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THOMAS BEWICK.

DURING the earlier part of the eighteenth century engraving on wood can scarcely be said to have flourished in England. It existed—so much may be admitted—but it existed without recognition or importance. In the useful little "Etat des Arts en Angleterre," published in 1755, by Rouquet the enameler, a treatise so catholic in its scope that it includes both cookery and medicine, there is no reference to the art of wood-engraving. In the "Artist's Assistant," to take another book which might be expected to afford some information, even in the fifth edition of 1788, the subject finds no record, although engraving on metal, etching, mezzotinto-scraping—to say nothing of "painting on silks, sattins, etc." —are treated with sufficient detail. Turning from these authorities to the actual wood-cuts of the period, it must be confessed that the survey is not encouraging. With the almost solitary exception of the illustrations in Croxall's "Fables of Æsop," to which we shall hereafter return, the "wooden engravings" which decorate books are of the most "stale, flat, and unprofitable" description. The majority consist of tasteless emblematical ornaments and tail-pieces, or coarse head-pieces such as that which Hogarth is said to have designed in 1747 for the "Jacobite's Journal" of Fielding. Among efforts on a larger scale, the only examples which deserve mention are the last two plates of the same artist's "Four Stages of Cruelty," engraved in 1750. It was with a view to bring the lesson of his somber designs within the range of the poorest classes that Hogarth had in this case selected wood; but the method was found upon trial to be more expensive than copper. Such as it was, nevertheless, the real field of wood-engraving during the greater part of the eighteenth century lay among those humbler patrons of art Philemon" (first version).

and literature to whom he had desired to appeal. It was to be found in the rude prints and broadsides then to be seen in every farm and cottage—patriotic records of victories by sea and land, portraits of persons famous or notorious,

"—ballads pasted on the wall, Of Chevy Chace and English Moll,* Fair Rosamond, and Robin Hood, The little Children in the Wood."

These homely mural decorations, familiar to Swift in the first years of the century, were, sixty years later, equally familiar to Goldsmith; and it was, doubtless, from some such gallery that honest Farmer Flamborough or the "blind piper" delighted the simple audience at Dr. Primrose's with "Johnny Armstrong's Last Good Night," or the "Cruelty of Barbara Allen." But the execution of these modest masterpieces was obviously of the most cheap and rudimentary kind, so that, taking the wood-cut art of the period as a whole, it was not without some show of justice that Horace Walpole, pre-occupied mainly with the more delicate effects of engraving on metal, stigmatized the wood-blocks of his day as "slovenly stamps."

He was scarcely so fortunate, however, when, writing in the same place of Papillon's recently published "Historical and Practical Treatise on Wood-Engraving," he went on to doubt if that author would ever, as he wished, "persuade the world to return to wooden cuts." No time, as it chanced, could have been worse chosen for such a prediction, since, assuming him to have written about 1770, in the short space of five years later,

*See the ballad of "Mary Ambree" in Percy's "Reliques." The lines are from Swift's "Baucis and

the "Society of Arts" was offering prizes for engraving in wood, and its list for 1775 "Transactions" of the Society that he again contains the names of no less than three persons who received sums of money on this graving on wood or type metal." To the third



Jam Jir Jones obliged knost obed Thomas Bewick

BUST OF BEWICK, BY BAILY, IN THE NEWCASTLE LITERARY AND PHILOSOPHICAL SOCIETY'S LIBRARY.

Hodgson, William Coleman, and Thomas Bewick. With respect to the first of the trio little needs to be said beyond the facts that he Music," as well as to certain poorly executed which it received from his individual genius,

account. The names were those of Thomas belongs the honor of doing what fastidious Mr. Walpole considered so improbable, that is to say, "persuading the world," not all at once perhaps, but gradually, "to return to wooden was a Newcastle man, whose signature is found cuts." It is to the improvements made by attached to a plate in Hawkins's "History of Bewick in wood-engraving, and the impulse cuts for magazines and ballad-heads, and that that its revival as an art must properly be he was also a printer and publisher in London. ascribed—a revival which continues to this

day, and which has not yet reached the final phase of its development. But, besides his qualities as a pioneer in his craft, he was an artist and observer of a very rare and exceptional kind, whose best work, in his own line, remains unrivaled. Moreover, he was a man of a singularly attractive northern type, having something both of Hogarth and Franklin in his character, and deserving of study as much from his personality as from his talents.

The true record of Bewick's life, like that of most artists, is to be found in his works, which have been voluminously catalogued in Mr. Hugo's "Bewick Collector,"

Bell, in 1851. Beyond these, the chief written by Charles Knight, in 1839. John Jackson, sources of information respecting his career are three in number. The earliest, or rather the for this book, was a native of Ovingham, first issued, is a brief memoir contributed in near Newcastle, and for a short time one of 1831 to the "Transactions of the Natural History Society of Northumberland," etc., by Mr. George C. Atkinson, a gentleman of Newcastle, who knew him during the last three years of many noteworthy biographical particulars, his life. Next to this comes chapter vii. in Jackson and Chatto's "Treatise on Wood-Engrav- person of Bewick's technique. Lastly, there is



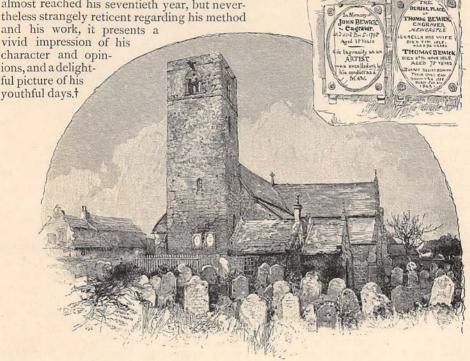
CHERRYBURN, BEWICK'S BIRTHPLACE, IN ITS PRESENT CONDITION. (PART OF THE ORIGINAL STRUCTURE HAS BEEN REMOVED.)

1866-68, and more moderately, by Mr. J. G. ing," the first edition of which was published the engraver, who supplied the raw material Bewick's pupils. He completed his apprenticeship under another pupil, William Harvey. With some reservations, this account contains together with an examination by a qualified



OVINGHAM PARSONAGE, WHERE BEWICK WENT TO SCHOOL.

the memoir composed by Bewick himself, for Bewick's grand-nieces. The remains of the his eldest daughter Jane,* and published by her in 1862. This is of the greatest importance, and to Bewick's admirers must always constitute the standard authority for the points by two comfortable-looking cows. But the litit covers. Written with a certain garrulity easily pardonable in an author who had almost reached his seventieth year, but nevertheless strangely reticent regarding his method



OVINGHAM CHURCH, BEWICK'S BURIAL-PLACE. - TABLETS ON THE FRONT OF THE CHURCH.

11.

CHERRYBURN HOUSE, Bewick's birthplace, lay upon the south or right bank of the Tyne, in the parish of Ovingham, Northumberland, and not very far from the little village or hamlet of Eltringham. We say "lay," for the the old cottage now only exists in part, and that part fulfills the homely office of a "byre" or cow-shed, over one door of which is the inscription-"Thomas Bewick born here, August, 1753." In the neighborhood of this now rises a larger dwelling, still inhabited by

* Bewick had four children-a son and three daughters. The son, Robert Elliot Bewick, died July 27, 1849, and a daughter, Elizabeth, in 1865. Miss Jane Bewick, the eldest of the family, reached the great age of ninety-four, and died as recently as April 7, 1881. Another daughter, Isabella, still survives. Nothing can exceed the affectionate veneration shown by Bewick's children for his memory

† In Audubon's "Ornithological Biography" is an interesting account of the American naturalist's visit to Bewick in 1827.

with cherry and plum trees, and violets and primroses bloom as of old beside the now dry bed of the once musical "burn" which gave the place its name. In Bewick's day there was in this orchard a spring-well under a hawthorn bush, the site of which may yet be traced, while a precipitous little garden to the north presumably remains much as it used to be. From the slope on which the house stands you may look toward the Tyne, still crossed by boat-ferries at Eltringham and Ovingham. Behind you lies Mickley, and away to the left and south stretched the great "fell" or common, comprising, until it was divided in 1812, some eighteen hundred acres of blossoming "whins" and heather, and fine green pasturage, watered by countless streams. Over the hill to the right are Prudhoe and Wylam; and across the river, also to the right, rises the square romanesque tower of Ovingham church, where Bewick and his brother John lie buried; and in the

tle "dean" or orchard at the back is still filled

older house formed its central portion. The

"byre" is still thatched with "ling" or heath,

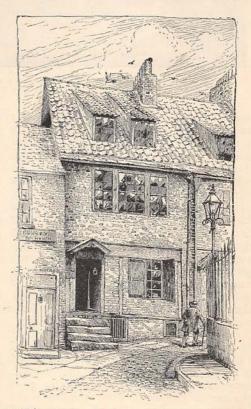
and, when visited by the writer, was tenanted

they went successively to school. A railway the Prudhoe meadows, and an embankment runs along the Tyne to Eltringham. But, in spite of these drawbacks and the smoky activity of brick-works and collieries hard by, it is still not impossible, on a fresh May morning, with a blue, shower-washed sky overhead acteristics are, however, of less moment than and the young green triumphing in the "shaws" and "braes," to realize something of the landscape as it must have looked more than a hundred years ago, when Thomas Bewick was born.

His father, John Bewick, was a farmer who rented a small land-sale colliery (i. e., a colliery the coals of which are sold upon the spot to persons in the neighborhood) at Mickley. It is still worked and held by the present occupants of Cherryburn. His mother, whose maiden name was Jane Wilson, came of a Cumberland family. She was John Bewick's second wife (the first having died childless), and she bore him eight children, of whom Thomas was the eldest, and John, born in 1760, the fifth. Another son, William, and five daughters completed the family. It is with the first-born, however, that we are chiefly concerned. He appears to have been sent to school at Mickley when very young. After the death there of two successive preceptors, he was placed, as a day scholar, under the care of the Reverend Christopher Gregson of Ovingham, whose housekeeper his mother had been before her marriage. There is no evidence that he distinguished himself by any remarkable diligence, although his after-career shows that he must have acquired some knowledge of Latin, and, what is better, of English. On the other hand, the "Memoir" is full of school-boy escapades which show him to have been a lad of unusual courage and intractability, earning, in those days when the rule of the rod was still supreme, no small amount of physical correction from his father and the school-master. Now he is taming a runaway horse by riding it bare-backed over the "sykes" and "burns"; now frightening oxen into the river for the pleasure of hearing the "delightful dash"; now scampering off naked across the fell with his companions, in imitation of the savages in "Robinson Crusoe." After these misdemeanors, if not locked into the belfry by Mr. Gregson to keep company with the ghosts and "boggles," he would steal home, wading the river, and hide himself in the byer-loft until his father's anger should blow over. But, with all this, he was not in any wise a bad or vicious boy. He

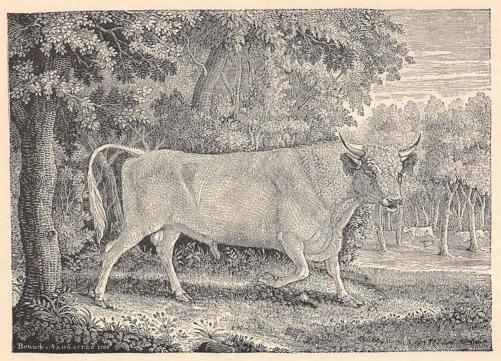
parsonage of which—a pretty, old-fashioned was truthful and warm-hearted, and an apstone house with shelving garden terraces— peal to his better feelings was seldom without success. One good quality he also seems to now comes winding from Newcastle through have possessed, not always found in boys. After a gentle reproof from his master's daughter, he never again "plagued" girls in his youth; and he preserved this early respect for women to the last day of his life.

These not by any means exceptional charthose earlier indications of the tastes which so strongly colored his after-life, namely-his love for drawing and his love of nature. The former appears to have been intuitive. Like Hogarth's, his "exercises when at school were more remarkable for the ornaments which adorned them than for the exercise itself." After exhausting the margins of his books, he had recourse to the gravestones and the floor of the church-porch, which he covered with rude representations in chalk, of devices or scenes he had met with,



BEWICK'S WORK-SHOP IN ST. NICHOLAS CHURCH-YARD, NEW-CASTLE, IN ITS PRESENT CONDITION. (THE OLD SIGN-BOARD OF "BEWICK AND SON" HAS BEEN REMOVED.)

and the pastime of the day at Ovingham was continued in the evening on the flags and hearth at Cherryburn. At this time, he says, "I had never heard of the word 'drawing,"



The Chillingham bull. (reduced copy, from a print from original block. Size of original block, $5\frac{1}{2} \times 7\frac{3}{4}$ inches.)

the king's arms in the church, and the signs in Ovingham of the Black Bull, the White Horse, the Salmon, and the Hounds and Hare. I always thought I could make a far better hunting scene than the latter: the others were beyond my hand." But although, oddly enough, he makes no mention of it at this stage of the "Memoir," there was another kind of art with which he must have been minutely acquainted. The house at Ovingham where the boys' "dinner-poke" was taken care of when at school, was lavishly ornamented with those patriotic prints and broadsides to which we have already referred. Here he might study the "Battle of Zorndorff," and the "Sinking of the Victory" (Admiral Sir John Balchen); or rejoice over the manly presentments of Benbow and "Tom Brown, the valiant grenadier." And this was not the only collection. In Mr. Gregson's kitchen was "a remarkably good likeness of Captain Coram," the brave old philanthropist whom Hogarth painted; and "in cottages everywhere were to be seen the 'Sailor's Farewell' and his 'Happy Return,' 'Youthful Sports,' and the 'Feats of Manhood,' 'The Bold Archers Shooting at a Mark,' 'The Four Seasons,'" and the like.

nor did I know of any other paintings beside in connection with the future restorer of the king's arms in the church, and the signs wood-engraving, are of greater significance in Ovingham of the Black Bull, the White than the ale-house signs.

After he had long scorched his face with his hearthstone designs a friend furnished him with some paper. He says:

"Here I had more scope. Pen and ink, and the juice of the bramble-berry, made a grand change. These were succeeded by a camel-hair pencil and shells of colors; and, thus supplied, I became completely set up; but of patterns, or drawings, I had none. The beasts and birds, which enlivened the beautiful scenery of woods and wilds surrounding my native hamlet, furnished me with an endless supply of subjects. I now, in the estimation of my rustic neighbors, became an eminent painter, and the walls of their houses were ornamented with an abundance of my rude productions, at a very cheap rate. These chiefly consisted of particular hunting scenes, in which the portraits of the hunters, the horses, and of every dog in the pack, were, in their opinion as well as my own, faithfully delineated. But, while I was proceeding in this way, I was at the same time deeply engaged in matters nearly allied to this propensity for drawing; for I early became acquainted, not only with the history and the character of the domestic animals, but also with those which roamed at large."

'Sailor's Farewell' and his 'Happy Return,'
'Youthful Sports,' and the 'Feats of Manhood,' 'The Bold Archers Shooting at a
Mark,' 'The Four Seasons,'" and the like. he had listened to the flooded burn murmurThese popular plank-cut pictures, considered ing through the dean at the back of the house,

birds-the woodcocks, the snipes, the red- astronomer. Another was Anthony Liddell, wings, the fieldfares-which in winter made who had formed himself entirely on the study their unwonted appearance in the frozen of the Bible, finding in its precepts reasons landscape, the sights and sounds of nature for the utter disregard of the game-laws, and had filled him with delight. To milk the cows, to cut and "cree" whin-tops for the stantly committed, since he gained the opporhorses, to carry straw and oats to the famishing and pastureless sheep on the fell -these were pleasures not to be forgotten, and only to be excelled by his favorite angling, which, with its endless "set gads" and night lines, its early risings, and late waterside wadings, occupied the summer months in happy cares. Then, when the Tyne was flooded and school was a thing impossible, there were the field sports of the neighborhood, the "flushing" of strange fowl by the terriers, the hunting of the hare and fox, the tracing of the "foumart" (polecat) in the snow, or the baiting of the badger at midnight. The cruelty of field sports did not at first present itself to him. Once, however, he caught a hunted hare in his arms, and was strangely moved by the poor creature's piteous screams of terror. On another occasion, the effect was more lasting. He says:

"The next occurrence of the kind happened with a bird. I had no doubt knocked many down with stones before, but they had escaped being taken. This time, however, the little victim dropped from the tree, and I picked it up. It was alive, and looked me piteously in the face; and, as I thought, could it have spoken, it would have asked me why I had taken away its life. I felt greatly hurt at what I had done, and did not quit it all the afternoon. I turned it over and over, admiring its plumage, its feet, its bill, and every part of it. It was a bull-finch. I did not then know its name, but I was told it was a little Matthew Martin. This was the last bird I killed; but many, indeed, have been since killed on my account.'

Of a different kind, but connected as closely with the country side, were his interest in, and attraction to, the strange characters of the neighborhood-characters more common a hundred years ago than now, when railways and other facilities for intercourse have done so much to round off the angles of individuality. The winter-night tales of wild exploits in the hunting-field, and legends of the Border Wars, were a never-failing source of pleasure. By the woeful "laments," such as those for the last Earl of Derwentwater, with whose death it was supposed that prosperity had forever departed from Tyneside, he was often affected to tears. Of some of the cottagers on the fell, poor men whose little store consisted of a few sheep, a Kyloe cow, or a flock of geese, and whose sole learning was derived from Holy Writ, old ballads and local histories, he has left portraits which show how deeply they had impressed

or watched, from the byre-door, the rarer him. One of these was Will Bewick, a natural exulting in the jail to which he was contunity of reading it through once more. Then there was Thomas Forster, called familiarly "Tom Howdy" (midwife) from his mother's occupation, with his stock of secret bee-hives on the fell; and last, but by no means least, the swarming old soldiers let loose upon the country at the conclusion of the "Seven Years' War"—old comrades in Napier's and Kingsley's, full of memories of Minden and Lord George Sackville, of James Wolfe and Quebec. Bewick's strong abhorrence of war, which appears so plainly in the later pages of the "Memoir" had not yet been developed, and he listened eagerly to these weatherbeaten campaigners, with their tarnished old uniforms and their endless stories about their prowess in the field.

But there comes an end to everything; and the inevitable time arrived at last when a calling must be chosen for the stout boy of fourteen. His taste for drawing determined his apprenticeship to a Newcastle engraver, and he quitted Cherryburn to serve his time with Mr. Ralph Beilby of that town. The pang of separation was a bitter one. He says:

"I liked my master; I liked the business; but to part from the country, and to leave all its beauties behind me, with which I had been all my life charmed in an extreme degree,—and in a way I can-not describe,—I can only say that my heart was like to break; and, as we passed away, I inwardly bade farewell to the whinny wilds, to Mickley bank, to the Stob-cross hill, to the water-banks, the woods, and to particular trees, and even to the large, hollow old elm, which had lain, perhaps for centuries past, on the haugh near the ford we were about to pass, and which had sheltered the salmon-fishers, while at work there, from many a bitter blast."

These things would be remembered long afterward in the busy city; and though, for a long period, the link with the country was not wholly severed, it is doubtless to those yearning recollections that we owe so much of that rural element in Bewick's work which is its most abiding charm.

III.

LOOKING down upon the Tyne from the pleasant parsonage garden at Ovingham, with the round-arched door and dial, and the bright flower-beds in shadow, it is easy to understand how keenly the boy must have felt the change. Over the broken water at the ferry the swallows are wheeling and turning,

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while from the other side a rustic group hails the ferryman. Higher up, a man, with raised knees, rides his horse through the river at the ford; a pony and cart come after. Below the ferry an angler is wading mid-deep: on the opposite bank another is throwing a fly. Behind him two tiny figures of school-children climb the steep hill to Master's Close. From the tall trees at Eltringham on the right comes the cry of the cuckoo: on the left the rooks are cawing in the great rookery at Prudhoe Castle, the ancient seat of the Umfranvilles. There is no other sound but the rippling flow of the river to Newcastle and the sea.

But the Newcastle to which it flows to-day is a far different place from the Newcastle to which Bewick came in October, 1767. One might then, as now, stand by the famous church of St. Nicholas, with its fairy-like turrets and vanes and crocheted pinnacles, but the grand High Level Bridge which Robert Stephenson flung across the dark ravine between Newcastle and Gateshead was yet a thing undreamed of. The keep of the old Norman castle which gave the town its name, black with age and smoke, still fronts it at the northern end; but the spectator may seek in vain for the frowning and gloomy old gates which stretched across the main streets from Westgate to Pilgrim Street, or the pleasant gardens and orchards which everywhere intersected the city and shut in the stately mansions and antique houses with carved enrichments, where dwelt its merchant princes.* The red-brick shop of Bewick's new master stood near Amen Corner, and looked into St. Nicholas's church-yard. It was distinguishable by two fantastic wooden spouts, and existed until very lately; but a towering building in the modern taste now occupies its site. Bewick boarded with Mr. Beilby, and, after the fashion of those days, attended him to divine service twice every Sunday (probably carrying the prayer-book), groomed his brother's horse, and made himself generally useful, not omitting, doubtless, to abstain carefully from the over-abundant Tyne salmon which (as per indenture) the apprentice of the period was not obliged to eat more than twice a week.

For some time after entering the business he was employed in copying "Copeland's Ornaments" (Lock and Copeland's Designs for Chimney-pieces, etc., 1768), and "this," he says, "was the only kind of drawing upon which I ever had a lesson given to me from

any one." So far as the discipline of the hand is concerned, the statement is no doubt strictly accurate; but that other education of the sight, which Hogarth defined as the early habit "of retaining in his mind's eye, without coldly copying it on the spot, whatever he intended to imitate," had probably been active for many years previously. Beilby's work was of a most miscellaneous character. Pipe molds, bottle molds, brass clock-faces, coffin-plates, stamps, seals, bill-heads, ciphers and crests for the silversmiths-nothing seems to have come amiss; and the coarser kinds of engraving which fell to the share of the young apprentice made his hands as hard as a blacksmith's. According to the "Memoir," the first "jobs" on which he was employed were etching sword-blades, and blocking out the wood about the lines on diagrams (to be finished subsequently by his master) for the "Ladies' Diary," a popular almanac which dated as far back as 1704, and which was edited for many years by Charles Hutton, then a Newcastle schoolmaster, and later the great Dr. Hutton of Woolwich. It was for Hutton also that he did what in the catalogues figures as his earliest production, namely the diagrams to a "Treatise on Mensuration." This book, which long enjoyed a great reputation, made its début in fifty sixpenny numbers (!), and was afterward issued by Thomas Saint in 1770 as a quarto volume. One of the cuts, often referred to, contains a representation of the tower of St. Nicholas's Church. Considerable ingenuity appears to have been shown by Bewick in the execution of these diagrams; and he devised a double-pointed graver, so successful in its operations, that the completion of the work, which had been begun by Beilby himself, was transferred to him at Hutton's request. About the same time he designed and engraved a billhead for the "George and Dragon" Inn. and (according to Mr. Atkinson) another for the "Cock," at the head of the Side. These performances, though of the rudest character, were exceedingly popular; and commissions for work on wood, which had hitherto been little done in Beilby's shop, began to multiply. Numerous orders for cuts for children's books were received, chiefly from Thomas Saint, a printer and publisher of Newcastle, who had succeeded John White, once famous for his stories and for the old ballads which were sung about the streets on market days. If we except the Hutton diagrams, the first efforts of Bewick in the way of book-illustration would seem to have been the "new invented Horn Book" and the "New Lottery Book of Birds and Beasts," 1771. We do not, however, propose to linger upon these elementary efforts. They were the tentative essays of an artist who

^{*} Some of these expressions are borrowed from a pleasantly written little pamphlet by Mr. Robert Robinson, of Pilgrim Street, issued in 1876, with his reprint of Bewick's "Waiting for Death."

neither knew his own strength, nor foresaw the resources of the vehicle he was employing; and who, when his talents were matured and his vocation found, might well be excused if he declined to be over-communicative respecting work which he had long excelled. Indeed, he excelled it in a marked manner before the termination of his apprenticeship. Among the wood blocks upon which he was busily engaged during the latter part of that period were some intended for an edition of "Gay's Fables." Of five of these Mr. Beilby thought so well that he submitted them to the Society of Arts in London, from whom, as already stated, they received the recognition of a premium of seven guineas, which Bewick at once transferred to his mother.

"Gay's Fables," however, were not published until 1779, and long before that date Bewick had quitted Mr. Beilby's shop. But during the time of his bondage, his character and habits appear to have been definitely formed. Having fallen into ill-health through over-application and the constant reading which was almost his sole amusement, the precepts of a sensible Newcastle physician and notability, Dr. Bailes, made him turn his attention to questions of diet and exercise. He began to study the regimen of the famous Venetian centenarian, Lewis Cornaro, together with the recommendations as to occasional days of abstinence given, but probably not practiced, by the great Joseph Addison. He thought nothing, he tells us, of setting out, after seven in the evening, to walk to Cherryburn, a distance of more than eleven miles, to see his parents, for whom he main tained the warmest affection, and whom he never failed to visit periodically. These long walks, he says, were chiefly occupied by the devising of plans for his conduct in life. But it is probable that the insensible education through the senses during these solitary expeditions was of even more importance than the forming of resolves, however laudable, to pay ready money, and never to live beyond his means.

He did not always continue to be an inmate of Mr. Beilby's house in the church-yard. After due time, he went to lodge with an aunt, and subsequently with a flax-dresser and bird-fancier named Hatfield. Here he had an opportunity of becoming acquainted with very varied company. Those of the trade who visited his landlord in his capacity of flax-dresser were a worthless and dissolute race: but (as might be conjectured) to the tales of the bird-fanciers and bird-dealers who resorted to the house he listened with the greatest interest. Among other acquaint-ances whom he made about this time was

Thomas Spence, the philanthropist, then only a few years older than himself, and who was already actively promulgating his doctrine "that property in land is every one's right," and, from his school on the Quayside, elaborating his new alphabet and phonetic system of orthography. For some of his types Bewick cut the steel punches; but he does not appear to have entirely espoused his principles, and his failure to support them on one occasion at a debating society resulted in a bout with the cudgels, in which the philosopher acted so unphilosophically, and even unfairly, that Bewick was obliged to give him "a severe beating."

Some of his friends, however, were better chosen, though they do not seem to have been less eccentric. Among these the Grays, father and sons, deserve mention. The former, Gilbert Gray, was a book-binder, and a thoroughly estimable man. He had previously been assistant to Allan Ramsay, at Edinburgh, after that honest wig-maker had left off "theeking the outside of the pash in order to line the inside," and was writing the "Gentle Shepherd." When Bewick knew Gray he was advanced in years, and following his trade in Newcastle. He lived in the most primitive way, eating only when he was hungry and sleeping when he was drowsy, and spending his money on the publication of little books of the moral and entertaining class (the "Countryman's Treasure," "Multum in Parvo," the "Complete Fabulist," etc.), which he sold to the people who attended the market on Saturday. On winter evenings his workshop was the resort of a number of young men, to whom his advice and example were of considerable service. In the workshop of his son, William Gray, also a bookbinder, Bewick was enabled to consult volumes which would otherwise have been sealed to him, and often before his own labors had begun for the day he might be found studying the treasures his friend had to bind. But the genius of the Gray family was the eldest son, George, a fruit-painter of considerable local eminence, and a good geologist, chemist, and botanist to boot, who traveled through a great part of America on a botanizing excursion—no small feat in 1787.

IV.

of flax-dresser were a worthless and dissolute race: but (as might be conjectured) to the tales of the bird-fanciers and bird-dealers who resorted to the house he listened with greatest interest. Among other acquaint-ances whom he made about this time was

printer of Newcastle, and occupied his leisure, as of old, with angling and field-sports, growing more and more attached to the country sights and ways. In the summer of the latter year, the spirit of wandering seized upon him, and, sewing three guineas in his waist-band, he made a long pedestrian excursion to Cumberland and the lake-country, and thence to Edinburgh and Glasgow, and so wandered northward to the Highlands. Here, having made up his mind not to visit any town or stay at any inn, he traveled from one farmhouse to another, meeting everywhere with kindly and simple hospitality, and pursued, at his departure, by the customary "bannocks" and "scones." A propos of one of these leavetakings, occurs the only idyllic passage in the "Memoir":

"On one occasion, I was detained all day and all night at a house of this kind, in listening to the tunes of a young man of the family who played well upon the Scottish pipes. I, in turn, whistled several Tyneside tunes to him; so that we could hardly get separated. Before my departure next day, I contrived by stealth to put some money into the hands of the children. I had not got far from the house till I was pursued by a beautiful young woman, who accosted me in 'badish' English, which she must have got off by heart just before she left the house, the purport of which was to urge my acceptance of the usual present. wished to refuse; but with a face and neck blushed with scarlet, she pressed it upon me with such sweetness-while I thought at the same time that she invited me to return-that (I could not help it) I seized her and smacked her lips. She then sprang away from me, with her bare legs, like a deer, and left me fixed to the spot, not knowing what to do. I was particularly struck with her whole handsome appearance. It was a compound of loveliness, health and agility. Her hair, I think, had been flaxen or light, but was tanned to a pale brown by being exposed to the sun. This was tied behind with a ribbon, and dangled down her back; and, as she bounded along, it flowed in the air. I had not seen her while I was in the house, and felt grieved because I could not hope ever to see her

He left Scotland in a Leith sloop, arriving at Newcastle on the 12th of August, 1776. The passage from Leith to Shields was an exceedingly bad one, and it is characteristic of his kindness of heart that during the whole of the time, although worn out for want of sleep, he tended a poor little baby, which had been put into his bunk for security during the utter prostration of its mother.

After remaining long enough in Newcastle to earn the money for his journey, he took a berth in a collier for London, where he arrived in October. In London he had numerous friends. The Gregsons, his old school-master's sons, and distant connections as well, were established there. William Gray, too, was a book-binder in Chancery Lane; and there were others besides. He got sole diversion—fishing.

commissions, chiefly for Thomas Angus, a work at once from Isaac Taylor, the master of another Newcastle acquaintance, and also from the before-mentioned Thomas Hodgson, then a printer and publisher in George Court, Clerkenwell. Mr. Atkinson also says he worked "with a person of the name of Cole," of whom, as a wood-engraver, Jackson could subsequently find no trace. It is possible, however, that this is a mistake for Coleman, the Society of Arts prizeman, who survived until 1807. Be this as it may, notwithstanding his facilities for obtaining employment, Bewick soon began to weary for the old rural surroundings of Newcastle. London had few charms for him,-it was too huge, too gloomy, too full of extremes of wealth and poverty. With many of his fellow-workmen he was out of sympathy; they called him "Scotchman," and he despised them as cockneys. The result was that, in spite of the remonstrances of his principal patrons, he resolved to return to his northern home. He told a friend that he would rather enlist than be tied to live in London; and, years after, the feeling was as strong as ever. Writing in 1803 to one of the Gregsons, he says:

> "For my part, I am still of the same mind that I was in when in London, and that is, I would rather be herding sheep on Mickley bank-top than remain in London, although for doing so I was to be made the premier of England."

> Thus, after brief trial, ended Bewick's wanderjahre. He returned to Newcastle, taking up his abode as before at Hatfield's, and accepting such engraving, either on wood, silver, or copper, as came in his way. He had not been long at work on his own account, when propositions were made to him to enter into partnership with his old master, Mr. Beilby. This by the intermediation of a friend was brought about, though not without some misgivings on Bewick's part. He took his brother John, then a lad of seventeen, as his apprentice, and the old weekly visits to Cherryburn were resumed, in company. For eight years these were continued in all weathers, winter and summer, fair and foul. Often he had to wade a pool at the outset, and sometimes the river at the end. But by this time his constitution was so hardened by temperance and exercise that neither heat nor cold had much effect on him. And the severities of the winter were amply compensated by the delights of the other seasons when the valley of the Tyne put on all its beauties, and he could watch the succession of plants and wild flowers, and the flight of birds and insects. Then again, at this period he had the fullest enjoyment of his

In 1785, Bewick's mother, father, and eldest sister died, and the walks to Cherryburn ceased. In the following year he was married to Miss Isabella Elliot of Ovingham. He was then living at the Forth, a large piece of public ground near St. Mary's Hospital, in a house which had been previously tenanted by Dr. Hutton. It was "a fine, low, oldfashioned house," situated in what was afterward known as Circus Lane (so probably called from the Amphitheater erected in the Forth in 1789), and having a long garden extending almost to the town wall.

For many years after the termination of his apprenticeship, Bewick appears, by his own account, to have been fully employed upon the business of the firm, which consisted chiefly of work for silversmiths, watchmakers, and hardwaremen. Much time was also occupied in seal-cutting; but engraving on wood, as is clear from the small number of acknowledged works between 1774 and 1784, must have been the exception rather than the rule of his trade. Among the books belonging to this date is the well-known "Tommy Trip's History of Beasts and Birds," published by Saint in 1779, which, owing to the fact that it is supposed by Atkinson and others to have prompted the "Quadrupeds" and "Birds," has acquired a fictitious reputation with collectors. Then there is the "Lilliputian Magazine," the letterpress of which Mr. Pearson boldly attributes to Goldsmith. It was published in 1783 by T. Carman, the successor of Goldsmith's friend Newbery, but had probably been printed earlier by Saint at Newcastle.* The two volumes, however, with

* The following passage respecting "Tommy Trip" and Goldsmith is taken from one of Miss Jane Bewick's letters to Mr. Edward Ford, of Old Park, Enfield, and has been kindly communicated to us by that

gentleman:
"My sister lately drew my attention to the passage
you quote in the 'Vicar of Wakefield' (Goldsmith's charming little puff [in chapter xviii.] of his children's books, published by Newbery), 'Tommy Trip and his Dog Jowler,' and 'Woglog the Giant.' Well do I remember the little book—amongst many charming Newberys still preserved, that treasure has disap-peared. We had it before we could read. The book contained many cuts of animals (a crocodile among the rest), the descriptions of which were probably com-piled by Goldsmith. The cuts must have been exe-cuted while my father was in London.

"I have often heard my father tell that, when he was very young, a stranger traveling on foot, and dressed in a sky-blue coat, with immensely large cuffs, called at Cherryburn, where he had some refreshment. Whilst resting, he conversed with my grandmother, and when he left she observed to her sister Hannah: 'That is no common person.' The impression made on the child (Goldsmith was sure to have noticed the

which we are most concerned during this period are the "Fables by the late Mr. Gay" of 1779, and the "Select Fables" of 1789, both of which were printed and published by Saint. In these, rather than the foregoing works, interesting as those are from the collector's point of view, Bewick's work began its true development, and they alone constitute his real beginnings.

The illustrations to "Gay's Fables," as we have seen, had been begun during Bewick's apprenticeship. In advertising them Saint referred to the "finely engraved frontispiece" and "very curious cuts," some of which had "gained the premium of the Royal Society [sic]." The "finely engraved frontispiece" was a poor copper-plate by Beilby of the monument which Gay's patrons, the Queensberrys, had erected to him in Westminster Abbey; and it was manifestly copied from Gravelot's print in the London edition of 1738. The "curious cuts" were sixty-seven in number, not including thirty-three vignettes. Of the five approved by the "Society of Arts," the "Old Hound" is the only one which has been identified. The others, probably executed at different times between 1773 and 1779 are of very various merit. Many of them plainly reproduce the compositions of William Kent, Wootton the animal painter, and H. Gravelot, in the first editions of the two series of Gay's "Fables," issued by Tonson and Knapton in 1727 and 1738 respectively. Whether Bewick made use of these books directly, or followed some intermediate copyist such as the unknown artist of Strahan's complete edition of 1769, is immaterial. But a comparison of his illustrations with the earlier ones establishes a remarkable relationship, especially in the more allegorical or mythological subjects. In the "Hare and Many Friends" the arrangement of the first illustrator, Wootton, is almost entirely discarded; and the gasping, pathetic picture of "Poor Honest Puss" appealing vainly to the calf is worthy of a Landseer in little. Now and then, Bewick's knowledge of domestic animals, or his keen eye for character overmaster him entirely, and he breaks away from the model altogether. "The Hound and the Huntsman" is a case in point; it might have been sketched at Cherryburn.* Other examples in this class are "The Man, the

little black-eyed boy) was so strong that the first time he saw a portrait of Goldsmith he felt certain that it was the poet himself who had called in. One may suppose the fare offered to have been eggs and bacon, with home-brewed birch-wine, which my grandmother used to make by tapping the birch-trees."

*An original pencil sketch for "The Hound and the Huntsman" is in the possession of Mr. Edward Ford, who obtained it from Miss Jane Bewick.

Cat, the Dog, the Fly," and "The Squire and his Cur." These two are not so much illustrations of Gay as little pictures in genre.

Generally speaking, the printing of all these cuts, even in the earlier editions (and it it is absolutely useless to consult any others), is weak and unskillful. The fine work of the backgrounds is seldom thoroughly made out, and the whole impression is blurred and unequal. Nevertheless, as book-illustrations, in detail, composition, and especially in expression, they are far beyond any thing of the kind that had appeared before, except a few cuts by Bewick himself, to which we now come.

The other book of importance belonging to this period is the "Select Fables," published by Saint in 1784. This was described as "a new edition, improved,"—a reference to the fact that, in 1772, Saint had issued a small number of "Select Fables" at the end of a little book called "Moral Instructions of a Father to his Son, etc.," the cuts to which were said by Miss Bewick to have been her father's early work. Of this book Saint brought out a third edition in 1775; and in 1776 he issued a volume of "Select Fables" alone, of which the "Select Fables" of 1784 is obviously an elaboration. In fact, the titlepages are almost textually identical, and the same emblematic vignette is used for both. The former volume contains one hundred and fourteen small and poorly executed cuts, and, at the end of the book, in illustration of the "Fables in Verse (Part III.)," are fourteen larger and better cuts, with borders. The smaller cuts, which include those in the "Moral Instructions," are, we must perforce decide, by Bewick. Jackson, indeed, speaking of them contemptuously in a foot-note, (page 480, edition 1861), says that "Bewick always denied that any of them were of his engraving." But, even if we had not Miss Bewick's authority for believing to the contrary, this is contradicted by the book itself, for no less than thirteen of the remaining fourteen cuts with borders are reproduced in the "Select Fables" of 1784, the illustrations of which are attributed to Bewick by common consent. It must therefore be conjectured either that Jackson misunderstood Bewick or his informant, or that he had not seen the very rare edition of 1776, which is now before us. So again, when Mr. J. G. Bell and Mr. Hugo speak of the "miserable" illustrations of the earlier edition of the "Select Fables," it must be concluded that that they the end are quite as good as those in the ter in Croxall; but, in Bewick, there is obvi-

"Gay's Fables" published in 1779. It would be tedious to carry this purely bibliographical discussion farther; but it so far disposes of one troublesome passage in the "Memoir," which states that, during his apprenticeship, Bewick was at work on the "Select Fables." That, before 1774, he could have been working at the edition published in 1784, is improbable; but when it is explained that he prepared cuts for the edition of 1776, the words are no longer difficult to understand.

Most of the illustrations to the "Select Fables" show a very marked advance upon those to the "Gay." The animals are better drawn, and the backgrounds and details more carefully studied. But the greatest improvement is in the grouping. This, and the arrangement of black and white, are much more skillful and effective than before. As before, however, Bewick seems to have been contented to take an earlier work for the basis of his designs. There can be but little doubt that the one used was the "Fables of Æsop and Others," translated by Samuel Croxall, D.D., some time Archdeacon of Hereford. This was one of the most popular books of the eighteenth century. First published by Tonson and Watts in 1722, by 1798 there had been no fewer than sixteen editions. Jackson, who refers to this collection at some length, appears to think that the illustrator, who deserves a better fame than he has obtained, was a certain E. Kirkall, whose initials are to be found appended to one of the tail-pieces in Maittaire's "Horace." It is not necessary to show in detail in what the likeness to Croxall consists, as a couple of examples will amply suffice. Take, for instance, the cuts to the "Viper and the File" and the "Young Man and the Swallow." In the former, Bewick has closely followed the earlier design. But the advantage in execution, in black and white, and in the superior fidelity of the accessories (e.g., the vice) is wholly on his side. So are the improvements in the relative proportions of the different objectsthe viper of the old illustrator for size might be a youthful boa constrictor. In the "Young Man and the Swallow" the deviations are more apparent than the resemblances, and little of similarity remains but in the attitude of the hero. The swallow which, in Croxall, assumes the proportions of a barn-door fowl is, in Bewick, reduced to reasonable dimensions. Croxall's Spendthrift has literally denuded were not aware that the edition of 1776 con- himself; but he of Bewick's drawing, like a tained a number of the cuts afterward printed true eighteenth-century rake, has only pawned in the volume of 1784. The smaller cuts his linen. Again, beyond the bare-boughed are indifferent enough; but the fourteen at tree there is no particular suggestion of win-

ous ice and men sliding upon it, while he has given to the chief figure a look of nose-nipped and shivering dilapidation which is wholly absent from its model. These specimens will show how Bewick dealt with Croxall when he employed him as a basis. But, as in the case of the "Gay," there are numerous instances where the invention appears to be wholly his own, and they are generally the happiest in the book. Take, for example, the charming little pictures of the "Wolf and the Lamb," and the "Proud Frog." Or (to choose some fables not given in Croxall at all) let us say the "Hounds in Couples," the "Beggar and his Dog," the "Collier and the Fuller." This last, especially, is a little chef-d'œuvrs for truth to nature. The fuller with his bare legs and beater; the grimy but not unfriendly coilier; the linen bleaching in long rows in the field behind and the colliery works on the hill, to say nothing of St. Nicholas's spire in the distance—all these go to make up a whole not afterward excelled by any of the famous tail-pieces. Bewick was familiar with fullers and colliers, with frogs and dogs, and what he knew intimately he could draw as no other man could.

Those who admire Bewick's draughtsmanship have often asked themselves how he obtained his proficiency as an artist, for he certainly did not acquire it from "Copeland's Ornaments." The only answer given by his family is that "he used to go out and look at things, and then come home and draw them." That is to say, he shared the instinctive perceptive faculty and eye-memory of Hogarth and Wilkie; but this scarcely explains his skill in combining and arranging his material. If, however, we bear in mind that he spent so much of his early life in adapting, correcting, and modernizing the designs of others, it requires no further argument to show that he studied in a school of composition of a very practical and serviceable kind.

VI.

From the work of Thomas Bewick previous to 1785, and more especially from the two volumes of "Fables," it is evident that he is most successful in depicting those phases of animal life with which he was familiar, or in making such selection as his genius prompted of the characteristics, whimsical or pathetic, of the humanity about him.

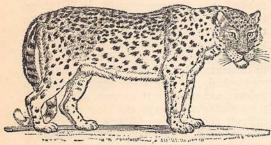
"That is best which lieth nearest, Shape from that thy work of art,"

never received more striking confirmation than at Bewick's hands. Hercules and Jupi-

ter, Time and Fortune, figures in which the allegorists of the day would have delighted, become under his pencil mere lumbering and futile unrealities, ill at ease in their nakedness, and not to be credited under any system of theology. But set him down to draw you a group of startled hares, or a hungry beggar watched by an equally hungry dog; a boy stung by a nettle, or a brace of snarling hounds tugging at the unequal yoke, and he will straightway construct you a little picture spirited, vivid, irreproachable in its literal fidelity-to which you will turn again and again as to the authentic record of something within your own experience, which you seem to have forgotten, but of which you are glad to be reminded once more. To such an artist, so truthful, so dependent upon nature, so unimaginative (in a certain sense of the word), the realizing of other men's ideas would be a difficult and uncongenial task. But suppose him to find a field outside these conditions, in which he is free to exercise his abilities in a fashion most pleasant to himself, it will follow, almost as a matter of course, that he will produce his best work. This, in effect, appears to have been the case with Bewick. He found his fitting field in the "Quadrupeds" and "Birds," and rose at once to his highest level.

The "Quadrupeds" were begun soon after the publication of the "Select Fables." But while working at them, and before they were published, Bewick produced the large block known as the "Chillingham Bull," one of those famous wild cattle of the old Caledonian breed which Landseer has painted and Scott has celebrated in the ballad of "Cadyow Castle." The engraving was a commission undertaken in 1789, for Marmaduke Tunstal of Wycliffe; and, in the "Memoir," Bewick has described some of the obstacles he met with in getting near his restless model. He was finally obliged to select one which had become separated from the herd, and was as yet unfurnished with its "curled, or shaggy neck and mane." It is said that he considered this block his masterpiece; and it is certain that the bull with its dark ears and muzzle, its black-tipped horns, and milk-white hide is an exceedingly handsome beast. It steps out lightly from a little glade, and halts with its head turned distrustfully toward the spectator, the thin foam threading from its jaws. Its hair and hoofs are excellently given; but in these days the background and accessories would probably be regarded as stiff and conventional. When engraved it was doubtless Bewick's best and most ambitious effort; but there are animals and birds in his subsequent works with which it can scarcely be compared. An accident, however, has had the

effect of giving the impressions of this block selves. In a letter to John Bewick, he speaks an abnormal value with collectors—the value of the difficulties that beset him. He canof extreme rarity. After a few copies had not get a good idea of the wolf, so conbeen struck off on parchment and paper, the block was thoughtlessly laid on a place where the rays of the sun fell so directly upon it that it split; and notwithstanding several attempts to reunite it, it was never betray indications of the fatal injury. The



THE OUNCE. (FROM THE "QUADRUPEDS.")

sums given for copies taken before the mishap, without the name and date, and especially for those on parchment, of which there appear to have been six, are consequently phenomenal. Fifty guineas was paid at one period of its career for that now in the "Townsend Collection" at South Kensington. Three more of the parchment copies were sold with the "Hugo Collection" in 1877. The original block, also in Mr. Hugo's possession, has since passed into the hands of a gentleman of Northumberland. Before this, it was cleverly wedged in a new frame of gun-metal, and a limited number of careful impressions were taken from it on vellum and toned paper for Mr. R. Robinson of 38 Pilgrim Street, Newcastle, from whom a few copies, we believe, are still to be obtained.

The account given in the "Memoir" of the "General History of Quadrupeds," like most of the portions of that book which relate to Bewick's work, is of an exceedingly meager character. But he had actually begun it as early as November, 1785, for he was engraving the dromedary when he first heard of his father's death. Most of the cuts and vignettes were executed after the day's work was over, and the letterpress was compiled by Mr. Beilby, who was " of a bookish or reading turn," Bewick giving him what aid he was of his own knowledge able to contribute. Such animals as he knew (he says) were "drawn from memory on the wood," others were rected on the wood from the animals them- hitherto unmanifested, abilities as a colorist.

tradictory are the reports of its appearance, and he is rejoicing in the advent of "a large collection of animals now on its way to the town."

In 1790, the "General History of Quadrupossible to take an impression which did not peds" was published and sold rapidly. A second and third edition appeared in 1791 and 1792, and it had reached an eighth in Its limitations are indicated above. The Bison and Hippopotamus would scarcely, we imagine, excite the admiration of Mr. Zwecker or Mr. Wolf; but the dogs, the horses, the sheep, the cows, leave little to be desired. Excellent, too, are the Badger, the Hedgehog, and the Ferret. Jackson is also right in the praise which he gives to the Kyloe Ox, although our special favorites in the book are the Spanish Pointer and the staid Old English Hound. Some of the backgrounds, those to the domestic animals in particular, are of considerable interest, and often are most skillfully contrived to give full effect to the diversities of fur and hide.

Admirable, however, as was the volume of "Quadrupeds," it was eclipsed by the two volumes of "British Birds." Here the necessity for depending upon incorrect drawings or doubtful reports was reduced to a minimum; and Bewick set out with the determination of "sticking to nature as closely as he could." After much preliminary study of such books on ornithology as came in his way, e.g., Albin's "Birds," the old "Histoire des Oyseaux" of Belon, Ray and Willoughby, Pennant and Latham, he paid a long visit to Wycliffe, where he remained for nearly two months diligently copying the stuffed specimens collected by Mr. Tunstal. Upon returning to Newcastle to make his engravings, he was at some pains to reconcile the discrepancies between those of his drawings which had been actually taken from nature and those which he had copied from preserved figures. The result was that in many cases he set aside what he had done to wait for newly shot birds, with which he was liberally supplied by a few enthusiastic friends. Several of the sketches were from life. The Corncrake, for example, was taken from a bird which ran about his own room, and its excellent attitude was cleverly reproduced by Richard Wingate, a famous birdstuffer of Newcastle, in a specimen which is still to be seen in that town. It was probably at this date that Bewick made the majority of copied from Buffon, and others again were the very beautiful water-color drawings lately from specimens in traveling menageries, first exhibited by the Misses Bewick in London, sketched from memory and afterward cor- drawings which revealed unsuspected, because



THE STARLING. (FROM THE "BIRDS.")

This supposition is confirmed by the fact that the "Roller" and the "Red-Legged Crow," both of which were at Bond Street, are plainly copies of the stuffed examples still to be found in the Museum of the Newcastle "Literary and Philosophical Society," which purchased the Wycliffe collection. Beyond the specimens possessed by Bewick's family, examples of his water-color work, however, appear to be rare. But Mr. George D. Leslie, R. A., has a beautiful Kingfisher, the praises of which he has recently written in that fresh and unaffected book, "Our River."

The first volume of the "Birds" was pub-

seventeen birds and ninety-one tailpieces. The letterpress was by Mr. Beilby; but the proof-sheets, which were in the late Mr. Hugo's collection, show that Bewick's amendments and additions were numerous and important. The second volume appeared in 1804. The text to this, with some assistance from the Rev. Mr. Cotes, of Bedlington, was prepared by Bewick, whose partnership with Beilby had by this time been dissolved. This volume contained one hundred and one figures and one hundred and thirty-nine tailpieces. Large additions were made to both in the succeeding issues; and in the sixth edition of 1826 (the last published during Bewick's lifetime), the first volume contained one hundred and fifty-seven figures, the second one hundred and fortythree, beside fourteen supplementary figures of foreign birds. Other editions appeared after his death, but the latest (the eighth) is that put forth by Bewick's son, R. E. Bewick, in April, 1847. In this "about twenty additional vignettes" were inserted from a series intended for a projected "History of British Fishes," left unfinished by Bewick at his death; the nomenclature and arrangement of Temminck were adopted; and a synoptical table of the classification was added. This table was the work of Mr. John Hancock, a distinguished naturalist of Newcastle, to whom we are indebted for some assistance in the preparation of this paper.

There is no doubt that the "Birds" are Bewick's high-water mark. In these he worked under a combination of conditions

which were especially favorable to his realistic genius. In the first place he was called upon not to invent or combine, but simply to copy nature with that "curious eye" which slurs nothing, but strives to give its full place and value to the fold of a feather, the minutest markings of breast and back, the most fugitive accidents of attitude and appearance. Then, having made his drawing in color or otherwise, he was not obliged to see it altered or degraded in its transference to the woodblock at the hands of another person. Between his original study and the public he was his own mediator. In confiding his work to lished in 1797. It contained one hundred and the wood he was able to select or devise the



THE SHORT-EARED OWL. (FROM THE "BIRDS.")

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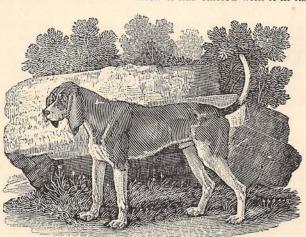
THE YELLOW BUNTING. (FROM THE "BIRDS.") *

most telling way the fine-shaped, delicate-shaded form of his model, and to do all this with the greatest economy of labor, the simplest array of lines. Finally, besides being the faithfulest of copyists, and the most skillful of wood-engravers, he was able to bring to the representation of "these beautiful and aërial wanderers of the British Isles" (as he styles them) a quality greater than either of these-that unlessoned insight which comes of loving them, the knowledge that often elevates an indifferent workman to an artist, and without which, as may be seen from some of Bewick's followers, the most finished technical skill and most highly trained trick of observation produce nothing but

flit rapidly through the air, they seem almost to utter their continuous or intermittent cries; they glossy are with health and freedom; they are alert, bright-eyed, watchful of the suspicious looking spectator, and ready to dart off if he so much as stir a hand or arm.

And as Bewick saw them so we see them, with their fitting background of leaf and bough, of rock or underwood,-backgrounds that are often little pictures in themselves. Behind the Rook his brethren stalk the furrows, oblivious of the scarecrow, while their black nests blot the trees beyond; the golden plover stands upon his marshy heath; the robin and the fieldfare have each his appropriate snow-clad landscape; the little petrel skims swiftly in the hollow of a wave. Sometimes the objects in the distance have a special biographical interest. To the left of the magpie is one of those worn-out old

most effective methods for rendering the nice horses, with whose miseries Bewick had so varieties of plumage, from the lightest down keen a sympathy. It has apparently broken to the coarsest quill-feather, to arrange his its neck by falling over a little cliff, part of background so as to detach from it in the the rails of which it has carried with it in its



OLD ENGLISH HOUND. (FROM THE "QUADRUPEDS.")

an imago mortis. These birds of Bewick,— descent. At the back of the guinea-hen is those especially that he had seen and studied the artist himself, seated upon a wall; in the in their sylvan haunts,—are alive. They swing out of the blackbird is a view of Cherryburn. on boughs, they alight on wayside stones; they

These details lead us naturally to another

feature of Bewick's books on Natural History, of which we have not yet spoken,-the numerous vignettes or tail-pieces at the ends of the chapters. But these deserve a section to themselves.



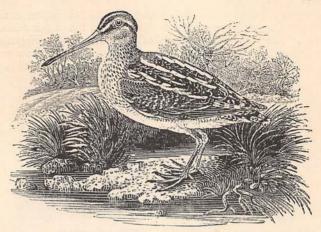
THE COMMON BOAR. (FROM THE "QUADRUPEDS.")

* Bewick thought this his best block.

Much in these famous tailpieces is of that enduring and universal character which belongs to no time or place. But the traveler from Newcastle to Prudhoe (the nearest station to Ovingham) is often reminded on the road that he is in Bewick's country. Passing out of the Central Railway station with the river Tyne to his left, he sees the "cool-staiths" and fleets of "keels," and the closed furnace-doors with the smoke curling from the crevices much as Bewick saw and drew them. Farther on they are rook-shooting, and there are sea-gulls wheeling above

the sandy reaches. While he is punted across the river at Ovingham he himself seems to be taking part in a tail-piece, and the spare "boat-stower" stuck in the stones of the little pier, and the long loops of net which are drying in the sun, help to strengthen this belief. As he climbs the steep stair-way on the Ovingham bank and notes the tide-dragged look of the branches near the water, he is reminded of the frequent floods, and especially of that great flood of 1771 which not only tore down the arches of the old bridge at Newcastle, but swept away the humbler boat-house at Ovingham. In the parsonage gate he recognizes an old friend of the "Fables," and he looks curiously at the picturesque churchporch where the farmer's son from Cherry-

burn once made his "chalky designs." Crossing the fields again toward Eltringham Ferry a hundred aspects of hedge and riverside seem friendly and familiar. The same plowman is following the same team as in the vignette of "Justissima Tellus": the same sheep are huddling in the fold watched by the same vigilant collie; and when he has traversed the Tyne again, and finds himself among the quaint north-country stiles and bickering burns, with



THE COMMON SNIPE. (FROM THE "BIRDS.")

the water-wagtail busy among the stones, and the farm-pigeon dropping down to drink, the illusion is well-nigh perfect. If, in addition to these, he comes suddenly upon a detachment of geese with their cackling leader at their head, marching solemnly waterwards in Indian file, or is startled by an old horse tearing hungrily at the green leaves of a young tree, he has no longer any doubt, and believes every line and stroke that Bewick ever put to paper.

The rural life, and the scenes among which Bewick was brought up, naturally play a large part in this delightful collection. At the beginning of the "Birds" is that well-known picture of a "Farm-yard," the drawing for which was exhibited in the Bond Street Col-

lection, and which is an extraordinarily minute study of the subject. A woman winnows grain in front; a man carries a sack to the barn. Cocks and hens, ducks, turkeys and geese, and even those uninvited guests, the starlings and sparrows, are clearly distinguishable in the foreground. A sow enters the yard with her litter; a dog dozes on the dunghill. Nailed against the byer-wall are a magpie, a crow and a heron; over these is a swallow's nest. Pigeons fly above



THE TAWNY OWL. (FROM THE "BIRDS.")

hibited in a dozen other designs. Now it is a swallow on the wing, and the angler who is bent old fellow breaking stones by the road-terrified by a turnip-headed "boggle." And



A FARM-YARD. (FROM THE "BIRDS.")

side, with his dog watching his coat and flask; or another cautiously crossing the snow-covered ice astride a branch for safety; a girl pumping upon a tramp's feet, or a cow that has broken through a fence to get to the water. We have mentioned only the principal figures: these are always set in their appropriate landscape, and surrounded with illustrative accessory. The man crossing the ice, for instance, is watched by a dog in the background, who is evidently too prudent to follow him.

Next to the pictures of rural life come those which illustrate the sports of the field. There the hare; there are the poachers who track her in the snow: there are the sportsmen who wade the river, or cross it upon stilts,

or reach perilously to secure their floating quarry, or fraternize at dinnertime with their dogs. But it is the angler's craft which is most richly represented, and Bewick has drawn a score of pictures of this, his favorite pastime. He shows us the steadygoing old angler "fettling" his hooks under a bank; the drenched fisherman watching his "set gads" in the shelter of a tree; the salmon-spearer with his many-pronged "leister." Then there are the humors and accidents of the game. There is the excellent but

the ricks against the dark background of the infirm enthusiast who fishes from his pony's trees, and there is a flight of fieldfares in the back while his footman waits hard-by with a air. The same microscopic truthfulness is ex-landing-net; the angler who has hooked a

in all these, the little glimpses of copse and thicket, of brown pool and wrinkling water, are enough to make a man wish (if he has forgotten the experiences of Washington Irving) to become an angler on the spot; and they seem to find their most restful expression in the charming vignette to which the artist has affixed the old Virgilian motto adopted by Shenstone at the Leasowes-" Flumina amem, sylvasque inglorius."*

In many of the designs already spoken of, although they are chiefly concerned with the accurate representation of natural objects, there are sly strokes of drollery. This brings us to a special class in these vignettes, namely, those which are purely and simply humorous,

-little compositions which would have delighted Hogarth, and hardly dishonored his genius. Such are the bottle-nosed and bewigged old coachman on the bob-tailed coachhorse who is following "little master" on his pony; the black sweep eating white bread and butter; the old woman (Bewick is unrivaled at old women) attacked by geese; the depressed and Callotesque procession with the dancing dogs and bear; the blind fiddler led by a ragged boy and fiddling without an audience; the old husband carrying his young wife and child across the river on his back. Many of these deserve a page of commentary. are the cruel greyhounds pressing hard upon It would be easy, for example, to write at

> "Be woods and waves my unambitious love." -Blackmore.



POACHERS TRACKING A HARE IN THE SNOW. (FROM THE "BIRDS.")



KITE-FLYING. (FROM THE "BIRDS.")

length upon such a theme as that which appears at page 106 of vol. ii. of the "Birds."* Two tramps have halted at the gate of a pretty cottage garden, where the mistress is hanging out the clothes. They have turned away empty and growling, leaving the gate open, and through this the inmates of the adjoining farm-yard are successively making their appearance. The hens have already occupied the lawn (and the spotless linen); the little pigs are entering joyfully upon the forbidden territory; the old sow follows leisurely at the back. Another fertile text for disquisition would be the incident depicted at page 173 of the same volume. A man is trying to ford a river with his cow, to save the toll. In mid-stream he has repented, but the cow insists upon proceeding, while her alarmed master pulls helplessly at her tail. The landscape background in this case, with its bridge and wintry hills, is excellent for truth and suggestiveness.

Of the especial kind of dilemma which is

illustrated by the last-named sketch, Bewick is particularly fond. He delights in portraying an incident at that supreme moment when, in classic poetry, it would be considered needful to call in the assistance of some convenient and compliant deity. This is the case of the embarrassed old man who figures as a head-piece to the "Contents" in vol. ii. of the "Birds." His horse, aged like his master, has been seized with an ungovernable fit of passive obstinacy. The day is rainy, and there is a high wind. The rider has broken his stick and lost his hat; but

and excited stock to dare to dismount. Nothing

can help him but a deus ex machina. of whom there is no sign. Another specimen of this sort is the admirable vignette at page o of the same volume. The string of a kite has caught in the hat of a man who is crossing a stream on a pony. The boys are unwilling to lose their kite. the man clings to his head-gear, and it is impossible to divine how the matter will end. Sometimes the humor of these little pictures reaches a point which can only be designated sardonic. In its minor form this is exemplified by the hulking black-

smith looking on unmoved at the miserable dog with the pot tied to its tail. This, however, may be simply intended as a satire upon brutality. But there are other examples which are not so easy to explain, and less easy to excuse, since they have a kind of heartlessness about them which almost entirely deprives them of their laughable elements. In this category come the blind man whom the heedless or wanton boy is leading into the deep water, and his fellow whose hat has blown off as his dog conducts him across a narrow and broken-railed bridge. Now and then, again, this kind of incident rises to tragedy, as in the case of the men who are chasing a mad dog almost into the arms of a feeble old woman around the corner, or the tottering child in the meadow who is about to pluck at the tail of the vicious horse. We know of no picture of its size which communicates to the spectator such a degree of compressed suspense as this little masterpiece.

But we must abridge what would otherwise



TAIL-PIECE TO THE "CURLEW." (FROM THE "BIRDS.")

he is too much encumbered with his cackling prove too long a catalogue. No list of ours, indeed, could hope to exhaust the "infinite variety" of these designs; and to turn over the leaves again is only to discover how many have been missed or omitted. The exquisite

^{*} The references, here and hereafter, are to the first editions.

series of feathers, and the quaint coast-scenes, with their queer pudding-stone rocks, deserve more than a passing mention. So does the little group of tail-pieces which deal with the picturesque "old soldiers" of Bewick's youth, two of whom head the "Introduction" to vol. ii. of the "Birds." A chapter again might be devoted to those alone which deal with the pathos of animal life, from the patient outlines of the two horses seen dimly in the open



TAIL-PIECE TO "THE BEAVER." (FROM THE "QUADRUPEDS.")

wonderful vignette in the "Quadrupeds" where the cruel, cowardly dog is tearing at the worried ewe, while the poor little knock-kneed lamb looks on with mute and helpless bewilderment—a composition which for sheer pitifulness is not surpassed by Landseer's "Random Shot." Then there is the section which may be said to deal with the lachrimæ rerumthe sad contrasts and mutabilities of things minute pictorial homilies which must have delighted Thackeray: the ass rubbing itself against the pillar which celebrates the famous victory; the old man reading "Vanitas Vanitatum" on the crumbling tombstone; the beggar taking refuge from the rain by the grass-grown hearth of the ruined cottage, the church on the shore, where the waves are rapidly effacing the records of the dead. All these, and many others, are works of art in the truest sense, and worthy of a far more extensive study than we can give them here.

So unmistakable, too, is the note of reality in the majority of these tail-pieces, that it is impossible not to believe that many of them are records of actual occurrences within the recollection of the artist. It is, therefore, much to be regretted that the late Miss Jane Bewick never carried out her expressed intention of writing a complete and authoritative commentary upon this text. From some of her letters to Mr. Edward Ford, of Enfield, we have, by the courtesy of that gentleman, been able to glean a few minute particulars upon this subject, some of which are new. The

child catching at the horse's tail in the "Quadrupeds" is Bewick's younger brother; the woman rushing over the stile is his grandmother. The tiny vignette at page 122 of vol. i. of the "Birds" represents Bewick's own hat and stick,—the latter, his constant companion, having belonged to his brother John. In another vignette (that of the sportsman who has missed the snipe and hit the magpie), is a portrait of "Witch," a favorite dog of the

family; and Miss Bewick confirms Jackson's statement that the traveler drinking out of the *flipe* of his hat ("Birds," i.,xxx.) is a portrait of Bewick himself. There is another in the sketch of the snow man ("Birds," vol. i., p. 78), where he is standing on the stool, and his brother is among the assistants.

Several of the original pencil and water-color sketches for the tail-pieces (we may here take the opportunity of stating) are now in possession of Mr. Edward Ford and Mr. J. W. Ford,

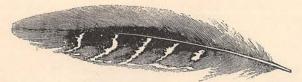
field through the mist and driving rain, to that wonderful vignette in the "Quadrupeds" where the cruel, cowardly dog is tearing at the worried ewe, while the poor little knock-kneed lamb looks on with mute and helpless bewil-

In the preceding notes we have made no reference to a few tail-pieces in which the humor is more nearly allied to that of certain Dutch painters than the modern taste would approve. But, to the student of Bewick who calls to mind the manners of eighty years ago, these will present no serious difficulty. Another question less easy to dispose of is, What was the amount of the assistance rendered to Bewick by his pupils in the "Land" and "Water Birds"? With trivial exceptions the figures of the birds in the first editions appear to have been entirely done by himself; but, as regards the tail-pieces, Jackson* goes so far as to give a specific list (pp. 497–8, ed. 1861) of those which, he alleges, were "either

* We say Jackson, here and elsewhere, because he was doubtless the authority in this case.



TAIL-PIECE TO "MISSEL THRUSH." (FROM THE "BIRDS.")



TAIL-PIECE TO "THE WATERCRAKE," (FROM THE "BIRDS,")

not drawn or not engraved by Bewick"—his information being derived from an unnamed pupil, probably Charlton Nesbit. That more than one hand was employed upon the *engraving* of the tail-pieces is manifest from the differences in the style of the cuts themselves; but these tardy and questionable claims on behalf of the pupils were not, as may be imagined, very favorably received by Bewick's representatives when the "Treatise on Wood-Engraving" was first published in 1839. No reference, however, was made to them in any way when the "Memoir" was issued in 1862,



BEWICK DRINKING OUT OF HIS HAT. (FROM THE "BIRDS.")

although, in the previous year, Mr. H. G. Bohn had put forth a second edition of Jackson and Chatto's book in which they were repeated. This is clearly to be regretted, as the day has now passed for deciding upon the truth or falsity of this equivocal list; and it may well be that the assistance afforded was greatly exaggerated. At the same time Bewick had some exceedingly clever pupils, and it is not at all unlikely that two of them, Robert Johnson and Luke Clennell—the one an engraver, the other a designer—did really

render effective service in the tail-pieces of the "Birds," and especially in the second volume. That this was so detracts little or nothing, as it seems to us, from Bewick's reputation.

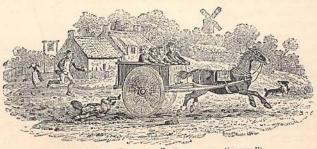
VIII.

IN 1804, when the second volume of the "Birds" was issued, Bewick was a man of

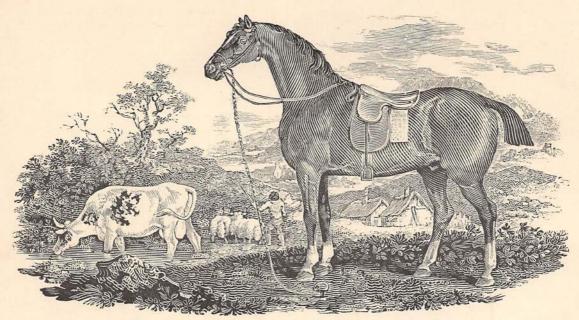
fifty. He had still four-and-twenty years to live. But, although he continued to occupy himself actively for the remainder of his life, he never again produced anything to equal the "Select Fables" and the three volumes on Natural History. A large number of books, illustrated or said to be illustrated by him, have been traced out by the enthusiasm of the late Mr. Hugo, whose unwieldy and indiscriminate collection was dispersed at Sotheby's in 1877. For the revival of many of these—"honest journeywork in defect of better," as Carlyle would have styled them—

we suspect that Thomas Bewick, who (as he said) had no ambition "to feed the whimsies of the bibliomanists," would scarcely have thanked him. The only book of any real importance subsequent to 1804 is the "Fables of Æsop," published in 1818. If any books issued in the interval deserve a passing mention they are Thomson's "Seasons," 1805, Burns's "Poems," 1808, and Ferguson's "Poems," 1814. But the designs for the two former of these were prepared by John Thurston, and in the case of the "Burns" it is stated by William Harvey that they were engraved by Bewick's pupil, Henry White.

The "Fables of Æsop and Others" seems to have been begun in 1812, after a severe illness, to which reference is made in the "Memoir." Bewick speaks of this book as if it had been a long-contemplated idea. "I could not (he says) help regretting that I had not published a book similar to 'Croxall's Æsop's Fables,' as I had always intended to do" [he seems to forget or ignore the "Select Fables"]; and he goes on to say that, as soon as he was so far recovered as to be able to sit at the window, he began to "draw designs"



TAIL-PIECE TO "THE JAY." (FROM THE "BIRDS.")



BAY PONY. (FROM "SPORTSMAN'S FRIEND." PRINTED FROM ORIGINAL BLOCK, LENT BY MR. ROBINSON, BEWICK'S HEAD, PILGRIM STREET, NEWCASTLE.)

upon the wood" for the illustrations. In this don; but although the concluding date of work he expressly states that he was assisted pupils, William Temple and William Harvey, afterward a popular designer. It is probable share of these latter.

As to the book itself, it bears much the same relation to Bewick's earlier work that the performances of a man's decline generally do to the first "sprightly runnings" of his genius. The impulse flags, but the effort is painfully increased. The cuts in "Æsop" are more minute and more studied, less certain of stroke, less sparing of line. The basis of the designs, by whomsoever the majority may be, is avowedly Croxall. Some of the tailpieces are good and humorous; but they are not equal to those of the "Quadrupeds" and "Birds." "Waiting for Death," at page 338, is one of the many variations of the large block upon which Bewick was occupied in his last days. According to Howitt, the inscription at page 152—"O God of infinite Wisdom, Truth, Justice, and Mercy, I thank Thee," was Bewick's favorite form of prayer.

the "Memoir" is November 1, 1828, or only by his son (R. E. Bewick), and two of his a few days before he died, it contains no reference to that occurrence. At this time, he was evidently in failing health; and it is that the bulk of the engraving fell to the related that although his friend Mr. William Bulmer drove him to the Regent's Park, he declined to alight for the purpose of seeing the animals. But if the "Memoir" is deficient in merely personal particulars, it is by no means deficient in personality, as some dozen further chapters are exclusively occupied by those reflections with which (as one of his biographers informs us with comical gravity) "he was accustomed to relieve his powerful mind in the bosom of his very aimiable family." To the general reader these deliverances would be perhaps a little tedious; but, to the lover of Bewick who cares to know all about him, they will command the respect with which they are spoken of by Mr. Ruskin. Most of them are charactererized by strong good sense and natural piety; and in one or two passages, as, for instance, when he speaks on the topics of selection in marriage and the education of If we except the account of a brief visit children, considerably in advance of his time. paid to Edinburgh in 1823, when he made, In other cases much that he says has only for Messrs. Ballantine and Robertson, the lost its freshness because, since he wrote, the only sketch upon the stone (the "Cadger's subjects referred to have been repeatedly Trot") which is known to have come from discussed. In speaking above of the lack his hand, there is little of further biographical of purely biographical material, we had overinterest in Bewick's "Memoir." In the last looked the two brief chapters which refer year of his life he seems to have visited Lon- to his method of engraving. This has, how

ever, been sufficiently treated in the admi- out old horse, waiting patiently in the rain for rable papers contributed by Mr. DeVinne to this magazine, for April and May, 1880, and we shall confine ourselves to quoting Bewick's own account of that "white line" of which he is termed the inventor, and which it is so difficult to make intelligible with pen and paper. Speaking of the effect produced in a wood-cut by plain parallel lines, as opposed to crossed lines, he goes on:

"This is very apparent when to a certainty the plain surface of the wood will print as black as ink and balls can make it, without any further labor at all; and it may easily be seen that the thinnest strokes cut upon the plain surface will throw some light on the subject or design: and if these strokes are made wider and deeper, it will receive more light; and if these strokes again are made still wider, or of equal thickness to the black lines, the color these produce will be a gray; and the more the white strokes are thickened, the nearer will they, in their varied shad-ings, approach to white, and, if quite taken away, then a perfect white is obtained."

Shortly before his death, Bewick retired from business in favor of his son, who continued to carry it on at the shop in St. Nicholas's church-yard, where for nearly fifty years his father had labored. It was in the upper room of this shop, we are told—the room that has two windows in the roof—that Bewick preferred to work in his latter days. The old shop still presents the same appearance that it did then, the only difference being that the sign-board bearing the words "Bewick and Son, Engravers" is no longer in existence. On one of the windows, his name, scratched by a diamond, and the profile of a face, are still exhibited with pride by the present occupants. His residence, after he moved from the Forth, was a house on the Windmill Hills, Gateshead, which then commanded a view of the Tyne, but is now simply No. 19 West Street. Here, after his retirement, Bewick continued to employ himself upon the "History of British Fishes," some of the blocks for which were printed at the end of the "Memoir," while a further selection of the tailpieces, already drawn upon for the "Birds" of 1847, are dispersed in the body of the book. In the cuts for the "Fishes" he was assisted by his son, Robert Elliot Bewick, an engraver of minute and laborious accuracy, but without his father's genius. The last vignette upon which Bewick was engaged is that of the ferry-boat waiting for the coffin, at p. 286 of the "Memoir." But the chief work of his closing days was a large, separate wood-cut, in which it was his aim by printing from two or more superposed blocks, to produce something of the variety of tint and effect obtained in the copper-plates of Woollett. The subject he selected was a lean-ribbed and worn- bairns," or working diligently at the "Birds"

death. This he intended to serve as one of those cheap prints for the walls of cottages which had been familiar to his boyhood; and



BEWICK'S THUMB-MARK.

with some such view he had written, as early as 1785, a graphic biography of the hapless animal that, in this picture, has fallen upon the evil days of neglect and starvation. This "pen-sketch" is printed in the "Memoir," and is well worth reading. On the Saturday previous to his death, which took place on the eighth of November, 1828, after a brief illness, he had the first block proved. It was then unfinished, the head being only partly engraved, but Bewick is said to have observed to the pressman upon inspecting the proof: "I wish I was but twenty years younger!" Copies of this were struck off in 1832 by R. E. Bewick, and in recent years it has again been carefully reprinted on parchment and paper for Mr. Robinson, of Pilgrim Street.

Bewick is buried at the west end of Ovingham Church, lying, as he hoped, beside his brother John, and near the place of his birth. In his last illness his mind wandered repeatedly to the green fields and brooks of Cherryburn, and once, on being asked in one of his waking moments what had occupied his thoughts, he replied, with a faint smile, that he had been "devising subjects for some new tail-pieces." Some idea of his personal character, as well as of his art, will have been gathered from the foregoing pages. It is only necessary to add here that he seems to have been a thoroughly upright and honorable man, unassuming and independent, averse to displays of all kinds, very methodical, very industrious, and devoted to his fireside, his own people, and that particular patch of earth which constituted his world. In such scant glimpses as we get of him in letters and the recollections of friends, it is chiefly under some of these latter aspects. Now he is chatting to the country folk in the market-place, or making friends, with some vagrant specimen of bird or beast; now throwing off a sketch at the kitchen table, "to please the

in the winter evenings to the cheering sound of his beloved Northumberland small-pipes.

Of the bust by F. H. Baily, for which Bewick sat in 1825, and an engraving of which is at the beginning of this paper, Mr. Atkinson writes: "Baily's bust in the library of the Literary and Philosophical Society of this town (Newcastle) is certainly the best representation of him, giving the very spirit and expression of his face, and descending to the peculiarities of the veins on the temple, the quid in the lip, and the tufts of hair in the ears." It is said that the artist wished to drape his model in the classic style; but the old man insisted, Cromwell-like, upon absolute fidelity, not merely to his coat and ruffled shirt, but to the "beauty spots," as he called them, which the small-pox had left upon his face.

It would be ungracious if this paper should close without acknowledgments of indebted-

ness to a few kind friends, not all mentioned hitherto, without whose aid much of it could not have been written. To Mr. Frederick Locker, for free access to his Bewick treasures; to Mr. I. W. Barnes of Durham, and Mr. T. W. U. Robinson, F. S. A., of Houghton-le-Spring, for the use of first editions and rare proofs, and for valuable information generally. Much obliging assistance has also been received from the Rev. Mr. Wray of Ovingham, and the Messrs. Ford of Enfield. Finally it should be stated that the photographs from which some of the engravings have been made, were taken, under the writer's superintendence, by Messrs. Downey, the well-known photographers of Newcastle.* Austin Dobson.

*To this list the Editor desires to add the names of Messrs. William L. Andrews, T. Cole, W. P. Garrison, Robert Robinson, and Austin Dobson for the loan of proofs or other valuable assistance.

OCEAN STEAM-SHIPS.*

THE employment of steam as motive power is by no means a modern idea. The possibilities of steam were known to the ancients; its applications were described by Hero, 130 B.C. Roger Bacon, in the fourteenth century, made some experiments, and Blasco de Garay constructed a rude steam-boat at Barcelona in 1543. Later, Papin built a steam-boat in Germany, which was of sufficient importance to arouse the superstitious dread or conservative opposition of the bargemen, who destroyed it. Many others gave their attention to the subject, but Jonathan Hulls of Liverpool appears to have been the first to reduce the marine steam-engine to actual practice. In 1737 he published a pamphlet describing his sternwheel boat, accompanying it with an engraving, which is yet in existence, and from which it would appear that it was capable of towing a large vessel. It is a little curious that the first form which the invention followed was that of the stern-wheel. Those who think that the first thought is the best may find confirmation of that opinion by observing that not only is the stern-wheel widely used on the rivers of the west to-day, but stern propulsion under a modified form is, after many experiments, and a long trial of lateral propulsion, the plan upon which the world has finally settled for marine navigation.

The principle of the screw propeller suggested itself early in the history of steam. At first it was attempted with a sort of Archime-

dean screw; but the bladed propeller was soon found to have greater efficiency. Of course, as in all great inventions, there are many claimants for the priority of invention. But although the great discoveries have generally been made simultaneously by active minds resident far apart and even ignorant of each other's existence, the fame of the invention is generally accorded to the man who first reduces the new invention to practice. has the credit of inventing steam navigation, but his boat, the Clermont, was a paddle-boat, the idea of which he borrowed from Symington's steamer, Charlotte Dundas; while two years earlier that great inventive genius, John Stevens, of Hoboken, N. J., had built a steamboat propelled by a screw, the model of which may now be seen in the Museum of the Stevens Institute of Technology at Hoboken. Men are now living who have seen Stevens's and Fulton's boats and the Servia, the great Cunarder, on the waters of the river up which Hudson steered the Half Moon not three centuries ago.

The Savannah was the first steamer which crossed the Atlantic.† She was originally intended for a sailing ship of three hundred

† Some doubt seems to have been thrown on this statement. We quote the following from a communication by Henry Smith in the New York "Evening Post" of June 24th, 1882:

"Happening to be in Liverpool at the time of her arrival, I visited and examined the ship, machinery, etc. She was complete ship-rigged, and made no pretensions to having navigated the

^{*} See also "The Evolution of the American Yacht" and "Steam-Yachting in America," by the same author, in THE CENTURY MAGAZINE for July and August, 1882.—ED.