian, an ever ready friend, and an adopted father.

Farewell, venerable and virtuous' admired, beloved and honoured, for wit, and worth, and wisdom. You have closed your reverend length of days, but your name will long live in hallowed remembrance; by me, ever to be regarded with filial reverence, for kind condescension, for parerial administration, for friendly recommendation, and for life repeatedly restored.

The following copy of verses, from the pen of Doctor Haliday, is inserted as a specimen of his poetical composition.

TO MY FRIEND MACLAINE ON HIS TELLING ME HE NO LONGUE AMUSED HIMSELF WITH WRITING VERSES.

Hague, Aug. 7th, 1750.

Thy muse who charm'd us is she fled !

Who charm'd with various art, Whether the sounding lyre she strung, Or vice with shaipest satile stung; Alas how could ye part!

Where Glotta's flood the plain divides, Amdst her oaks where Lagan glides The feitile vale along,

Oft have we heard her tuneful strains,
Oft have we felt her joys and pains;
O wondrous power of song!

Tow'ring aloft on Rapture's wing Did she of God and nature sing, With love dwine we burned;

With love dwine we burned;
Did lovely loving Metis claim;
Her softer voice, that heavenly flame
To carnal love was turned.

Fired with an honest patriot rage As now she lash'd a covrupt age,

Up indignation sprung; Laughter, as merry tales she told, Borrowed some wrinkles from the old, And lent them to the young.

She's heard no more—say whence this change

Does she through fields of Æther range, And nature's laws explore? Or is she back to Mettis gone, Her woes to weep, her sorrows moan, With whom she smiled before?

With patriot and poetic fires
Perhaps bold Marcus* she inspires,
And hence his noble fury;
Or ofher jokes and doggrels foud
Has entered in a judgment bond
To live and laugh with Murray.

As late near Leyden's lonely bound I kay thus musing on the ground, White o'en my pensive head, Safe from the breeze tail poplars sleps, And close beneath the dull wave crapk

Along its cozy bed.
"Vamily you guess"—descending said
A form in tobes of light arrayid,
Too glotious for my sight,

"A chernb now, a muse before, Amidst the angelic chon I soar, And praise the God of might.

"When he, for higher things design'd,
"The poet's idle fame resign'd

"Thus chang'd I pass the poles;
"Still I inspire for different ends;
"Refore he pleased his latesting fries

"But, now, he saves their souls." A.H.

LIFE OF VIEW.

THIS artist, who, 1789, was appointed to the place of first painter to the king of France, had such a decided inclination for the pencil, that nothing could surmount

#Mr. Aikenside.