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Contributors

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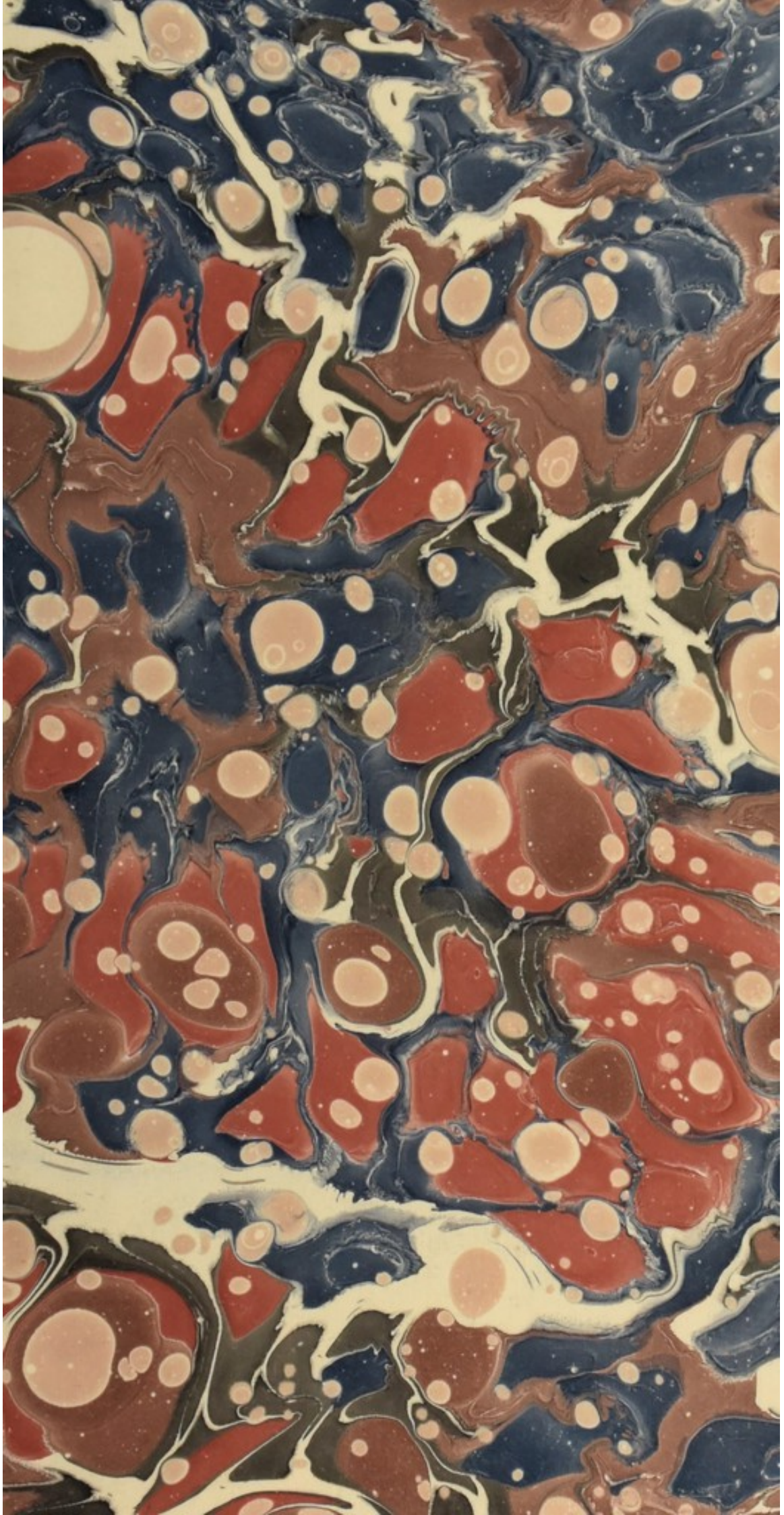
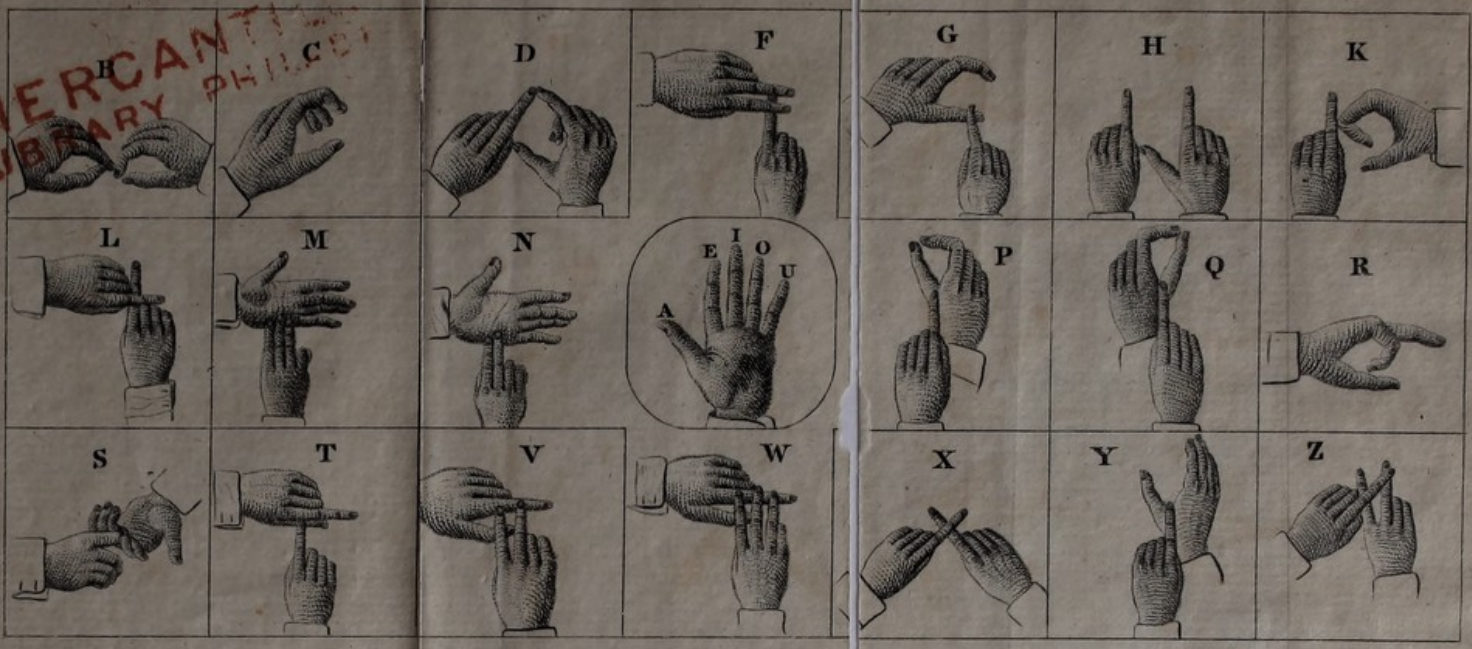


EDUCATION OF THE DEAF & DUMB.

ALPHABET FOR THE FINGERS.



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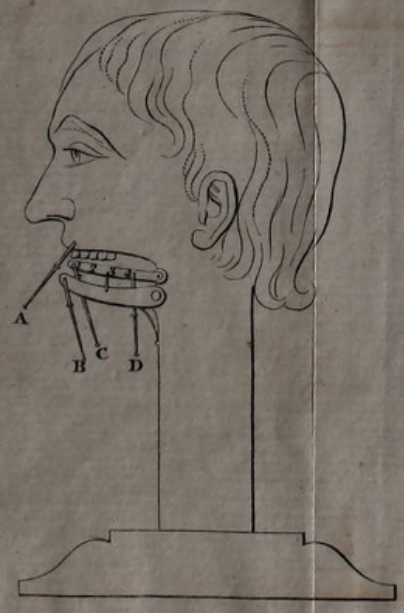

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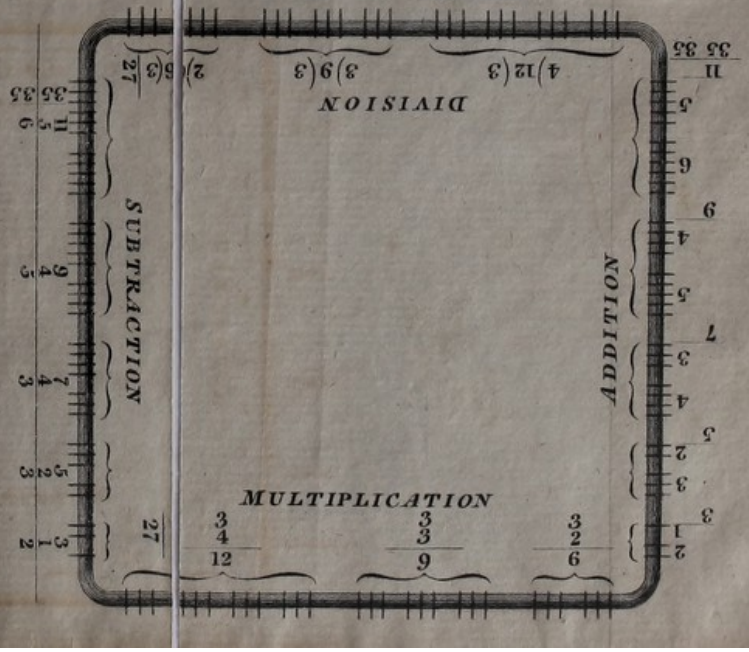

A

TREATISE

ON THE EDUCATION

OF THE

DEAF AND DUMB.

TO WHICH IS ADDED,

AN

Essay on Deafness:

ALSO,

AN APPENDIX,

RELATING TO THE EDUCATION AND COMFORT OF THE BLIND.

BY JOHN ENGLAND,

Teacher to the Institution under the Patronage of the Northern Society for Educating the Deaf and Dumb, in Aberdeen.

Thou shalt not curse the deaf, *nor put a stumblingblock before the* blind, *but shalt fear thy God.*——Levit. xix. 14.

Montrose:

Printed by Smith & Hill,

FOR JOHN SMITH, BOOKSELLER, MONTROSE;

AND SOLD BY

LAW & WHITTAKER, LONDON; OLIVER & BOYD, EDINBURGH;
A. BROWN & CO., AND W. ROBERTSON, ABERDEEN;
AND ALL OTHER BOOKSELLERS.

1819.

Since the last sheet of this Pamphlet went to the press, the Author has seen "A Short Account of the Institution established in Dundee for Educating the Deaf and Dumb," under the tuition of Mr Rattray; and he is happy to perceive, from the list of Managers, that such a benevolent undertaking has so worthy patrons: the Clergy of Dundee, with a noble philanthropy, have come forward as able supporters of that Institution.

ERRATA.

Page 1, line 12 for *person was*, read *persons were.*
—— 3, line 5 infra, for *rapacious*, read *exorbitant.*
—— 6, line 9 infra, for *Philologists*, read *Physiologists.*
—— line 3 infra, for *is*, read *are.*
—— 9, line 12 for *is*, read *are.*
—— line 4 infra, for *emits*, read *is emitted.*
—— 12, line 4 infra, for *are*, read *is.*
—— 19, line 1 for *individual*, read *object.*
—— 23, line 13 for *is*, read *are.*
—— 30, line 8 infra, delete *I then bore.*
—— 33, line 11 infra, for *was*, read *were.*
—— 40, line 10 for *shall*, read *shalt.*

DEDICATION.

TO

ALEX^{R}. ANDERSON, Esq. of Bourty,
ALEX^{R}. CROMBIE, Esq. of Phesdo,
ADAM WILSON, Esq. of Glasgowego,
HARRY LUMSDEN, Esq. of Belhelvie,
JOHN EWAN, Esq. Aberdeen,
ALEX^{R}. RHIND, Esq. do.
ALEX^{R}. SMITH, Esq. Advocate, do.
JAMES BLACK, Esq. *Treasurer*,

} *Managers*,

AND

To all the Other Members and Subscribers,

TO THE

Northern Society for Educating the Deaf and Dumb.

GENTLEMEN,

As it is entirely owing to your distinguished patronage, that I have been enabled to continue my exertions in educating the Deaf and Dumb, I feel it a duty incumbent

upon me to give publicity to my plans, that you may, in some measure, be enabled to judge of the merits of teaching in this Institution, which owes so much to your disinterested benevolence.

It is not necessary, in this address, to enter into a detail explaining all the means by which I acquired the art of communicating instruction to the Deaf and Dumb; suffice it, therefore, to state in this place, that I have derived my information more from the local situations, and adventitious circumstances in which I was placed in my younger years, than to any systematic instruction received from other teachers.

You are well aware, Gentlemen, that I have had several difficulties to encounter, before I could venture to submit my labours to public notice. Having now been enabled, by your liberal patronage, to continue my exertions, I have drawn up my methods of education for the Deaf and Dumb, and consider it a paramount duty I

owe to such generous patrons, to inscribe this small publication to you.

Without presuming to trespass too much upon your time, or tire you with the grovelling language of adulation, I beg, Gentlemen, with due respect, to offer you my best thanks for favours received.

Accept, the tribute of gratitude so justly due from,

GENTLEMEN,

Your most obedient,

much obliged, and

very humble Servant,

JOHN ENGLAND.

Deaf and Dumb School,
SKENE STREET, Aberdeen,
February 12, 1819.

PREFACE.

PRELIMINARY OBSERVATIONS.

MAN, by the constitution of his nature, is extremely desirous of his own preservation. Exposed to many wants, and unable to secure his own safety and maintenance without the assistance of his fellows, he is capable of returning kindness by the furtherance of goodwill. It seems, therefore, to be a fundamental law of our being, that every man ought, as far as he can, to promote and preserve a sociableness with others, agreeable to the main end and disposition of the human race.

The prejudices and passions of mankind have, in every age, been an obstacle to the exercise of candour. It has often been lamented, that party feelings and personal considerations, have been found to occupy the breasts of the learned and the venerable, as well as the vulgar and illiterate. Hence many well meaning individuals, have been brought to coalesce in opposing undertakings of public utility, and it cannot therefore appear strange, that the author of any new undertaking should experience part of this opposition.

Although dumb education, in this part of the country, may be stated as in its infancy, some would already fix the bounds beyond which it cannot be carried; while others, prematurely imagine, that all knowledge on the education of the deaf and dumb, is solely confined to a foreign land, or to a distant part of the kingdom: hence, in their opinion, the education of dumb pupils should be confined to the establishments in a remote part of the nation; without considering

that there are many parents who would rather keep their dumb offspring secluded from society, than permit them to be removed so far from their sight.

Without, therefore, attempting to combat the prejudices of parents (if they may be so called) in this case, I beg to state how great a hardship it is, that, for the want of local asylums for the reception of the deaf and dumb children of the poor, many human beings are allowed to lie concealed from society. Their minds are suffered to remain in a dormant state; and, being abandoned to themselves, they are degraded from the privileges of men, and exiled from the society of rational beings. Thus are they buried in oblivion from their earliest years, and all motives to exertion withheld from them. Hence, as they advance in years, their intellectual faculties become paralysed, from the want of due exercise upon proper objects; all desire of improvement becomes repressed, and those unfortunate beings, from an organic defect, are allowed to sink into the grave in a state little above the brute creation.

In these observations I beg to address the clergy of our venerable establishment, both as a collective body, and as individuals.

To you, Reverend Pastors, it belongs to put in motion all those impelling powers that urge mankind to contribute to institutions and establishments for the instruction and improvement of the human race. Much has already been done by you to ameliorate the moral condition, and give expansion to the human intellect; and it cannot be wondered at although something remains unfinished where there was so much to be done.

By your arduous exertions, and those of your predecessors, has this country to boast of a collection of Statistical information, drawn up by you, that stands unparalleled in the annals of any other state in Europe. It is strongly urged in these communications, how necessary it then was, to increase the salaries of parochial teachers, so as to encourage men of adequate talents, to undertake the charge of parish schools. This requisite amelioration in the income of teachers, was so ably and judiciously inculcated from all quarters, that it has since been attended to as a measure of wise policy, by the British legislature; and the remuneration of teachers is, in some measure, brought to correspond with their rank in society, and the task assigned them.

A liberal grant by the executive government of our country is annually intrusted to your discretion, for the benefit of education, and the propagation of Christian knowledge in the Highlands of Scotland; and the lower classes of inhabitants in this country have facilities of acquiring useful knowledge not attainable by the peasantry of any other nation in Europe.

By your unremitted exertions, have the British and Foreign Bible and Missionary Societies received much aid, both in money and able instructors: and the inhabitants of foreign lands, long sunk in "the darkness of "superstition and pagan idolatry," have been brought to acknowledge the "true God," and to bless the name of HIM who "redeems from destruction."

You are well aware, that there are many deaf people in your respective parishes, who are allowed to remain in a state of comparative ignorance of all moral and religious duties; as their parents have not the

means of obtaining for them local instructors, and they are unwilling or unable to send them to distant asylums, to receive the necessary instruction to fit them for being useful members of a Christian community.

I hope, therefore, when so much has already been done by our clergy, to promote instruction for the rising generation, and to propagate the seeds of Christianity in distant lands, that they will be the foremost in lending their aid to establish local institutions for educating the deaf and dumb. Let them, therefore, as the vicegerents on earth of Him who said, "Thou "shalt not curse the deaf," give every encouragement to local seminaries, so that those unfortunate objects of the human race, who by the prejudices or poverty of their parents, have hitherto been consigned to oblivion, may in future find the means of instruction at local schools, where they can be occasionally visited by their friends, to comfort them in their solitary seclusion, and administer to their wants. The prejudices of parents, when centered in affection, will readily be excused by liberal minds.

Let the leaders of our land, therefore, no longer allow the solitary deaf to die in ignorance of the true God, "and Jesus Christ whom he hath sent;" from the want of support to local institutions.

The number of children born deaf, will be found greater than is generally supposed; and were the establishments for their instruction advantageously situated, many individuals would be presented for instruction, who are presently hid from public notice; partly from the disagreable feelings which arise in the breasts of parents, at the idea of parting with their children to go to a distant place; and the thoughts,

of how uncomfortable their dumb offspring must at first feel when placed in the midst of strangers, beyond the reach of all acquaintances and relations.

It must not be understood, that I here insinuate, that deaf people should be educated only to live among their relations, and persons of their own unfortunate condition. On the contrary, they should be brought up, so as to become useful members of society, and to mix with others, as they follow after their various avocations, and pursuits through life. The use of speech, when it can be attained, is therefore the more necessary to them.

With some people it is a matter of doubt, "whether "the advantages of speech to the deaf, is a sufficient "compensation for the time and labour consumed in "attaining it?" In as far as regards their intercourse with society, this may be made a question of utility, that, in some measure, depends upon the future destination and condition in life of the individual in question. But when it relates to the expansion of intellect, the cultivation of the human mind, and the benefit of an immortal soul, the utility of teaching the deaf the use of speech, where it can be attained, becomes more than apparent to all well thinking minds.

The practice of teaching a deaf pupil articulation, and the use of speech, produces an active operation in his mind, that is never brought into excitation by any of the other parts of dumb education. The ideas of the memory and understanding are associated, which paves the way for his acquaintance with objects, actions, and results. The ideas of personal identity unfold themselves; and by the greater expansion of the pupil's mind, the consciousness of future existence

may be successfully inculcated, and the principles of the Christian religion colloquially imparted to him.

Speech, therefore, to the deaf, is a great acquisition, when it can be attained; and is a most important branch of deaf education. The memory becomes more retentive by the use of speech, because it gives a greater excitement to the new ideas in the minds of the pupils, and enables them to comprehend the leading import of their instruction much sooner than can be attained by the use of methodical signs, as recommended by the Abbé Sicard in his "*Theoré des "Signes pour l'Instruction des Sourds Muets.*" Paris, 1808.

It is to be observed, however, that in teaching the deaf articulation and the use of speech, it is only to be made an incidental part of education, and taught occasionally, as opportunity offers. Particular periods should be set apart for instructing the pupils in the use of speech, and to practise them in repeating their former lessons.

By this means they will imbibe colloquial knowledge, and will be able to peruse what books may be presented to them, so as to profit by the subject. And after they have made some progress in comprehending the meaning and ideas contained in books, the instructor should make them arrange their own ideas, and commit them to writing; so as to describe, in their own language, what they see performed. The pupil may be taught daily lessons in composition, descriptive of his walks, his amusements, and intercourse with his companions. And after he produces his rude compositions, and explains them by his pantomimic

skill, the instructor should correct them into plain intelligible language, so as to be easily understood.

The acquisition of speech in the pupil greatly facilitates the explanation of his own ideas; as it unfolds a new channel of communication. And the meaning and use of words, in the structure of sentences, are more easily acquired.

It is highly apparent to all persons conversant in the use of languages, how necessary it is to hold converse and intercourse with others, to retain the ideas which we have acquired; otherwise the impressions we have received become effaced from our memory by the lapse of time. This is particularly obvious in retaining the knowledge of the dead languages.

To satisfy those readers who may wish to know how the author acquired the art of communicating instruction to the deaf and dumb, he begs to refer them to the following circumstances that attended him in early life; and those readers, who are nowise curious on this subject, may pass on to the Treatise. In the following observations, the first person singular is generally used, for obvious reasons.

Being brought up in the country, I was sent to the parish school at an early age, to be taught reading, writing, and arithmetic. When I entered the writing class, I became acquainted with two pupils, considerably older than myself, who had both acquired a good hand at writing, although deaf and dumb from their birth. One of them was at great pains in guiding my hand while writing, and correcting the errors in my copy-book. The assistance I received from this dumb companion, contributed materially to im-

prove me in writing, and such unexpected kindness, received from a person in his solitary state, could not fail to make an impression upon my mind.

Gratitude for his kindness, and sympathy for his forlorn condition, made me do all that lay in my power to impart to him the meaning and use of written language, with the names, and relative qualities of the objects around us. To accomplish this task, I caused him carry a slate (such as used in the school), and when we returned home in the evening, I first made him point to an object while I wrote its name on the slate. I next caused him point to an object with one hand, and to its name on the slate with the other. For instance, a tree; I made him point to the tree with one hand, and with the other point at its name, written on the slate. I afterwards pointed to the object, and made my companion write its name upon the opposite side of the slate; and when he forgot the name, he turned up the other side of his slate, and endeavoured to find its name among those previously wrote down by me. By the assistance of a good memory, and quick apprehension, he soon acquired the names of all common objects, with their uses and qualities.

It had previously been hinted to me, that the thumb and fingers of the left hand were a proper representation of the five vowels, *a*, *e*, *i*, *o*, and *u*; and from this hint we proceeded to construct the alphabet for the fingers which I now use. Having brought ourselves to understand each other by the fingers, I began to teach my companion how to spell words by signs, writing them down at the same time upon his slate, and also pointing at the object indicated by the word he was spelling with the fingers.

I next endeavoured to make my companion pronounce these words and letters, articulated by means of the external organs, such as, *papa*, *mama*, *babe*, &c. and making him understand, by signs and writing, the import of the words pronounced, he learned to comprehend the different associations of ideas, I was anxious to establish; and before I left the school, after a practice of some years, they were firmly rivetted in his mind.

Several years after I left school, I happened to be lodged in the same house with a young man who had entirely lost his sense of hearing, by a severe fever in his youth: the use of speech he had almost lost from the want of practice. But as he had acquired some faint knowledge of letters before he was deprived of hearing, the task of instructing him was the more easily accomplished. Here my exertions were again renewed to impart to him all that I knew of writing, arithmetic, and language. But the necessary attention we were obliged to bestow upon our daily avocations, allowed us but little time for our incidental instructions, as we were always separated throughout the day: what time we had, however, was busily employed. At meals, evenings, mornings, in bed, and on Sundays, we were always closely engaged; and we soon found that the most insuperable difficulties we had to encounter were easily surmounted, by unremitted exertion and perseverance.

As this young man had only lost his speech for the want of use, from the time he was deprived of his hearing, he soon again recovered it. Here, it may be observed, that the incapacity of speech, in many persons designated deaf and dumb, is altogether owing to their

being deprived of hearing, and not from any physical defect in the organs of speech. In four cases out of five of those commonly denominated deaf and dumb from their birth, I have found by inspection, whilst in the act of teaching them, that they are only deaf, and their dumbness results from their want of hearing, and from their not knowing how to use the organs of speech.

But to proceed:—By practice, the last mentioned young man soon acquired the use of speech; and as the act of speaking is acquired mechanically, he soon conversed intelligibly with me, by observing the motions of my mouth. So acute was his sense of feeling, that, by placing his fingers upon my mouth while I was speaking, he knew how to answer me in the dark: and, by this means, we could communicate our ideas, and converse while in bed. Thus, by feeling, signs, or speech, we soon learned to converse and unfold each others ideas in almost every possible circumstance.

It will scarcely appear credible, to many persons unacquainted with this subject, that people deprived of hearing, by studying the position and different movements of the speaker's mouth, should intuitively acquire the art of knowing what is spoken, and afterwards utter articulate sounds as answers to what has been said. Repeated experience, however, has shown that this task is not attended with such difficulty as may at first be imagined.

About two years after I began teaching the last mentioned young man, I left the place; and went to reside in a different part of the country. Here I happened incidentally to fall in with another young man who had been deaf and dumb from his birth.

After a short trial to instruct this young pupil, I agreed with his parents to suspend my other avocations for a time, and by settling in the family, devote my whole attention to the instruction of their darling son. And he being a young man of quick parts, and an apt scholar, my efforts to make him comprehend the import of the instruction attempted on him, was the less difficult to accomplish.

Besides instructing him in the meaning and use of written language, figures, and the use of speech; his parents were particularly desirous that I should make him acquainted with the nature of his existence; and impress upon his mind, proper ideas of the Supreme Being. And also teach him a sense of, and respect for the Christian religion: and, as soon as possible, give him proper ideas, and impress him with a belief of the resurrection and re-union after death.

In the neighbourhood where we resided, was a burying ground: here we attended at the digging of graves, and also at interments; which often affected my pupil with unusual sensations. Here I often repeated my attempts to impress him with clear ideas regarding the resurrection after death: and it was long before I could bring his mind to believe in what he considered at first an improbable event.

Indeed, I have invariably remarked, that this is the opinion of all the deaf and dumb pupils which have been under my charge, while in an uneducated state. They seem to have confused ideas of the resurrection; imagining that our future existence is some subtile part of the human system, unconnected with the body. Nor is it to be supposed that they can have clear ideas on the subject of identity, or the consciousness of future

existence, until their minds are unfolded by proper instruction.

After I had used every endeavour to impart to my pupil lessons in reading, writing, and figures, and had made some progress in teaching him articulation, my labours were likely to be crowned with the most complete success, and the hopes of his parents almost realised. But all our hopes relating to him in this world, were annihilated by a relentless fever, that brought him to his grave, to my regret, and the sincere sorrow of his kind parents.

A short time before the death of this interesting young man, he expressed a desire to see me. When I entered the sick-chamber, I found the worthy clergyman of our parish, praying fervently at the bedside of my emaciated pupil. When the reverend pastor ended his supplication, I could perceive the countenance of the young man brighten: and, making signs for me to approach him, I advanced, when he grasped my hand, and convinced me by signs, that he had no hopes of recovery, and appeared to be reconciled to his fate, trusting in the belief of a resurrection and a future state. And making signs for a Bible to be placed before him, he pointed to that passage in Job, "For I know that "my Redeemer liveth, and that he shall stand at the "latter day upon the earth. And though, after my "skin, worms destroy this body; yet, in my flesh "shall I see God."

Amidst my reflections on the approaching death of this young man, it was consolatory to think, that I had, in some measure, been permitted to be instrumental to the unfolding of his ideas, and assisting him

to add strength to his intellectual powers, and brighten his prospects beyond death and the grave.

In this manner was I employed instructing the deaf and dumb, previous to my settling in Aberdeen; since which time I have met with various success. Some have patronised, and some opposed me. Conscious, however, of giving no just cause of offence, in as far as regards the educating of the deaf and dumb, I intend to persevere, and am not without hopes of extended patronage. And should my methods of education for the deaf and dumb, herein detailed, be worthy of notice, it will be duly appreciated by a discerning public.

As dumb education has hitherto been but little attended to in this part of the kingdom, any hint that shall be communicated to me, having a tendency to facilitate the teaching of it, will be candidly received. And those persons who may differ from my method of teaching this solitary class of human beings, will, I hope, be pleased to favour the public with better plans, which will be the surest method of establishing the utility of their difference; and make the proper distinction between the assertion of mere opinion, and the promulgation of useful knowledge.

INTRODUCTION.

EDUCATION, whether systematic or incidental, is acquired by lessons of imitation, or experience. No sooner does the child become capable of regarding the persons around him, than he endeavours to imitate their words and actions.

Although the organs of hearing and speech, have little, or no connexion in the animal system, yet the acquisition of speech depends so much upon the sense of hearing, that those persons who are afflicted with incurable deafness from their birth, must remain dumb during life, although their organs of speech be entire: and no deaf person was ever known to acquire the faculty of speech by any effort of their own, without the direction and assistance of a teacher. And, this assistance can only be obtained, through the medium of their other senses.

So far as the writer knows, there is no book published that will afford much aid to instruct the Deaf and Dumb, except one wrote by M. Sicard, in French; wherein he describes his progress of educating a young shepherd, when keeping a school at Bourdeaux, in France.

For what reason M. Sicard has not attempted to learn his pupils to articulate sounds, where the organs of speech are entire, he has not told his readers. His system of dumb education, is certainly valuable in many

respects, particularly in the grammatical department: but, taken as a whole, it appears so complicated and tedious, and attended with such apparent difficulty to acquire, that it is likely to deter persons of ordinary patience from undertaking such a task.

Early accustomed to the society of deaf companions, I have, from my infancy, endeavoured to aid them by intuitive instruction; and habit has now rendered my labours to illumine their minds, a delightful task. There are no pupils who apply themselves with such steadiness and perseverance to acquire the lessons assigned them, as the deaf and dumb. Taught by intuitive example, they are quick in perception, and their aptness to learn would astonish the ignorant beholder. Grateful to their teacher for the instruction afforded them, they attend to his orders with lively emotions; and the smiling expressions in their features, are certain indications of the happiness they feel in acquiring new ideas, and the hopes of further unfolding their intellectual powers.

Every benevolent person must regret, that so few institutions are established for educating the deaf and dumb in Great Britain: and, it is to be the more regretted, that those few we have are conducted upon such interested views, by the established teachers.*

* The Rev. Mr Galludate, of America, came over to this country in 1815, for the humane purpose of getting himself qualified to be a teacher of the Deaf and Dumb. He made application at the institutions both in London and Edinburgh, to the respective teachers; and, to his surprise, they told him that they could not impart to him such a valuable secret, for less than a thousand pounds sterling! But, if he would bring over the deaf and dumb people from America, they would educate them in five years, at L.140 each! The deaf and dumb people in the United

The British nation has long been celebrated for giving assistance to every charitable and benevolent institution. On a late occasion, the whole inhabitants of these kingdoms vied with each other in promoting a cheap and expeditious mode of educating the children of the poor; from the patriotic Royal Family, down through every rank, all were animated by an ardent zeal for the same benevolent object.

Could not a plan be devised amongst ourselves (similar in its effects to the celebrated Lancaster's system) to raise funds by moderate contributions, which, by prudent management, might go far to educate all the deaf and dumb persons in the United Kingdom who have not the means of paying for it themselves? Suppose a teacher to be placed in every one, or two counties, according to their respective population. And, as the expence of maintaining, would far exceed the expence of educating, the funds of each might be kept separate. The largest fund, for maintenance, might be raised by collections at the places of worship; and each presbytery to have the management of its own fund, to be applied by them for keeping such dumb children as happened to belong to any parish within its bounds. The other fund, to be raised by annual contributions and voluntary donations, by the respectable and opulent inhabitants of the respective counties, and

States, are supposed to be about two thousand persons.—The reverend gentleman not being possessed of the means to satisfy such rapacious demands, took his leave of these dumb teachers, and their *high priced secret*, and went over to Paris; and waiting upon the philanthropic M. Sicard, he experienced a kind reception and iberal treatment. *Note.*—The above fact appeared in several publications of respectability last spring.

submitted to the management and controul of a committee appointed for paying the teacher, and other contingent charges.

The author does not presume, that, the above scheme is the best that may be adopted to answer the end proposed: but he will be highly gratified, if what he has presumed to suggest, shall be the humble means of drawing the attention of his benevolent countrymen to ameliorate the condition of this solitary class of human beings; who, by a natural defect in their organs of sense, are, in a great measure, cut off from society; and whose education has hitherto been much overlooked.

It is with considerable diffidence, that the author of the following Treatise on Dumb Education, submits his labours to the eyes of the public. Had his abilities been commensurate with his inclinations, he is conscious that many errors might have been avoided. Conscious, however, of his laudable intentions, he will give himself no uneasiness on the score of criticism; happy only should he assist in aiding with instruction the deaf and dumb, whose education is his proposed end in offering his labours to public notice.

EDUCATION

OF THE

Deaf and Dumb.

On entering upon the education of the deaf and dumb, the first attention of the teacher should be directed to learn them how to write letters, and figures. This should be first practised upon a slate, with a pencil, both for convenience and cheapness. Although, at first, their efforts may be badly executed, a little practice will soon enable them to imitate the examples placed before them. As soon as possible, the teacher should direct them to connect letters, so as to form words, and daily practice will give correctness both to writing and spelling.

The next step of the teacher should be, to shew them by example, how to represent the letters of the alphabet with their fingers (as delineated on the plate prefixed to this book); by which means, every lesson the pupil writes, is to be read with the fingers, and committed to memory.

When the pupils have attained considerable proficiency in writing and reading, with the fingers, the teacher may begin to instruct such of his pupils who have the organs of speech, how to articulate sounds. This, at first, will appear attended with difficulty; and

is never to be attempted but with one pupil at a time. And where the organs of speech are perfect, there is no doubt of success. It is necessary, however, to insure complete success, that the teacher be determined to bestow both time and labour to this arduous undertaking; to which must be added, every mild art, and kind treatment, to encourage the perseverance of the pupil, who will thereby learn to rely entirely on the approbation of his teacher; who on his part must endeavour to keep the pupil in good humour by making him believe he is doing well; and the instructor should exercise every indulgence towards his pupil consistent with his situation.

Before proceeding to describe the method of teaching the deaf pupil to speak, it is necessary to consider how the various sounds of the human voice are produced; and point out and describe the determinate rules by which the pupil can clearly comprehend the position in which he must place the organs of speech so as to produce articulate sounds. By which are meant those modulations of the voice, or of sound, emitted from the *thorax;* which are formed by means of the mouth and its several organs, the teeth, the tongue, the lips, and the palate.

Philologists are agreed, that, vocal sounds are produced by vibrations in the expired air as it passes through the larynx; and, that, the strength or softness of those sounds depends upon the force with which the breath is expelled from the lungs; and also, that the various tones of which the human voice is susceptible, is chiefly owing to change of dimensions in the windpipe, and the different positions of the *epiglottis.*

The organs of speech may be arranged into two classes, the external and internal. The first, comprehends the lips and foreteeth; by which the letters *b*, *f*, *m*, *p*, *v*, are chiefly articulated. The second, or internal, consists of the tongue, jaw-teeth, palate, &c. and are but imperfectly seen in the positions they assume when articulating the more difficult sounds.

The pupil will learn the articulation of those sounds produced by the external organs, by intuitive example, by imitating the movements of his tutor's lips while pronouncing them. But, those sounds produced by the internal organs, are not so easily come at by the pupil, as he cannot perceive the movements, and vibrations of the internal organs, from which they are produced. To facilitate the knowledge of the internal class, the orthographer, represented on the plate, will be found useful, both in assisting the pupil to pronounce letters, syllables, and words.

Explanation of the Orthographer.

This figure represents a human head fixed on an upright shaft, with a base of lead to keep the apparatus firm to the table, while the various operations are performed. The cheeks, and space between the lower jaw-bones, are left open, for the purpose of allowing the interior of the mouth and motions of the tongue to be seen, and described by signs to the anxious pupil. The lips and tongue are made of elastic gum, so as to contract, and expand to the preceptor's touch of the various keys by which they are moved, denoted by A, B, C, D, made of steel, and having two blades in the form of tweezers, with a sliding hoop to bring them close, so as to fix them firm to the gum. Those keys affixed to

the tongue, require to be frequently shifted, in order to show the various evolutions it performs in articulating different sounds.

When the preceptor is about to commence teaching articulation by experimental means, the orthographer may be conveniently placed on a table between him and his pupil, and beside it a slate and pencil, on which to write the letters to be pronounced by articulation. Every external object must be excluded, that would tend to attract or withdraw the attention of the pupil from the objects before him.

Matters being thus arranged, the first attempts of the tutor should be to give the pupil distinct ideas between sound, and silence. To accomplish this he must be made to observe the external organs of speech with his eyes, and by placing his fingers on the upper part of his tutor's throat, while the latter repeats slowly *m*, *f*, *b*, several times, until his pupil indicates by signs that he has clear conceptions of what is intended to be taught, and is anxious to make a trial at articulation, and chooses a letter of his own fancy. Nor is it of much consequence, with which letter the pupil begins. But in the following directions I begin with the vowels, and shall place them in order accordingly.

Directions for Pronouncing the Vowels.

A. In sounding *a* the breath passes easily along the tongue, and its expression depends on the back part of the tongue being a little raised, equal with the jaw-teeth, and the lips a little open.

E. There is little difference in sounding this vowel from the former, only the tongue is a little more raised and the teeth some closer.

I. In sounding the vowel *i*, the back part of the tongue is farther elevated than in sounding the two preceding vowels; and the edges of the tongue are applied to the upper jaw-teeth, and the breath passes between the teeth, they being almost in contact.

O. In pronouncing *o*, the lips are pushed forward from the teeth, the under jaw is opened, and the tongue is lowered in its hollow, in order to allow a large space for the expired air, which produces a hollow sound, and is varied by contracting the orifice of the mouth.

U. The sound of this letter depends upon the same organs as in *o*, only the teeth is brought nearer in contact; and in sounding this letter the lips are protruded more forward, and brought closer, so as to leave a small orifice; while the under jaw is a little raised and the tongue depressed in its hollow, and the breath is expelled easily by the mouth.

Directions for Sounding the Consonants.

B. At beginning the sound of *b* the lips are shut, and the velum of the palate raised, so as to shut the passage of breath to the nostrils, and the instant the sound begins the lips are opened and the expired air passes along the tongue, which is placed horizontal with the lower jaw-teeth.

C. For sounding *c* the back part of the tongue is raised so as to press easily against the upper jaw-teeth, while its tip is placed softly at the root of the upper foreteeth; when the sound emits the tongue, and under jaw are moved downwards together.

D. In sounding *d* the mouth is kept open, while the edges of the tongue are pressed against the upper jaw-

teeth, and its tip is held firmly to the roof of the mouth, near the fore teeth; and the instant the sound begins the tongue is smartly moved downwards with the under jaw.

F. When the sound of this consonant begins, the under lip is brought up so as to press against the upper foreteeth, and the breath passes between them while the sound is continued.

G. In sounding *g* the edges of the tongue are applied to the upper jaw-teeth, and its back part is placed closely to the velum of the palate, while its tip is easily pressed to the roof of the mouth; and when the sound begins, the tongue, and under jaw are declined together.

H. When this letter begins to be sounded, the mouth is kept open, and during the emitting of the sound the tongue and under jaw are brought upwards until they be in the same position as at beginning to sound *g*, only the breath is expired more forcibly from the lungs.

K. In sounding *k* the back part of the tongue is placed so closely to the velum of the palate that it shuts up the passages from the *thorax*, at the same time the breath is urged against it, and the instant it opens the sound has that acute expression required.

L. During the sound of *l* the mouth is open, and when the sound begins the tongue is turned up and drawn back, and its tip applied to the roof of the mouth, between the upper jaw-teeth, after which the breath passes between the teeth and sides of the tongue in prolonging the sound.

M. At beginning to sound *m* the mouth is open, but when the sound is emitted the lips are brought close together, after which the breath passes through the nostrils, while the sound is prolonged.

N. In sounding *n* the mouth is kept open, and the tongue is raised and pressed firmly to the roof of the mouth when the sound begins, and the breath passes entirely by the nostrils while the sound continues.

P. Is sounded in all respects the same as *b*, with regard to the position of the organs of speech, only the breath is more forcibly expelled from the lungs when the sound begins.

Q. In beginning to sound *q* the organs of speech are in the same position as in *k*, but during the sound the lips are brought forward as in sounding *u*.

R. In sounding *r* the tongue is raised in the same manner as in *l;* only, instead of pressing against the roof of the mouth the tongue touches it easily, and is set a vibrating while the breath is urged from the throat. Children are generally five or six years old before the tongue acquires muscular strength to vibrate correctly in sounding this *guttural* consonant.

S. In sounding this letter the tongue and under jaw are raised, and the upper surface of the tongue is brought in contact with the upper jaw-teeth, and its tip placed near the roots of the upper foreteeth ; while the breath is urged from the throat, and gives that hissing sound peculiar to all words terminating with *s*.

T. The organs are placed in every respect the same in sounding this letter as in *d*, only the breath is expelled with greater force when the sound begins.

V. In beginning to sound *v* the under lip is pressed to the upper foreteeth, and during the sound both lips are urged forward as in sounding the vowel *u*.

W. Is a letter of distinction, the sound being the same as in *u*.

X. In sounding this letter the back part of the

tongue is placed in the same position as in *k*, and in continuing the sound the tongue is raised to the roof of the mouth as in *s*.

Y. In this sound the lips are urged forward as in terminating *u*, and during the sound the organs are placed as in vowel *i*.

Z. The first sound places the organs as in *s*, and in the end as in sounding *d*.

Note.—The English alphabet, like most others, is both deficient and redundant; in some cases the same letters expressing different sounds, and different letters expressing the same sounds.

When the pupil is become capable of pronouncing the elementary sounds above described, he is next, to be taught the method of connecting letters, so as to form syllables and words. This will be sooner acquired by the pupil than at first expected, and differs considerably from the mode practised of instructing children by the ear. A few examples will explain:

William Davidson;	David Jamieson;
Ul-am Da-fi-son.	*Da-fid G-me-son.*
James Taylor;	John Duncan;
Gm-s Ti-lr.	*Gon Dun-kn.*

Will come to-morrow;
Ul kom to-mo-ro.
By Aberdeen;
Bai Ab-r-dn.

When the pronunciation of the words are acquired by the pupil, and impressed upon the memory, the false spelling must be erased; to avoid perplexity and a wrong association of ideas in his mind; and

great care must be taken in this respect, otherwise much irregularity and vexation will ensue.

As the pupil advances in acquiring the use of speech, he learns, by intuitive example, to understand the language of his instructor, by the motions of his mouth; provided the words be pronounced distinctly and with full utterance. The facility with which the deaf and dumb learn to know the speech of others, when addressed to them, and answer questions, is truly astonishing, and will not be readily believed by those who have not seen them.

The next department of educating the deaf and dumb, is to teach them the value of numerical figures, and characters, with their use and application in operations of arithmetic. The first part of this science is the arrangement of numbers into classes: this is a measure indispensably necessary in arithmetic, as being more complicated than the other sciences.

Notation is the art of expressing properly and methodically any proposed figures or characters; and every number is expressible by the due ordering of the following figures, viz. 1, which of itself signifies one, or an unit; 2, which denotes two; 3, three; 4, four; 5, five; 6, six; 7, seven; 8, eight; 9, nine; and 0, nothing. As all units under ten are expressed by the nine digits, 1, 2, 3, 4, 5, 6, 7, 8, 9; so all simple whole numbers of tens, hundreds, thousands, &c. are expressed by the same figures with cyphers annexed. Thus, 10, signifies ten; 20, twenty; 30, thirty; 40, forty; 300, three hundred; 5000, five thousand; 10,000, ten thousand, &c. Hence a cypher, though of itself or when alone signifies nothing, yet, when placed to the right of any figure it increases its value tenfold.

The following table denotes the value of any number, to the hundred thousand of millions of billions.

The names, and divisions of the classes, are, as follows :—

3d. Series. Of Billions.			2d. Series. Of Millions.			1st. Series. Of Units.		
Hundreds of thousands,	Tens of thousands,	Thousands,	Hundreds,	Tens,	Units,	Hundreds of thousands,	Tens of thousands,	Thousands,	Hundreds,	Tens,	Units,
2	1	3	0	2	1	8	7	3	4	0	2	9	3	1	2	5	6

From the foregoing Table, it is obvious that the first figure on the right hand bears its simple value as an unit, only; the second ten times the value of the first, and so on *ad infinitum*.

At the commencement of instructing the deaf and dumb in numerical calculation, the teacher will derive considerable assistance from the use of an *Analytical square*, as represented on the plate, which may be constructed as follows :—

Procure four feet of No. 1, iron wire, and knee it so as to form four sides equi-distant from each other; rivet a stud into each corner, about two inches long, which will serve as feet for fixing it to a board of about two feet square. Purchase one hundred and twenty-four small curtain rings, and cut an opening in each of them as wide as will let them pass the feet or studs

when put upon the wire-rod, so as all the rings can be brought to one side of the square when necessary.

In proceeding to the operation of reckoning, the rings are to be understood as so many units, and arranged into classes upon the rod from one to nine; and the pupil must be taught to write with chalk upon the board against each class, its numerical figure, as shown on the Addition side of the square.

When the value of the figures are known by the pupil, the next expedient is to teach him the art of putting them together by addition, and the manner of shifting the rings together as the adding advances.

In the square, as shown on the plate, Addition and Subtraction are placed opposite, and operations performed in each rule by figures of the same value, and sum total of 35, thirty five. Multiplication and Division are also performed upon opposite sides of the square; and, like Addition and Subtraction, the operations reverse each other in the working, and are accompanied by rings as units on each side to the sum total of 27, twenty seven: so as the pupil may still have the value of each figure before him, until by practice he acquires sufficient knowledge to perform the working in figures without the assistance of rings. Even in borrowing and carrying forward, the use of rings will become obvious; particularly in explaining to the pupils the value of different weights, and measures.

It has often appeared to me, when teaching the deaf and dumb the use and value of figures, that, if a system of arithmetic were constructed for integers on the same principle as Decimal Fractions, it would produce an accuracy and uniformity in computation; and tend to simplify the use of numbers in every department of science.

The three following Tables are inserted as a specimen of what I propose.

TABLE I. *Of Money.*

Farthings.	Pence.		
4	1	Shillings.	Compound Arithmetic.
48	12	1	Pound.
960	240	20	1

Farthings, or tenths.	Pence.		
10	1	Shillings.	Decimal Arithmetic
100	10	1	Pound.
1000	100	10	1

TABLE II. *Of Scots, or Troy Weight*

Ounces.	Pounds.		
16	1	Stones.	Compound Arithmetic.
128	16	1	Hundredweight.
896	112	7	1

Ounces.	Pounds.		
10	1	Stones.	Decimal Arithmetic.
100	10	1	Hundredweight.
1000	100	10	1

TABLE III. *Of Dry, or Corn Measure.*

Lippies.	Pecks.		
4	1	Firlots.	Compound Arithmetic.
16	4	1	Boll.
64	16	4	1

Lippies.	Pecks.		
10	1	Firlots.	Decimal Arithmetic.
100	10	1	Boll.
1000	100	10	1

The diversity of weights and measures in use, is one of the most perplexing articles both in commerce and calculation; and renders it a difficult task to teach young persons, particularly the deaf and dumb, to comprehend a system of arithmetic suitable to so great a variety of cases. And it is to be lamented that all attempts hitherto tried to reduce weights and measures, to one uniform standard, have proved vain from the want of unanimity among those engaged in the task. But as this wished for measure of domestic policy does not belong to my province, I have merely hazarded an incidental observation on that head, and shall proceed with my system of dumb education.

The most important part of deaf and dumb education that remains to be treated of, is the explaining to them the meaning and use of written language,

As soon as the pupil is capable of writing, and calculation, the teacher should explain to him, at convenient intervals, the meaning of words, by connecting them into sentences. And here it is of the utmost importance to the teacher, to acquire a clear comprehension of the natural signs of his pupils. Instead of adopting methodical signs, as recommended by M. Sicard, in his system, the teacher should here for a time become the pupil, and learn from his pupils that pantomimic language by which they express their inward thoughts, and feelings. This language is peculiarly their own, and the alacrity and fulness with which they express themselves, in conveying their meaning, is truly surprising.

The instructor should study at the beginning, what signs are used by his pupils to denote any of the familiar objects that may be in view; such as a knife, pen, book, &c., and write down their names; and by giving the signs in return to the pupils, try them to find out the names. But as this fund will soon be exhausted, recourse must be had to systematic arrangement, by adopting the method of classification.

Classification is to be effected by picturesque representation, something similar to hieroglyphics; with this difference, that each general class must be arranged together, and the names of the objects annexed to the picture, with their use, and other circumstances thereto connected.

Examples of tables are annexed, and the following rules will serve for constructing any number required. Procure pieces of pasteboard covered with paper, of a sufficient size whereon to write the names and uses of each general class; and leave empty spaces at each

name, to paste on the picture of each individual; and, as far as possible, a picture expressive of its use. As for example, (*See Table*, No. 1.) Poultry, Hen, lays eggs; place by it the picture of an egg. Goose, quills, the picture of a pen, &c. Or even the objects themselves will admit of direct application, as in table No. 5. silver coin, a shilling; copper, a penny; steel, a knife, &c.

Being thus far advanced in what is called nouns of the first order, and examples of two of the genders, it is next proposed to lay down some specific rules for explaining a few of those words denominated *attributes* of figure, shape, size, colour, &c. of bodies natural or artificial.

All natural bodies are understood to have a determinate figure, as for instance, an egg is universally of a roundish form, so are all fruits and grains, with a few exceptions; but their colours are varied almost to infinity, as also their sizes, according to the different species to which they belong.

Artificial bodies are varied in figure and size according to taste, fancy, or other circumstances. A hat may be altered from a round or oval form to a triangular shape. Perhaps there is nothing formed by art more diversified in its appearance than a snuff-box, both in the construction, colour, and materials of which it is formed.

In constructing a table for explaining colours, it is only necessary to write their names with ink of the colour meant, red, with red ink, and blue, with blue ink, &c. And when this cannot be conveniently done, give the object, painted with the colour, such as, yellow, orange, a green tree, &c.

In describing the figures of objects, they are delineated much the same as geometrical figures; a circle, and a globe are named *round*: four lines equi-distant, a *square*; long and short, by a long and short line; high and low, by contrasting two objects erected vertically; tall being an adjective applied only to a man or a tree; but when the man is dead, or the tree cut down, they are then termed long.

No. I. ANIMALS.

QUADRUPEDS.

	Male.	Female.	Use alive.	Use when killed. Flesh.	Skin.
Horned Cattle.	Bull.	Cow.	Cow gives milk.	Beef.	Leather.
	Ram.	Ewe	Ewe do.	Mutton.	do.
	He Goat.	She Goat.	She Goat do.		do.
Domestic Animals.	Dog.	Bitch.		unclean.	do.
	He Cat.	She Cat.		do.	do.
Wild Animals.	Hare.	Doe.		clean.	do.
	Fox.	Bitch.		unclean.	

FOWLS.

Domestic Fowls or Poultry.	Cock.	Hen.	Hen lays eggs.	clean.	Feathers.
	He Pigeon.	She Pigeon.	She Pigeon do.	do.	do.
	Drake.	Duck.	Duck do.	do.	do.
	Gander.	Goose.	Goose do.	do.	Quills, Pens.
Wild Fowls, or game.	Partridge.	Hen.	Hen do.	do.	Feathers.
	Woodcock.	Hen.	Hen do.	do.	do.

No. II. FISHES.

Some Fishes are Hermaphrodites, and no distinction of sex is used.

Fresh water Fishes.	Salmon,	used for food.
	Trout,	do.
	Pike,	do.
	Eel,	do.
Salt water Fishes.	Shark,	unclean.
	Whale,	do.
	Haddock,	clean.
	Herring,	do.

No. III. VEGETABLES.

	Wood.	*Its use.*
Forest Trees.	Oak,	for building ships, &c.
	Fir,	for building houses, &c.
	Ash,	for making machinery, &c.
Fruit Trees.	Apple,	for bearing fruit, &c.
	Pear,	ditto ditto.
Flowers.	Rose,	nosegay, for smelling.
	Lily,	ditto ditto.
	Carnation,	ditto ditto.

No. IV. MINERALS.

	Stones.	*Their use.*
Quarry Stones.	Granite,	for building houses, &c.
	Freestone,	ditto dito.
	Slate,	for covering houses.
Precious Stones.	Diamond,	a gem, or jewel.
	Ruby,	ditto.
	Topaz,	ditto.

No. V. METALS.

		Their use.
Precious Metals.	Gold,	Coin and Ornaments.
	Silver,	do. do.
Hard Metals.	Copper,	do.
	Steel,	for making a knife, &c.
	Iron,	do. do. tongs, nails, &c.

Although the foregoing examples are given with much brevity, it is hoped they will convey a clear idea of the mode necessary to be observed, in forming what more examples may be required.

It now remains to give a few examples for defining such words as are denominated pronouns, and pronouns possessive, &c. Such as, This knife is mine; This is my book, &c. The following table will render their use more plain.

No. VI.

			The foregoing state.	The following state.	Their Possessives to be used.	
					With a Substantive.	Without a Substantive.
1st Person		*Sing.*	I.	Me.	My.	Mine.
		Plur.	We.	Us.	Our.	Ours.
2d Person		*Sing*	Thou.	Thee.	Thy.	Thine.
		Plur.	You *or* ye	You.	Your.	Yours.
3d Person.	Male.	*Sing.*	He.	Him.	His.	His.
	Fem.		She.	Her.	Her.	Hers.
		Plur.	They.	Them.	Their.	Theirs

But instead of perplexing the pupil at the beginning, and burdening his memory with a multiplicity of distinctions among words (about which the grammarians of our own day accord so ill with each other), the teacher should begin to learn him the meaning of short and familiar sentences, expressive of the motions and actions of the human body. For example, "Go and shut the door;" or, "Look out at the window," &c. When the action is performed, write down the sentence, and go on to another example, until a number of actions are performed, and wrote down; then try if the pupil can be made to perform the action by reading the sentence pointed out to him. Then proceed to something longer, until the pupil has acquired so much knowledge as to derive instruction from reading in any book used by children. "*The House that Jack built*," is peculiarly suitable for this purpose, the tale being told in plain language, and the operations of agents,

with cause and effect, made easy and familiar by the accompanying pictures, as representative of the actions, as he advances in reading this simple tale.

The pupil being now arrived at that stage of improvement wherein he is supposed to be capable, in some measure, of managing his own ideas and committing them to writing, must now be left to the choice of his own subject and mode of expression. His first attempts will no doubt be incorrect and obscure, and it will require some time before he can express his thoughts in regular language, by the assistance of his tutor correcting him as he proceeds.

Below is inserted two specimens. The first was written by a young man who is both deaf and dumb; he being one of a family of ten children, five of whom were born deaf. It is his narrative of a voyage to London.

"I took a passage from Leith in a ship for London; we had a fine passage of two days. The master gave me my passage for nothing, because I am deaf. When I arrived in London, I was surprised with various shows, some of which I will write. I saw a shoemaker making shoes quite blind; also a tailor making breeches blind; also a man making ladies' fans wanting both hands, having an apparatus fixed on his wrists which answered the purpose of hands. I saw eight men hanged for forgery, and house-breaking. I was in a large warehouse, which had brilliant lights, which they called gas."

The next was written by a deaf girl, who was assisted by the former mentioned young man, in composing her dream upon the 28th of November, 1817, occasioned by her having read in the newspaper a de-

scription of the funeral of the late lamented Princess Charlotte of Wales.

" I thought I was transported to the vault where the *Grand Lady* is buried ; when I saw her arise from the coffin with her child in her arms, and her husband standing at some distance looking at her. I am given to understand that the coffin is black, and ornamented with gold : but I thought in my dream it was sprinkled with blood."

Both the foregoing examples were composed by pupils who have been taught by me in Aberdeen ; and along with others, have exhibited to the public upon several occasions, with what accuracy and acuteness the deaf and dumb acquire the use of language, and figures, by intuitive example, and imitation.

I shall conclude this Treatise on Dumb Education, with a few general directions necessary to be observed, by those having the charge of deaf and dumb persons.

The deaf and dumb of both sexes, are, in general, very jealous, and feel much hurt when any affront is attempted to be put upon them. In consequence of their want of hearing, great care should be taken to prevent persons from entering the dumb school who would be disposed to ridicule their mimic language, or laugh at their obscure signs, or write immodest words in their sight.

Their signs may be divided into two classes, Hieroglyphic, and Imitative. The first consists in forming the hands to the shape of objects, or by describing lines with the hands, denoting the form of the object meant. As, a round hat is denoted by a circle round the head ; an oval, or a cocked hat, by their figure delineated in the same manner. A snuff-box is denoted

by forming the thumb and forefinger of the left hand as holding it, and by taking snuff with the right hand. The materials of which they are made, is also denoted by signs. The sun is denoted by a circle round the face. The moon by a half circle, &c.

The second class of signs, consists in expressing all professions and trades, by imitating the position and attitude each person assumes when performing the duties of their respective callings. If any attempts are to be made to methodise signs, the pupils will do that for themselves; for, if any one in the school, have either an awkward sign, or an unbecoming gesture, the rest of the pupils will soon correct him. Perhaps no class of persons whatever, take more pains to have their dress neat and clean, than the deaf and dumb; or are more anxious to behave in company with due decorum.

It would give me satisfaction to have dwelt longer on a subject of such importance to the interest of those unfortunate objects, whose education is the motive of this publication. But wishing to afford the foregoing treatise at a low price, suitable to the abilities of all classes of society, I am obliged to conclude. I am aware that the performance will be considered by many as unsatisfactory and incomplete; and I have no doubt that several errors might easily be detected. But in a work where cheapness and utility are solely my view, I have little to say to the fastidious critic.

AN

ESSAY ON DEAFNESS.

Of all the organs of sense, those of hearing are most easily unfolded to the human eye, by the operation of dissection. Yet in many cases where persons have been deaf from their birth, dissection has not afforded us any well grounded hope of our ever being able to ascertain, with certainty, the precise deficiency in those organs of sense, that is the cause of persons being afflicted with deafness. We all know, that deafness is a disease in the ear, which prevents its due reception of sounds; and, that it arises from an obstruction, or compression of the auditory nerve; or from some collection of matter in the cavities of the inner ear; or from the auditory passage being stopped up by some hardened excrement; or from some excrescence or swelling in the glands. And deafness is sometimes occasioned by foreign matter getting into the ear. But which of those causes relates to a particular case, it is often difficult to ascertain; as those parts which are most essential to the sense of hearing, are placed beyond our inspection during life, and also after death; because, the change they then undergo, cannot be calculated upon with any degree of certainty.

I am aware of the difficulties I have to encounter, and the censures I am likely to undergo, for thus indulging in researches on the secrets of nature. I there-

fore beg leave, once for all, to observe, that I have no new discoveries to unfold on this subject, nor any absurd hypothesis to defend, but what I am willing to give up, when once I am convicted of error.

My sole aim, in this publication, is to direct the attention of my benevolent readers, to the solitary condition of the deaf and dumb, in an uneducated state; and advocate the cause of those individuals of our own species, who, without instruction imparted to them, must continue to live in a state of comparative seclusion from human society, and social intercourse, by their being cut off from one of the principal inlets to the human mind, so essentially necessary for conveying instruction to the rational and inquiring soul. It is also my intention to promote some investigation, upon hypothetical *data*, of the supposed causes in the conduct of mothers, when in a pregnant state, as affects the sense of hearing in their future progeny. And, although the circumstances to be adduced are not conclusive, they will be found, in some degree, interesting.

Upon reviewing the life of inferior animals, it will be perceived, that the greater part of them pass their lives in a state of comparative ease and tranquillity. Their wants are so limited and few, that the bounties of nature supply them with every thing necessary for their support and existence. Hence, very few cases of defective organization are to to be found among the inferior animals.

When we turn our attention to the vastly diversified scene of human life, and the many accidents to which the mothers of our own species are exposed, by the different positions that the body undergoes in per-

forming the various duties of domestic life ; and above all, the passions, and many emotions of their minds, when in a pregnant state ; these causes will, in some measure, account for the defective organization of their offspring; and also lead to the more remote causes of many of the aberrations of nature, in the distorted formation, to which a great many of the human race are liable, from their birth.

I shall here state a few of the most material cases communicated to me by the mothers of deaf children ; and leave the reader to draw his own conclusions on this abstruse subject.

The mother of a deaf-born daughter, related to me the following circumstance, which I shall give, nearly in her own words. " Prompted by curiosity, I was " induced to attend a military review of several regi- " ments of soldiers, and, perceiving some bustle among " the spectators, on the right, I walked towards the " spot, to ascertain the cause ; and, immediately on " my arrival, two artillery guns were fired off, which " so stunned me by the concussion, and unexpected " surprise, that, for some time after, I was deprived of " my hearing. And I had afterwards more cause to " repent of my curiosity, for the child I was pregnant " with at the time, had two marks of fire on her body, " and was deaf from her birth."

The mother of the young man I have mentioned in the preface, expressed to me her regret in the following manner. " Being on a visit to our relations, I was per- " suaded by my husband to accompany them to the " theatre, to witness the performance of the celebrated " tragedy of Pizarro, at that time much admired for " the splendid decorations of the dresses, and astonish-

" ing grandeur of its scenery. When the play was " well advanced, I became a little warm, and at last " fainted; and the house was so crowded to excess, " that it was next to impossible to procure any cor- " dial to relieve me. In a little time I so far recover- " ed as to be able to sit up, which unluckily happened " at the time of acting that scene, wherein *Rollo* is " mortally wounded by the military, when escaping " with *Cora's* child. The noise of the fire arms, and " shouting of the spectators alarmed me to such a de- " gree, that I became almost distracted, by sudden " surprise, and awful emotions; and it was with consi- " derable difficulty I could be got removed from the " theatre. I was then pregnant with my beloved son, " and have no doubt but his deafness was occasioned " by my folly in going that night to the play- " house, from the sudden fright and emotions I there " suffered."

The wife of a miller related the following case. " When pregnant with my child, I saw a person one " day in danger of being drowned in the mill-pond, " and the alarm took such a hold of my imagination, " that, on the following night, I dreamed I was drown- " ing; I thought I heard the water rushing into my " ears, so loud as to awaken me. I felt a little deaf " for some time afterwards, and the child I then bore " was deaf from his birth."

That similar causes will sometimes produce similar effects, is beyond a doubt. Our sensations of horror are often as strong in our sleep, as when awake. It must be observed, however, that, in dreaming, our sense of feeling is, in general, much more obtuse than those of seeing and hearing. Many instances, how-

ever, might be adduced, that would fully exemplify the sense of feeling often experienced while asleep; and what will account for one sense being affected in our dreams, will account for the others, although in a nearer or more remote degree, as the imagination is influenced.

Professor Stewart relates two similar cases of dreams, that touched the sense of feeling with a certain degree of horror. They are taken from his Philosophy of the Human Mind, as here related. "A gentleman being "indisposed, applied a bottle of hot water to his feet, "when he went to bed; and, when he fell asleep, he "dreamed that he was travelling to the top of Mount "Etna, and felt the heat of the ground under his feet "insupportable." Another gentleman, "having a "blister applied to his head, dreamed that he was "scalped by a party of wild Indians." It would appear, that both these persons had awaked in a fright, occasioned by their imaginary situations.

I do not pretend to say, that what is advanced here, about sleeping sensations, is absolutely conclusive, to establish the hypothesis, that the passions and emotions of the human mind will uniformly produce such striking and extraordinary effects; particularly as dreaming is the effect of fancy, or imagination, which occurs to the minds of people in their sleep.

Dreams have, in all ages, been reckoned by the vulgar to have something portentous in them, and to presage future events. But how they can presage future events, unconnected with the body, does not clearly appear; although the sacred records give many striking instances of the knowledge of future events being conveyed to mankind in their dreams. But this re-

velation was for wise purposes, and brought about by supernatural influence.

In our age, it seems difficult to advance any thing satisfactory on a subject so obscure. Mr Locke traces the origin of dreams to previous sensations, when he says, " The dreams of sleeping men are all made up " of waking men's ideas, although, for the most part, " oddly put together."

Our dreams are affected by the state of our health, by the manner in which we have passed the preceding day, by our general habits of life, by the hopes we most fondly indulge, and by the fears which prevail most over our fortitude when awake. From rocollecting our dreams, therefore, we may learn to correct many improprieties in our conduct; and, instead of imagining what our dreams may forebode, we may, with much better reason, reflect by what they have been occasioned, and look back to those circumstances in our past life, from which they have arisen. The sleep of innocence and health is sound and refreshing, and their dreams delightful and pleasing.

Dreams, upon the whole, are a curious phenomenon of the human mind, and cannot properly be explained by inductive reasoning. Some philosophers maintain, that our reason is in a dormant state during sleep, because our dreams are often wild, improbable, and inconsistent. But this opinion is liable to many exceptions, as it often happens, that our inventive and reasoning powers are as active and vigorous in our dreams, as during the vigilance of our daily occupations.

Mathematicians have sometimes had profound calculations represented to them in their dreams, for this reason, that the subject had previously occupied their

waking thoughts. And, it has sometimes been said, that the bearings and issue of political events have been unfolded to men in their dreams, that had puzzled them much when awake.

I once knew an ingenious mechanic, who was employed to construct a machine to raise a great weight, in a situation where little room was allowed to exert sufficient power; and, after thinking he had accomplished his scheme, his plans were completely overset, for the want of room to erect the supports in the given space, without interfering with the moving power of the machine. In this dilemma, he retired to his bed, and in his dream, the idea of the framing and supports was represented to him complete, and in proper order; and, in the morning, he surmounted his difficulty. This dream was, no doubt, owing to previous sensation. But I must close this digression.

Deafness, however, may be owing to many other causes than what has been stated. A celebrated preacher, who mounted the rostrum in Aberdeen, on a late occasion, held forth to his hearers, with considerable effect, that, in his opinion, the luxury of mankind was one cause why so many of their offspring was born deaf. Luxury in diet, as well as in drink, is a breach of the law of nature, as it tends to bloat and disfigure the body, and debilitate the whole animal system. How far its evil consequences may affect the females of our race, in the generation of the species, may in some measure be inferred, by the consideration, that, in those places where mankind are least addicted to luxury, the dangers of child-birth are less frequent, and the organs of sense least injured.

It appears from history, both sacred and profane,

that, in every age of the world, a portion of mankind have been deaf from their birth. "Who hath made "man's mouth? or who maketh the dumb, or deaf, or "the seeing, or the blind?" These questions were put to Moses by JEHOVAH, when he refused to go unto Pharaoh, and solicit the departure of the Jews out of Egypt. And, when Moses afterwards became the lawgiver to the "chosen people," he received, among sundry laws, this solemn injunction; "Thou "shalt not curse the deaf." And from these passages it may be inferred, that there were deaf people in Egypt, and also among the Jews.

We have little more mention of the deaf, in the sacred records, until Judea became a Roman province; except in the prophecies of Isaiah, foretelling the coming of the Saviour of mankind. "Then," saith Isaiah, "the eyes of the blind shall be opened, "and the ears of the deaf be unstopped: the lame "man shall leap as an hart, and the tongue of the "dumb sing."

When our Saviour commenced his ministry the Evangelist St Matthew has recorded that, "the blind "receive their sight, and the lame walk: the lepers "are cleansed, and the dumb hear." It is farther recorded by St Mark, that our Saviour "rebuked the "foul spirit, saying unto him, Thou dumb and deaf "spirit, I charge thee come out of him, and enter no "more into him."

In the last and present century, many successful attempts have been made in Europe, to enlarge the comforts of the deaf and dumb, and to instruct them in useful knowledge. Mr Braidwood, of Edinburgh, was perhaps the first who ever brought the surprising art o

teaching the deaf to articulate sounds, and join in conversation, to any degree of perfection. He began with a single pupil, in 1764; and he afterwards taught many people, born deaf, to speak distinctly, to read, write and understand figures; and also the principles of religion and morality. This, to many people, appeared incredible, but the fact is certain.

Mr Braidwood's principal difficulty, after he had discovered this art, was to make people believe in the practicability of it. He exhibited his pupils to many noblemen and gentlemen, and advertised their progress in the public papers; yet, still he found the generality of mankind unwilling to believe him. A remarkable instance of this incredulity occurred to him in the course of his labours. "A gentleman in England sent "a deaf girl to Mr Braidwood's care. A year or two "afterwards, Mr Braidwood wrote to her father, that "his daughter could speak, read, and write distinctly. "The father returned an answer, begging Mr Braid-"wood's excuse, as he could not believe it: however, "he desired a friend of his, who was going to Edin-"burgh, to call upon Mr Braidwood, and inquire into "the truth of what he had wrote him. The gentle-"man called upon Mr Braidwood, saw the young lady, "heard her read, speak, and answer any question put "to her. On his return, he told the father the sur-"prising progress his child had made; but still the "father thought the whole an imposition: the girl "herself wrote to her father, but he looked upon the "letter as a forgery."

The author above quoted farther remarks, "We "have conversed with Mr Braidwood concerning the "nature and method of teaching this wonderful art:

"he seems to be very desirous of communicating, and "transmitting his discovery to posterity; but says "(and from the nature of the thing we believe it to be "true,) that he cannot communicate it so fully in "writing, as to enable any other person to teach it. "What a pity, that such a curious and useful art "should live and die with a single man!"

The celebrated Abbe Sicard, whose name I mentioned in the Introduction, is the first in notice in the present age, who has brought this art into a regular system; and, for giving publicity to his plans, M. Sicard instructs his pupils to become teachers: and, before the reverend Mr Galludate returned to America, M. Sicard gave him, as an assistant, M. Laurent Clerc, a deaf pupil, who had acquired the art of teaching others.

After the return of Mr Galludate from Paris, to the United States, accompanied by M. Le Clerc, as his assistant, an establishment for educating the deaf and dumb, was set on foot at Hartford, in Connecticut, and in a short time 18,000 dollars were subscribed for the support of this new establishment. The school was opened in April 1817, and a number of pupils admitted; and the establishment is now incorporated by a legislative charter.

But of all the methods hitherto tried to infuse instruction into the minds of the deaf and dumb, none come up to the experiments of M. de Moret.

M. de Moret, by order of the French government, commenced his labours upon four deaf children in 1813, which he has continued up to the present day. The experiments of M. de Moret are highly interesting to humanity. He has acquired the art of infusing into

the minds of his deaf pupils, by means of their eyes, a capability of giving utterance to their thoughts in an intelligible voice; and without screams, to read in a natural tone, to write to verbal dictation; and to originate and adapt ideas to things that are proper for them. He has succeeded completely in adding to their natural stock of ideas, and in giving them an exact knowledge of language, and things abstracted from the senses. He has enabled them to converse intelligibly with other men, without putting into requisition any outward signs, whereby to make themselves understood. It is by an attention to the motion of the speaker's lips in the light, and by touching in the dark, that they are enabled to comprehend his import: and, by these several means, he has given the deaf and dumb facilities of education by no means inferior to those enjoyed by persons who have their faculties perfect. This unexampled success, which appears almost a phenomenon, evinces indubitably, that M. de Moret has arrived at the highest stage of perfection in the art of teaching the deaf and dumb, which has hitherto been attained.

I hope, by this time, my readers are convinced, that the art of teaching the deaf and dumb the use of speech, is still preserved; and that it is now become practicable to communicate the knowledge of it to others, by a few simple rules. Without, therefore, wishing to obtrude my own labours, in educating the deaf and dumb, too much upon the reader's notice, I shall here state a case, which any person may see exemplified, by calling at my school.

I have at present two pupils, the one blind and the other deaf and dumb; and, strange as it may appear,

they can communicate their ideas to each other by signs and feeling, so as the one can comprehend what the other wants to infuse. The dumb pupil instructs the blind by the sense of feeling, and makes the latter understand him by touching different parts of his body: and the blind pupil conveys his meaning to the deaf and dumb by signs and outward motions.

I shall close this Essay, by a comparative statement of the deaf and dumb, with the aggregate population of Aberdeenshire; and, from the sources I have been favoured with this information, I have reason to believe it nearly correct.

In the eighty-five parishes in the county of Aberdeen, there are 71 deaf and dumb persons. Of these, 21 are above 36 years of age, and nine under eight years old; leaving forty-one, capable, in some measure, of being instructed. Of this last number, there are twenty-three between eight and sixteen years of age, being the most proper age for instruction. Of the forty-one, formerly mentioned, seven are in circumstances to pay for their board and education; and twelve are capable of paying only for their education. The remaining twenty-two being children or relations of people in indigent circumstances. Taking, therefore, an abstract of the whole, there will be found eleven capable of paying for board, clothing and instruction; and thirty to be provided for otherwise with board and education.

But if a regular settlement for their education were some years established, the number to be taught will be considerably reduced, by educating the young between the age of eight and sixteen. Say, therefore, that in this county, twenty would require to be educated by public charity.

The population of Aberdeenshire is thus stated. In 1790-6, the return was, 122,949; and in 1798, 122,921; in the year 1801, the population amounted to 123,082. We shall assume the return of 1798, for data:—therefore, 122,921 of population, and 71 of this number deaf and dumb, gives about 1731 population, for each deaf person in the county. And supposing, as above, that 20 of these deaf persons, between the age of eight and sixteen, required to be kept and educated by public charity, it only amounts to one for every 6146 of the whole population.

It requires no hesitation to state, that the British nation can boast of having greater exertions made by individuals, and a greater number of laudable and benevolent institutions for lessening the miseries and wants of human life, than are to be found in all the annals of antiquity.

Supposing, that the three united kingdoms may contain the same proportion of deaf and dumb persons, to their aggregate population, as there is in the county of Aberdeen, it is reasonable to conclude, that we have humanity among ourselves, if it were once put in action, to feed, clothe, and educate *one* deaf person, for every 6146 of the whole population. And three or four years, in most cases, will suffice for instructing the pupils to read, write, understand figures, and acquire some knowledge of religion, and the moral duties. And without the assistance of instruction, the deaf and dumb must remain as ignorant of the knowledge of God, and the benefit of religion, as the inhabitants of the most savage nation on the face of the globe! I plead the cause of humanity, and I hope to be heard, without prejudice to any other cause.

And I appeal to the benevolence of my countrymen, if there are not many sums applied in this kingdom, both by government and private persons, for less important purposes, than the extension of that art of communicating instruction to the deaf and dumb; and raising a number of our fellow creatures from a grovelling state of solitary seclusion, to that of rational beings, and useful members of society? "Thou shalt "not curse the *deaf*, nor put a stumbling-block before "the *blind*, but shall fear thy God: I am the Lord."

NOTE.—Subscriptions and Donations for the support of "The Northern Society for Educating the Deaf and "Dumb in Aberdeen," may be sent to JAMES BLACK, Esq. Treasurer to the Society.

APPENDIX.

THE BLIND.

——But chief of all,
O loss of sight, of thee I must complain!
Blind among enemies, O worse than chains,
Dungeon, beggary, or decrepit age!
SAMSON AGONISTES.

THE indifference with which the blind are often treated, is hurtful to the feelings of humanity. How often, alas! do we see the poor old blind wandering in our streets for charity, and groping in the dark to procure a casual assistance! "Beaten by the wind, "and battered by the rain," what object can be more painful to behold than a poor blind man exposed to the storm?

"Oh! first created Beam, and thou great WORD
Let there be light, and light was over all:
Why am I thus bereaved thy prime decree?
The sun to me is dark
And silent as the moon,
When she deserts the night
Hid in her vacant interlunar cave."

It is proposed, in this Appendix, to suggest some plain instructions regarding the education of the blind; and also to state a few instances of the surprising knowledge that some individuals have acquired, although blind from their infancy.

To the blind all visible objects are annihilated: the sensations of sound may convey to him some

idea of distant objects; but he can only be perfectly conscious of the place where he stands, or to which his extremities can reach. The living and comprehensive eye, darts its instantaneous view over distant objects: expansive valleys, lofty mountains, protracted rivers, and widely extended oceans, are all viewed in one moment of time. Thus, while the face of nature is irradiated, to one class of human beings, to delight their imaginations by views of diversified splendour; and their understandings invited to expatiate on a theatre so large and attractive—to the blind all those objects are chaos and confusion!

As it is in the infinite wisdom of all that is good, that some persons are born destitute of eyesight; in like manner, it is his goodness to make them amends another way, by bestowing upon them a greater share of memory, and other mental powers: and by the assistance of early instruction, they have been known to acquire as great an extent of intellectual powers as was ever attained by man; which explains the truth of this adage,

> "That if one *sense* shall be suppressed
> It but retires into the rest."

Music has often been pointed out as the peculiar province of the blind, where they excel all others, and obtain a livelihood. Dr Stanely, some time organist of St Andrew's, Holborn, London, is a striking instance of their musical talents.

In teaching the blind the knowledge of letters, the characters should be planted upon a board in *relievo*, and by repeated trials of the fingers, the blind pupil learns to become familiar with the letters by touching

them. He may afterwards be taught to delineate letters on a slate, with a pencil. The slate should have a moving bar across it, whereby the pupil is instructed to guide the little finger of the right hand, in writing to the end of a line; and to move the sliding-bar, line by line, as he proceeds in his writing; while, at the same time, he feels the letters in *relievo*, with the fingers of his left hand, until he acquires proficiency in writing both straight and regular. It would swell this pamphlet beyond the size that its price can afford, to enter into a detail of all the methods of instructing the blind, in the various branches of education they are capable to learn. I shall, therefore, refer such of my readers, as are curious on that subject, to the Preface to Dr Blacklock's Poems, written by G. G. Esq. and printed in Edinburgh, 1754; or the account of Mr Blacklock's Life and Writings, by the Rev. Mr Spence, prefixed to a quarto edition of his Poems, published at London in 1756, and at Edinburgh in 1793.

The celebrated Dr Blacklock appears a prodigy for talent. Blind from three years of age, he made himself master of various languages; he became a proficient in the Greek, Latin, Italian, French, and English. And he wrote a celebrated poem, in his native language, remarkable for its variety and happy description, although he never saw the light from the days of his childhood.

What, for instance, can be more remote from the conceptions of a blind man, than the abstract relations and properties of space and quantity? Yet the incomprehensible attainments of Dr Sanderson, the celebrated Professor of Cambridge, in all the branches of ma-

thematics, are now fully known, and firmly believed, by the whole literary world. Although blind from his infancy, Dr Sanderson, by the ardour and assiduity of his application, not only made incredible advances in mechanical operations, in music, and in the languages, but also acquired a profound knowledge in geometry, optics, algebra, astronomy, in chemistry, and in all the other branches of the Newtonian philosophy, as taught and received by the admiring world.

Dr Moyes, who occasionally gave Lectures of Philosophical Chemistry, at Manchester, lost his sight by the small-pox, in early infancy. He never recollected to have seen. "But the first trace of memory I "have," says he "are some confused ideas about the "solar system." "Possessed of native genius," says his biographer, "Dr Moyes, by his ardent application, "made rapid advances in various departments of eru- "dition; and not only acquired the fundamental prin- "ciples of mechanics, music, and the languages, but "likewise entered deeply into the investigation of the "profound sciences; and displayed an acute and ge- "neral knowledge of geometry, optics, algebra, as- "tronomy, chemistry, and many other branches of the "occult sciences."

A remarkable instance is related, of a lady who lost her sight, hearing, and speech, by the small-pox. In this melancholy condition, her remaining senses became so acute, that she could distinguish the colour of silk, cloth, flowers, and other articles by the touch of her hand, and she could recognise her acquaintances by their breathing in her face. She learned to be neat and expert at needle-work; her faculty at writing was truly astonishing, as she could write with characteris-

tic accuracy, and if a letter had been omitted in the spelling, by some surprising means, she could find out the error. She often wrote, or sewed in the dark, in her bed, when she felt herself disinclined to sleep.

The instances of wonderful literary powers displayed by blind authors, are striking and numerous. Homer, Milton, and our Caledonian bard Ossian, had been long acquainted with the visible world, before they were surrounded with clouds of ever-during darkness. And their laments for the deprivation of their visual powers, are often mournfully pathetic. And, as this Appendix is collected from various sources of information relating to the blind, I shall make no apology for inserting the annexed quotations from the poetical writings of the forementioned bards.

" Dear to the muse, who gave his days to flow
With mighty blessings, mix'd with mighty woe;
In clouds and darkness quench'd his vital ray,
Yet gave him power to raise the lofty lay."

ODYSSEY

——" Thus with the year
Seasons return: but not to me returns
Day, or the sweet approach of ev'n or morn,
Or sight of vernal bloom, or summer rose,
Or flocks, or herds, or human face divine:
But cloud instead, and ever-during dark
Surrounds me; from the cheerful ways of men
Cut off, and for the book of knowledge fair,
Presented with an universal blank,
Of nature's works, to me expung'd and raz'd,
And wisdom at one entrance quite shut out."

PAR. LOST. B. III.

" O thou that rollest above, round as the shield of my fathers! whence are thy beams, O sun! whence thy universal light? Thou

comest forth in thy awful beauty, and the stars hide themselves in the sky. The moon, cold and pale, sinks in the western wave; but thou thyself movest alone: who can be a companion of thy course? The oaks of the mountains fall; the mountains themselves decay with years: the ocean shrinks and grows again; the moon herself is lost in heaven: but thou art for ever the same, rejoicing in the brightness of thy course. When the world is dark with tempests; when thunder rolls, and lightning glances through the heavens; thou lookest in thy beauty from the clouds, and laughest at the storm. But to Ossian thou lookest in vain; for he beholds thy beams no more; whether thy yellow hair flows on the eastern clouds, or thou tremblest at the gates of the west. But thou art, perhaps, like me, for a season, and thy years will have an end: thou shalt sleep in thy clouds, careless of the voice of the morning. Exult then, O sun, in the strength of thy youth! age is dark and unlovely; it is like the glimmering light of the moon, when it shines through broken clouds, and the mist is on the hills; the howling blast of the north is on the plain, the traveller shrinks in the midst of his journey."—CARTHON.

In the Introduction to "The Education of the "Deaf and Dumb," a plan is suggested for establishing local seminaries for instructing them in all manner of useful knowledge. The same plan might be adopted for endowing provincial establishments for the reception of the blind. And, were once such local seminaries opened to receive pupils, the feelings of humanity would make donations for their support flow in from all quarters.

I shall close this pamphlet with an appeal to my readers (in the beautiful language of an eminent writer on the nature and qualifications of the blind), which may justly claim their attention.

"It now remains to demand an answer from society, "Whether it is more humane and eligible, that such "unhappy persons should be suffered to languish out

" their lives in torpid and miserable obscurity, wretch-
" ed in themselves, and burdensome to others; or to
" cultivate and improve their powers, in such a man-
" ner, as may qualify them for internal enjoyment and
" public utility? Surely there is not a human being
" who does not disgrace the works of God, that can be
" at any loss in answering this question. Have we not
" then a right to call the world to an account? Have
" we not a right to demand, why rational beings, sus-
" ceptible of felicity in themselves, and capable of
" transferring happiness through the societies with
" which they are connected, should be abandoned to
" a state of insignificance and misery? Is it possible
" that men who are every moment subject to the same
" contingencies, with which they behold their fellow crea-
" tures afflicted, should not, with all their souls, endea-
" vour to alleviate the misfortunes of their suffering
" brethren? You who are parents, who feel the
" strong and powerful pleadings of nature, do not, by
" a brutal negligence and insensibility, render the ex-
" istence which you have given a curse to its posses-
" sor. Do not give them cause to upbraid your me-
" mory, and to answer those who ask what patrimony
" you have left them, that their sole inheritance was
" ignorance, incapacity, and indigence. You men
" of wealth and eminence; you whom Providence
" has rendered conspicuous on the theatre of nature,
" to whom it has given the noblest opportunities of
" participating the *divine beatitude*, by the exercise
" of universal benevolence, and genuine patriotism:
" yours is the glorious province of bringing neglected
" merit from obscurity, and healing the wounds
" inflicted by adverse fortune, and of cultivating

" those talents which may be exerted for your own " advantage, and the honour of your species. Thus " shall you rise in the heraldry of heaven, and your " names diffuse lustre through the extent of space, " and the archives of eternity!"——" Strengthen ye " the weak hands, and confirm the feeble knees."— " Then the eyes of the blind shall be opened, and the " ears of the deaf shall be unstopped: then shall the " lame man leap as an hart, and the tongue of the " dumb sing."

Smith & Hill,
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