Short introduction for

to learne to Swimme.

Gathered out of Master Digbies Booke of the Art of Swimming.

And translated into English for the better instruction of those who vnderstand not the Latine tongue.

By Christofer Middleton.



AT LONDON, Printed by *Iames Roberts* for Edward White, and are to be fold at the little North doore of Paules Church, at the figne of the Gun. 1595.

To the worshipful and well accomplished gentleman Master Simon Smith

Sir, the report of your perfection in this faculty hath emboldened me to presume upon your courtesy, the rather for that as experience in other things hath taught me how birds of one kind, with mutual consent, help to support the younger and weaker sort till nature hath sufficiently enabled them, so doth hope in this thing persuade me that men of one disposition will as willingly accord in their commendable exercises tending to profitable ends, as the senseless fowls of the air naturally agree, mutually to maintain their own estate. Thus under your thrice worthy protection, as a sufficient shelter from all the airy buzzards, shroud I myself *until age shall make me a man*, which if you vouchsafe, it shall embolden me so to employ my next vacant time as may in some better sort requite your worshipful favour.

Yours in all dutiful obedience, *C.M.*

I wrote not this (gentle reader) to derogate from his worth whose labour first brought this work within the rules of art, and hath thereby as Virgil for the tillage of the earth, Vegetius for military profession, Hippocrates and Galen for physic, Justinian for the law, Aristotle, Tully, Euclid, Boethius, Ptolemy for the liberal sciences, Pomponious Mela for cosmography or Mercator for the globes of the world, though his matter may be of some accounted as the least, yet for his form deserved commendations with the best. But, for his learned style exceedeth the capacity of the greater part of men and the matter itself being so necessary for all, I have (as I could) gathered his work into a brief compendium for their better understanding that are ignorant in the Latin tongue. Thus not to gain the reward of other men's labours, nor to attribute to myself other men's virtues, but to uncurtain that to the view of all which was only appropriated to a few, have I undergone this task, which I doubt not will prove as profitable as pleasant.

Farewell.

Of the Art of Swimming

Although from the beginning, amongst all the authors of arts and sciences, there are few or none which have bestowed any pains in the explaining or publishing this art of swimming, it being so profitable a thing as it is towards the preserving of man's life when as he is at any time distressed in the greedy jaws of the swelling sea, destitute of other help, although it be praised by no-one, yet is it praiseworthy in nature. Although it be by none praised, yet doth nature itself prefer it sufficiently, especially in man, which above all fowls of the air, fish of the sea, beasts of the earth or other creatures whatsoever, excelleth in this faculty as hereafter shall more at large be expressed. If physic be worthy of commendations in respect of the nature in purging poisoned humours, driving away contagious diseases and by this means adding longer date unto the life of man, well then may this art of swimming come within the number of other sciences, which preserveth the precious life of man amidst the furious billows of the lawless waters, where neither riches nor friends, neither birth nor kindred, neither liberal sciences nor other arts, only itself excepted, can rid him from the danger of death. Nor is it only to be respected for this great help in extremity of death, but it is also a thing necessary for every man to use, even in the pleasantest and securest time of his life, especially as the fittest thing to purge the skin from all external pollutions or uncleanness whatsoever, as sweat and such like, as also it helpeth to temperate the extreme heat of the body in the burning time of the year. And if we respect thoroughly the nature of this art, we may easily perceive and see that it doth not much differ from the rest of the liberal sciences proceeding from a free mind. (I. 1-4)

Whether all things swim by nature, or no

Nature, our provident mother, hath carefully provided for every several creature several means for their preservation in their several kinds. As unto those creatures which have their living in the inmost bowels of the earth or other such places far remote from the danger

of water, to those hath she not imparted this knowledge for that is a thing to them altogether impertinent. But to other her creatures, either those whose continual abode is in the deeps as fishes, fowls and some beasts that live in the water, or to other which in the actions of their lives do any ways tend towards the waters, on them for their better preservation hath she bestowed this great gift, yet not to every creature alike, but what element doth most abound in the composition of their bodies, according to the quality thereof is their kind of swimming. As for example a toad hath a broader body than a frog and to man's judgment more fit to swim. And yet because her complexion is more earthly and therefore heavier by nature and feedeth upon the solid poison of the earth, either presently after she cometh into the water sinketh right down, or if she do remain any time upon the superficies of the water, it is with great labour. Whereas a frog, feeding on the airy dew that lieth upon the grass, pleasantly playeth upon the water, lively representing the true swimming of a man.

The like reasons is of the fowls of the air, as the swallows that feed upon the slender buzzing flies of the air, they nimblier fly to and fro and lightlier drink on the top of the water than other fowls, that either feed on the worms of the earth or the fishes of the sea. And even as the lifeless trunks, which in their constitution have a greater temperature of air or fire than of water or earth, are of their own accord carried above the water as wood and such-like, and on the contrary heavy constitutions of water or earth as lead, iron, stone and such directly settle down to the bottom, so is it with all creatures that have life. As the lion, the beast of the sun and king of the forest, because he is of a sanguine complexion, a hot constitution, nimble of his joints and of a noble courage, swims lightly and strongly, and so of the dog and other creatures whose constitution is a lower degree of heat. But some kinds of fowls, although they be of a good constitution of body, yet for some impediment in their form are hindered and do not swim so well as other whose bodies are more gross. As the cock, which is the bird of the sun, for that he wanteth (as we call them) the webs of his feet, swimmeth not so easily as a duck which is more melancholy and heavy by

nature according to the disposition of Saturn. (I. 5-6)

Man swimmeth by nature

The fishes in the sea, whose continual life is spent in the water, in them doth no man deny swimming to be the only gift which nature hath bestowed upon them. And shall we think it then artificial in a man, which in it doth by many degrees excel them—as diving down to the bottoms of the deepest waters and fetching from thence whatsoever is there sunk down, transporting things to and fro at his pleasure, sitting, tumbling, leaping, walking—and at his ease performeth many fine feats in the water which far exceeds the natural gifts bestowed on fishes? Nay, so fit is the constitution of man's body that whoso doth but with himself thoroughly consider of it cannot but accord with me in this, that a man of all creatures under the circumference of heaven naturally excelleth in swimming.

As for example, a shaft shot in the water, when it riseth again hangeth perpendicularly downward with the head, and the upper parts and feathers swim above the water. Even so is it with a man, who although the lower parts of his body be earthly and heavy, yet above is the life of lives, the vital spirits, the external and internal senses. To be short, the life spirits of every man exceedeth the lives of all beasts, for that they /the beasts/ only retain the vegetable and sensual powers, the one whereby they grow and increase and the other whereby they hear, feel, see, smell and taste. But in man is all these, whose least part exceedeth the greatest quantity of the other in the highest degree: a reasonable soul. So that he hath not only in great measure the other helps which nature hath provided for this purpose, but he hath wisdom by art to perfect that in himself which by nature is left imperfect. And having plain rules of art how by motion to keep up the heavy parts of his body, which by reason of their heaviness are naturally carried down, it cannot otherwise be but that swimming must naturally come to a man, and in swimming he must excel all creatures whatsoever.

But, for some will object that if swimming were so natural a thing to a man then should not so many perish in the water, to these

in a word I thus answer: that men who have not had some practice in it afore, when by any sinister occasion they fall into the water, the discreet use of their senses is taken away by a sudden fear. And so unorderly labouring in the water, they by the indirect moving of their bodies pull down themselves under the water and so are drowned, which to avoid I leave it to every several man's consideration how necessary a thing this art of swimming is. (I. 7-8)

Of the place and time to swim

Of all the circumstances which the author of this our art hath in his first book learnedly set down, as necessary antecedents before he enter into the practice itself, I hold these two sufficient for the unlearned sort to know: time and place, and leave the rest to their wise considerations which are able thoroughly to understand the Latin tongue. The time which the temperature of this our climate affords as good to swim in, is comprehended in four months: May, June, July and August, for that in these months the sun drawing nearer unto our zenith, his beams falling more directly down upon the superficies of this earth make a greater reflection, and thence cometh a more vehement heat which doth temperate the water and make wholesome the air. The wind and weather ought also in these months to be regarded, especially of those whose weak constitution is not so able to endure the cold as others of a stronger composition of body. The winds that are most unwholesome and dangerous to swim in is the east and north, for that blowing from cold and dry places they bring divers and sundry discommodities. The weather that is to be eschewed is rain, for these considerations: the drops do trouble the superficies of the water, hurteth the body, disturbeth the eyes and lastly, draining from the banks into the river, bringeth also with it whatsoever dung, straw, leaves and what filth or unwholesome things else, do lie near adjoining unto the place. (I. 9-14)

In the place is two things especially to be respected. First, that the banks be not overgrown with rank thick grass where oft-times do lie and lurk many stinging serpents and poisoned toads; not full of thorns, briars, stubs or thistles which may offend the bare feet, but that the grass be short, thin and green, the bank beset with shady trees which may be a shelter from the wind and a shadow from the parching heat of the sun. Next, that the water itself be clear, not troubled with any kind of slimy filth which is very infectious to the skin; that the breadth, depth and length thereof be sufficiently known; that it be not muddy at the bottom, lest by much treading, the filth rising up from the bottom thicken the water, and so make it unfit for that purpose. Also that there be not in the bottom of the river any old stakes or sharp stones, which may greatly endanger the swimmer, but that it be a clear running water not a standing corrupted pool, the bottom fair sand, where from the banks may easily be perceived whatsoever doth lie in the deepest place of the river.

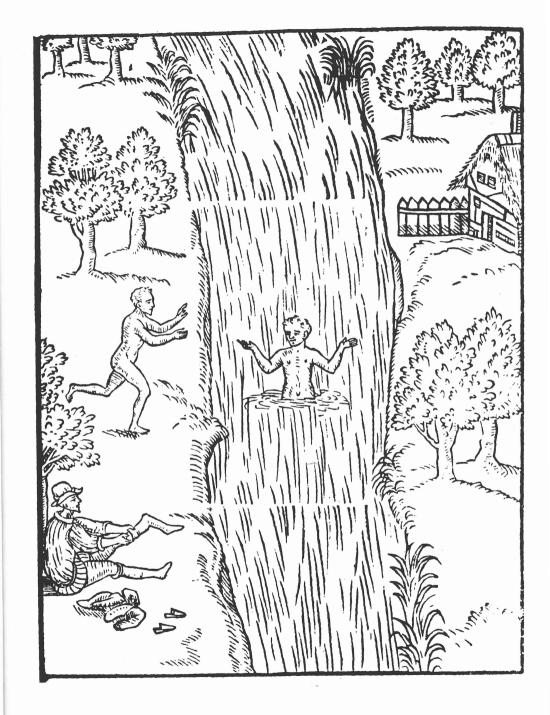
Which time and place, according to these rules and directions when he hath fitly selected, let him associate himself with someone that is taller and stronger than himself which may both comfort him and help to sustain him, for that at the first entrance the chillness of the water will greatly discomfort him, as also he may thereby be better directed where the water is deep and where it is shallow. But if so be that he for any extraordinary occasion or other reason whatsoever rather delight to be alone, then thus. Let him take a long rod like unto an angle, and upon the end thereof hang in a long small cord a plummet of lead, wherewith he may standing upon the bank sound every place of the water. And if he cannot reach the further side with his pole, boldly venturing so far into the water as by this direction he hath experienced, he may reach further and further until he hath tried it all. Which, if he find correspondent in every point to the rules before rehearsed, and that there be not any sudden or plumb falling down into any great holes which exceed his own height, nor any whirlpools as we call them, or kind of swift or violent streams that may forcely carry him away, let him there practise according to these rules following, and venture not into any other unknown place until he be a perfect practitioner in this art. Thus much for the time and place. (I. 15-16)

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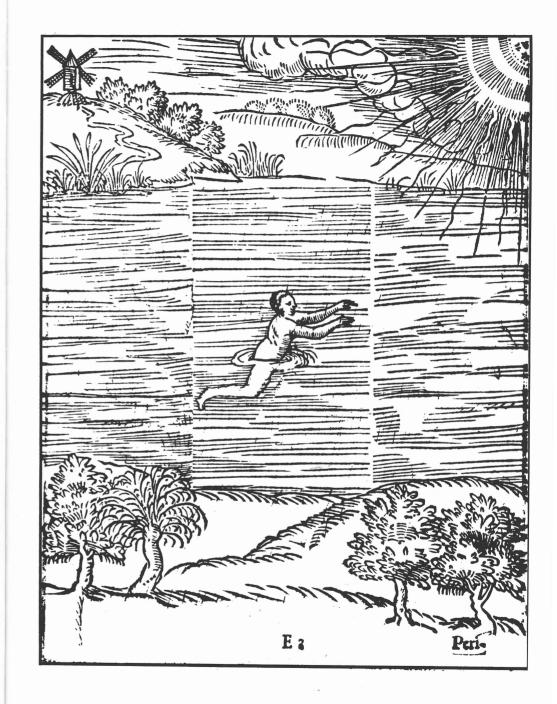
To enter the water

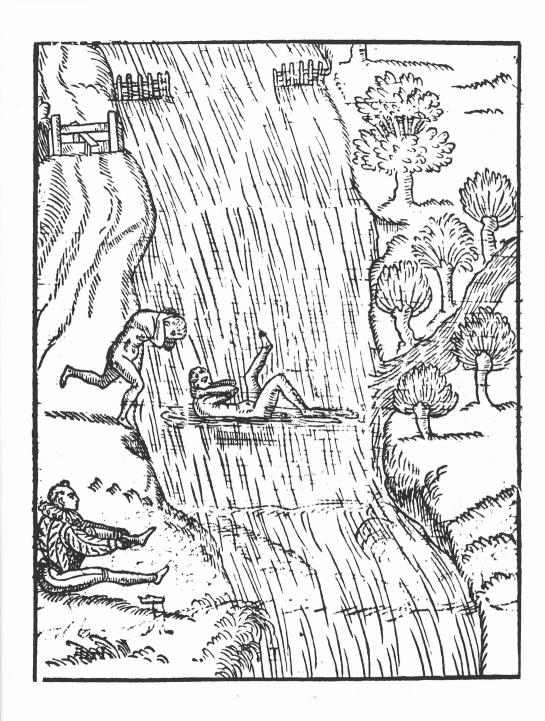
For the manner of his going into the river, it must not be sweating, a thing whereunto in the heat of the summer men are greatly subject, for that coming into the cold water it maketh a sudden change in body which is very dangerous. But rather, by walking easily in some cool shade or some such other moderate means, let him before he enter into the water bring his body into a reasonable temperature of heat and cold. And then not as some, which are more bold than wise, rudely leap into the water with their feet downward, as this picture next following showeth:

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But let him easily enter until he be covered up to the waist in water, as thus: (II. 1)

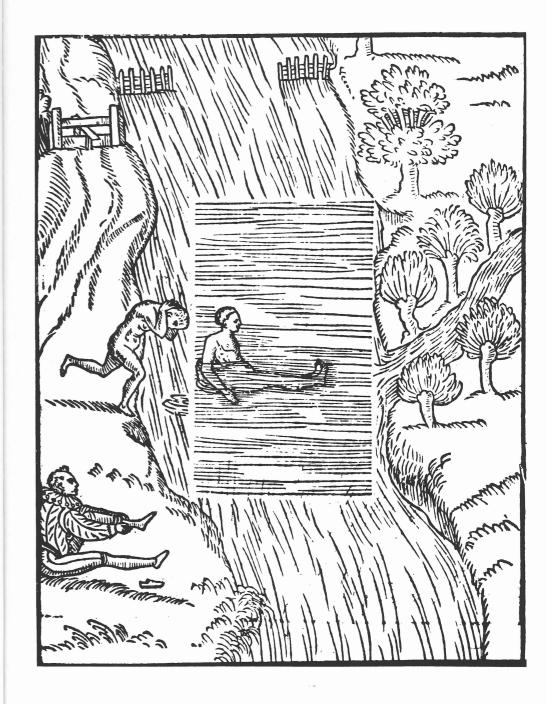




Or, when he cometh at the side, fall upon his right or left side after this fashion: (II. 1)

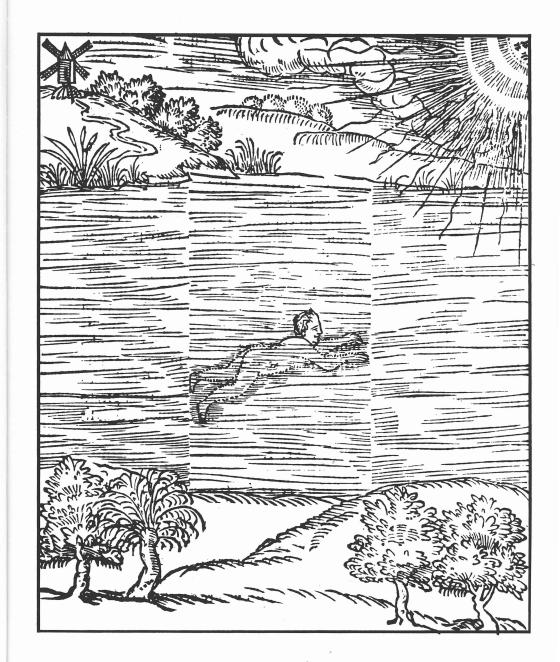


Or else, leaping from the bank and casting forth his legs (but yet keeping of them close together), he may light upon his hips and the hinder parts of his legs, as you see in this picture: (II. 1)



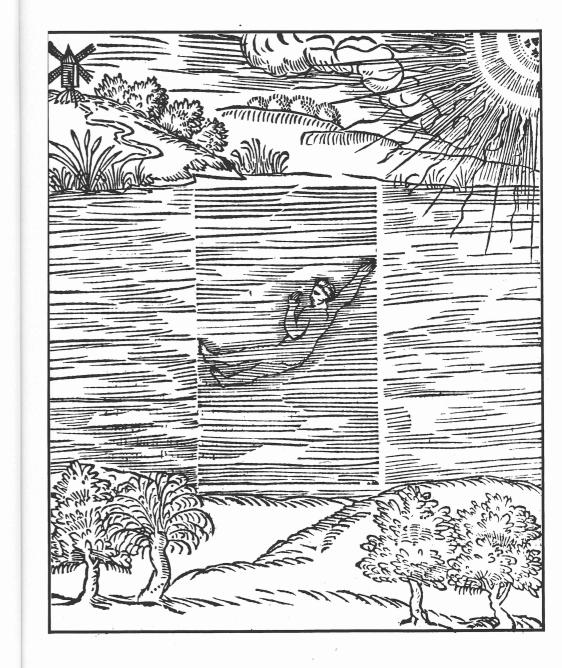
The first degree of swimming

These directions are sufficient either for his entrance which is yet to learn, or for his which is already expert in this faculty. Now he that is learning to swim, as we said afore, having waded in up to the waist or somewhat higher, laying himself easily along upon the water with his belly downward, and striving as much as he can to hold up his head, and draw/ing/ in his arms close to his breast, holding his hands broadways together under his chin with the palms down; let him pull his feet from the bottom and withal put forth his hands as far as he can and draw them in again as afore, and likewise his feet. Which double motion of hands and feet serve to this use: the one thrusteth him forward and the other keepeth up his body. And because it is a toil, something to learn how to strike right thus with his hands and feet as afore, let him either get someone to accompany him that may by holding his hand under his chin keep him from sinking, or else take two bladders, blow them full of wind and fasten them so together that he may have them to lie under his armholes, which will easily bear him up. And thus may he do till he hath perfectly learned to swim on his belly, as the picture following showeth: (II. 2)



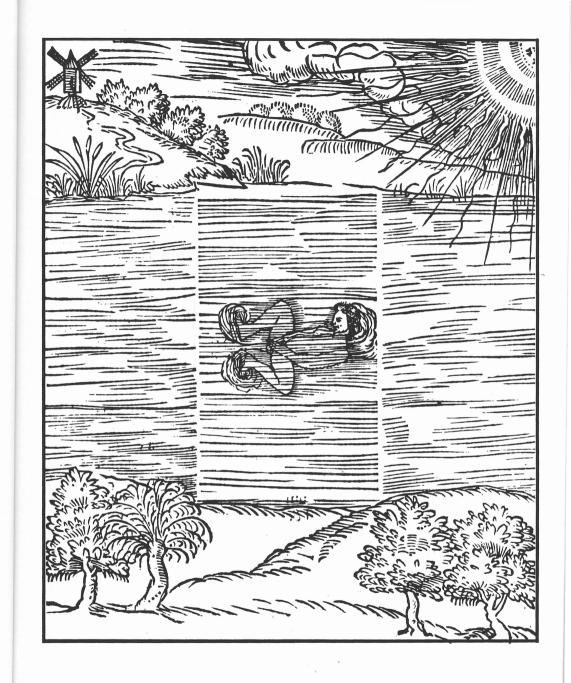
To [turn] on the back

But, for that with long swimming on his belly he will be wearied, nature that provident nurse, which carefully provideth for every creature things fitting their kind, hath as in all things so in this thing made man excel everything. For him hath she taught in this to ease his weary arms by lying in the water upon his back, which we call 'swimming upon the back'-a gift which she hath denied even to the watery inhabitants of the sea. No fish, no fowl, nor other creature whatsoever that hath any living or being, either in the depth of the sea or superficies of the water, swimmeth upon his back, man only excepted. And therefore, when he hath perfectly learned to swim to and fro on his belly as he listeth, let him learn thus to turn upon his back by thrusting out his right hand as far as he can before him, and withal turn over his left side, and still keep out his right hand until he be turned upon his back, for that it doth in turning so support him from sinking, as in this example following: (II. 3)



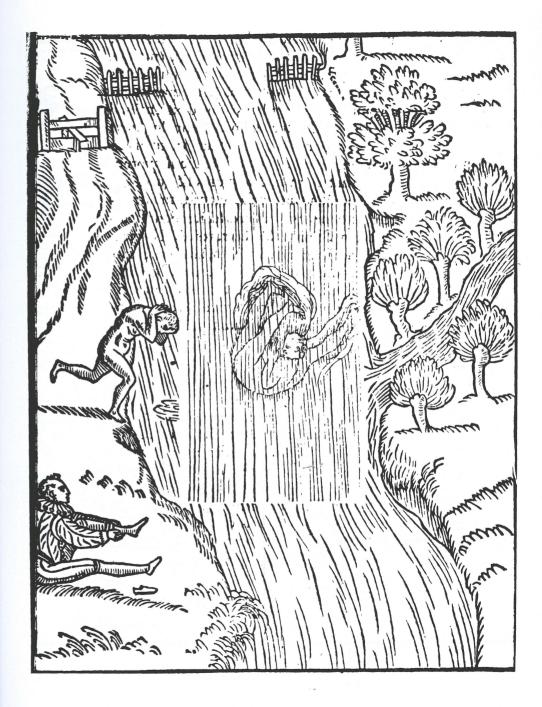
[To swim on the back]

And when he is thus laid upon his back, he must lie very straight, not bending or bowing with his body any way, save only his legs which he must easily pull out and in, as when he was on his belly, to put him forwards in the water, as thus: (II. 4)



To turn in the water like a roach

There is another kind of turning when a man is swimming upon his belly with his head one way: suddenly to turn himself, still being upon his belly, and bring about his head and all his body the other way. And for that it is to be done quickly (as oft times you may see the fishes within the water, when in the pleasant heat of summer they wantonly frisk to and fro), it is commonly called 'the roach turn', and that is done thus. If he will turn towards the right hand, he must suddenly put the water from him with his left hand, and pull that water behind towards him with his right hand, turning back his head and his body as you see in this next figure: (II. 5)



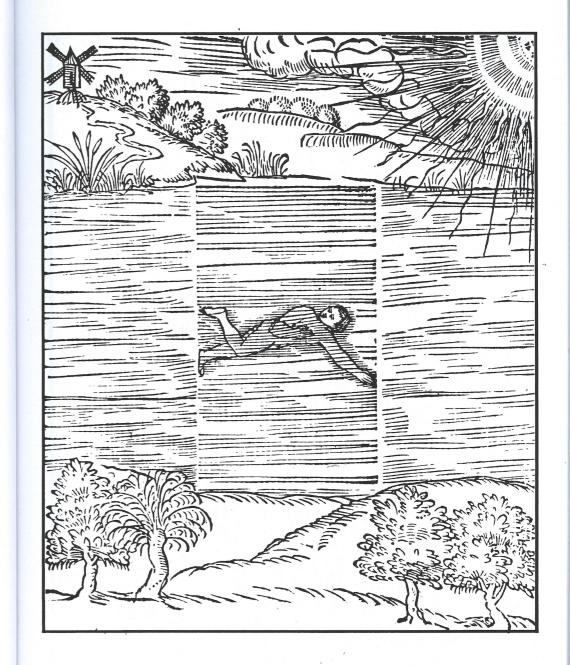
To turn 'the bell turn' in the water

There is also a turning which is called 'the bell turn', as when one swimming on his belly shall suddenly pull in his feet, and instead of striking with them as is aforesaid, he shall, heaving backward with his foreparts, strike forward with his feet, which motion will turn him upon his back. And because he may at his pleasure turn so upon his back and belly as he will, it is called 'the bell turn', resembling also a bell when it is ringing, as for example: (II. 6)



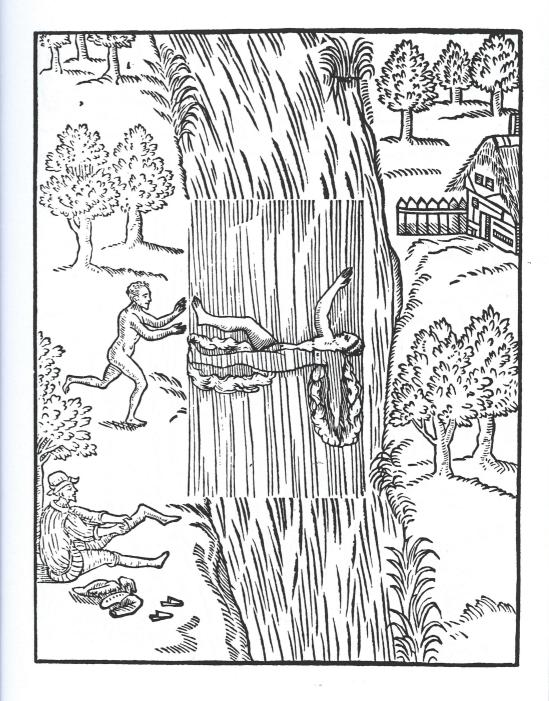
To tumble in the water

There is also a kind of tumbling in the water, as a man would roll and tumble in the grass, and that is done thus. Swimming on his belly or back, which way he meaneth to roll himself—as towards the right hand or the left, he must thrust that hand broad-ways down into the water with the palm downward, and he must carry the other [hand] close beside him as ready to use on the other side. And with the uppermost leg still as he turneth, strike the superficies of the water so that the motion with the hand helpeth to turn over the body. And the striking with the feet keepeth better up the hindmost parts, which are most heavy of themselves, as in this picture following: (II. 7)



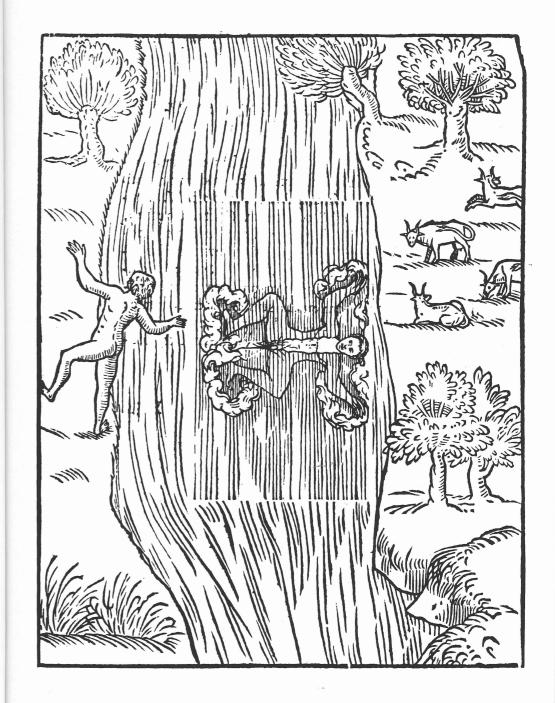
To strike the superficies of the water

To strike the superficies of the water with four parts of the body at twice is thus done: by lying upon your back and something declining your body towards the left side, which hand must be in the water, labouring to and fro like the fin of a fish, to keep him from sinking. And so he may lift his right hand and right leg out of the water and beat them down again, and so of the left side, as the picture following showeth: (II. 16)



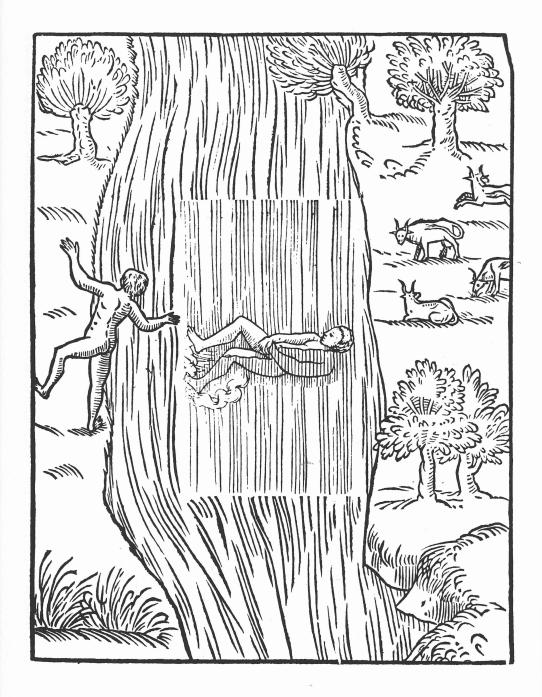
To swim with hands and feet upward

To swim with hands and feet upward is nothing else but the swimming upon the back as we taught before, saving that he useth his hands as a boat doth her oars, casting them out on both sides and drawing them in again, which maketh his motion swifter, as in this example: (II. 17)



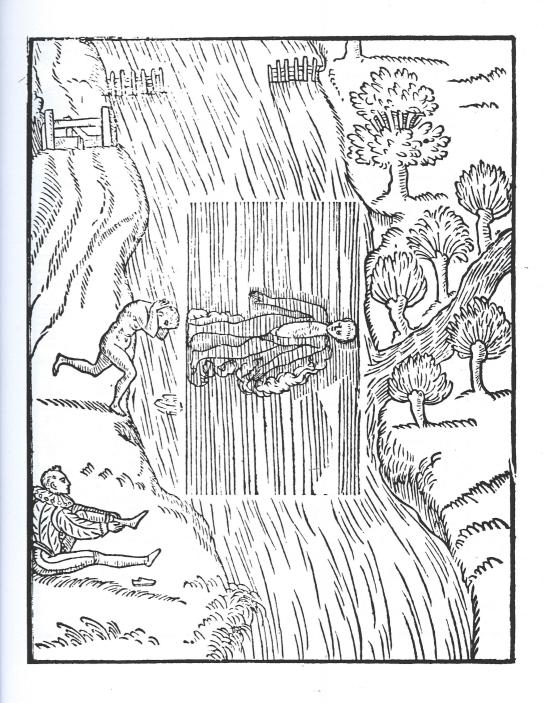
To swim backward

That is when one, lying upon his back with his body stretched forth, and holding up his breast as much as he can that his back may lie hollow, which will keep him from sinking, and lifting easily one foot after another above the water, and so drawing them forcibly towards him under the water, they will pull his body backward, as in this example is showed: (II. 18)



To roll upon one's back

This is done only by lying straight upon his back and pressing down the water with his hands, so may he roll from side to side like a ship at sea, as thus: (II. 19)



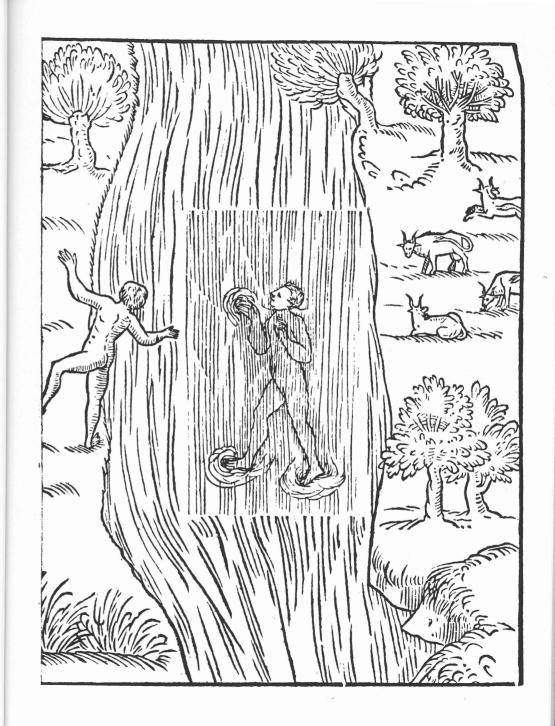
To make a circle in the water with his feet

This is done as we said afore, by lying straight upon his back without bending any part of his body. And if he will turn from the right hand, then must he lie somewhat over upon his left side, and first of all pull his right leg out of the water and afterwards his left as fast as he can, and strike with them toward the left hand, one after another, and about one foot, one before another, which will turn his body round and make his head lie in the midst, like the centre of a circle, as thus: (II. 8)



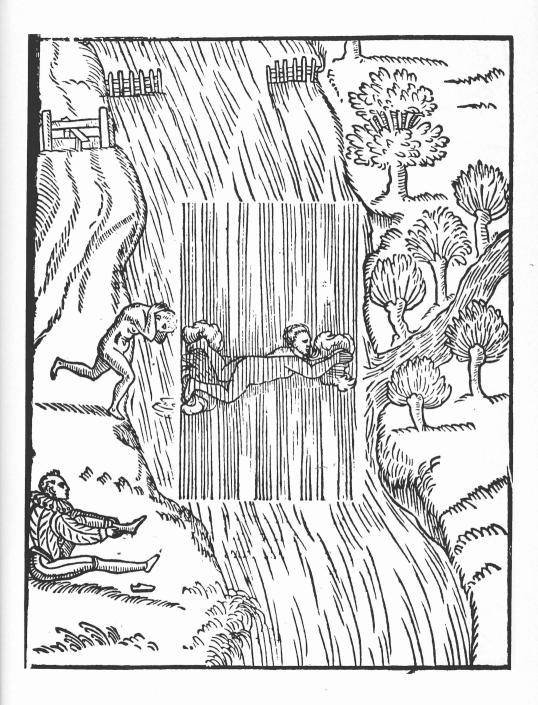
To stand upright and turn about in the water

He must by stirring of his feet up and down in the water keep up his body, and keeping his hands underneath the water, pull the water towards him that way which he would turn, and so also incline the motion of his feet, as thus: (II. 9)



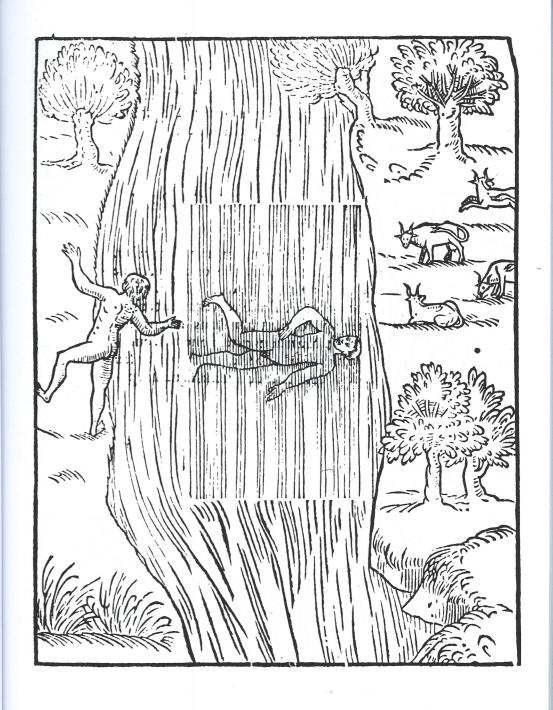
To swim with his hands together

This must be done in all respects as is said afore for the first kind of swimming upon the belly, saving the motion of the hands which must be joined with their palms together, the thumbs standing right upward, which he must pull into his breast and thrust them forth again without parting of them, as for example: (II. 10)



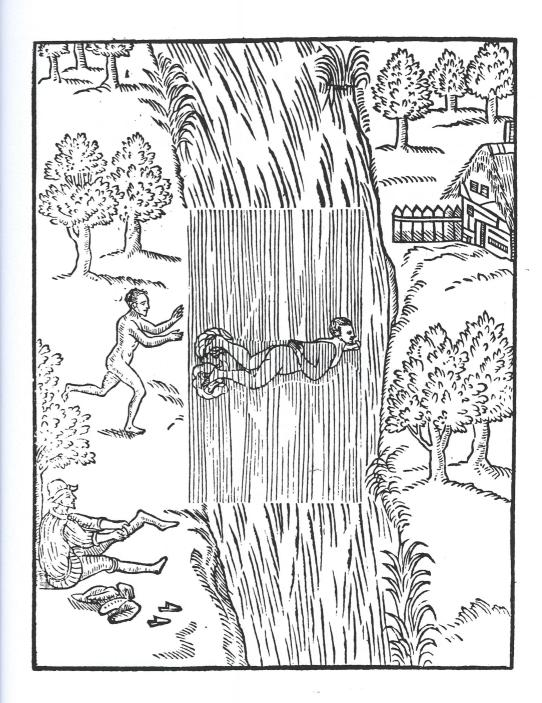
To swim upon his side

This kind of swimming, though it be more laborious, yet is it swifter than any of the rest, for that lying upon one side, striking with your feet as when you swim on your belly, but that the pulling in and thrusting out of his hand, which then did only keep him up, do now help to put him forward. For only the lower hand supporteth his body, and the upper hand roweth like an oar, as in this example: (II. 11)



To swim upon his belly with his hands still

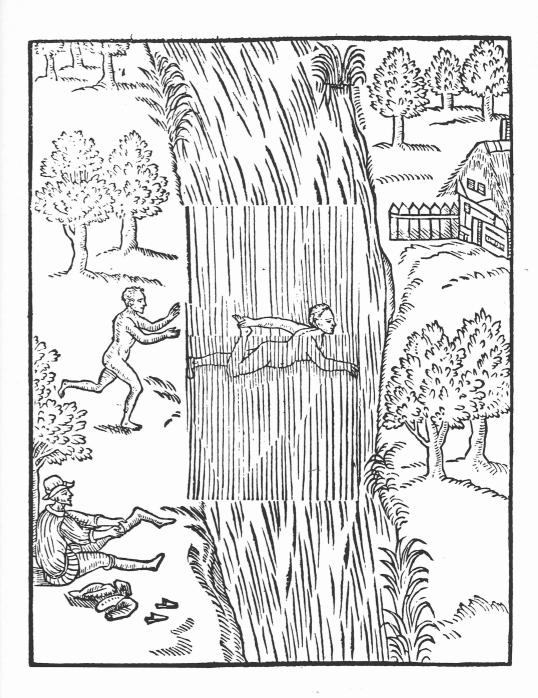
This is only to lay his hands behind him and strain himself to bear up his head somewhat higher, and strike somewhat lower with his feet, as in the picture following is showed: (II. 12)



To swim with one hand and one foot upon his belly

He must take his right foot backwards in his left hand, and strike with his right hand and left foot; which, for that one is upon the one side and the other on the other, they will easily bear him up, as thus:

The use of these two last kinds of swimming is to ease his hands that is subject to the cramp or any other infirmity. (II. 13)



To swim like a dog

Into this kind of swimming many do at the first fall, before they perfectly learn the right stroke. And there is this difference betwixt them, that whereas in the right kind <u>of</u> stroke<u></u> he stretcheth out his hands and his feet, in this he rudely beateth the water with his hands and feet, first lifting his right hand out of the water and then his right foot, and forcibly striking them into the water again, as in this example following: (II. 14)



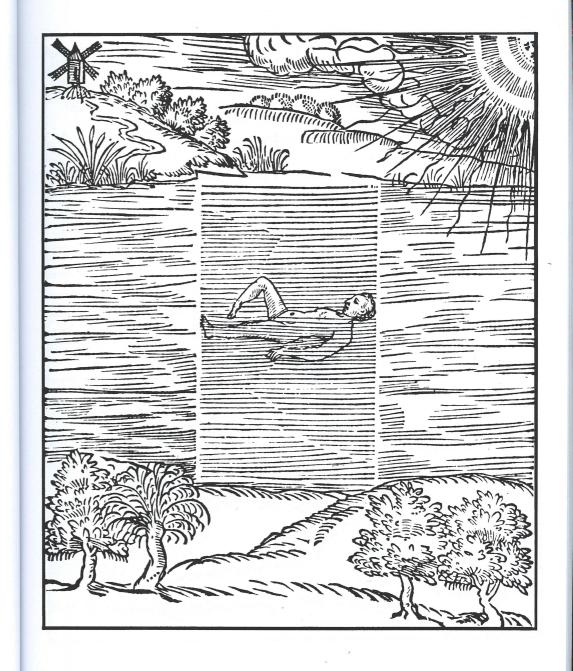
To beat the water

This is done swimming upon his back and lying straight out with his body, the palms of his hands being downward, and moving up and down in the water to keep him up. So may he lift out either one or other of his legs, and beat with it upon the superficies of the water at his pleasure, as thus: (II. 15)



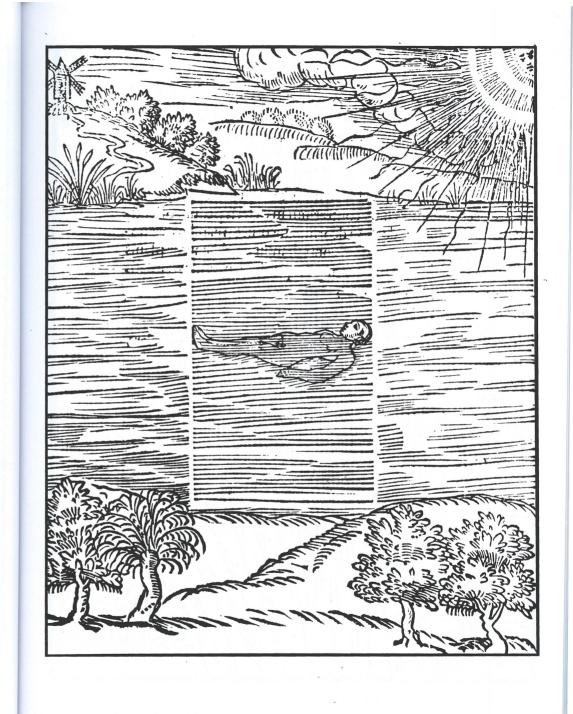
To play above the water with one foot

This is all one with the next precedent, saving that instead of striking his leg right down into the water, he must, turning it about three or four times, only but touch the very superficies of the water with his toe, as in this example: (II. 20)



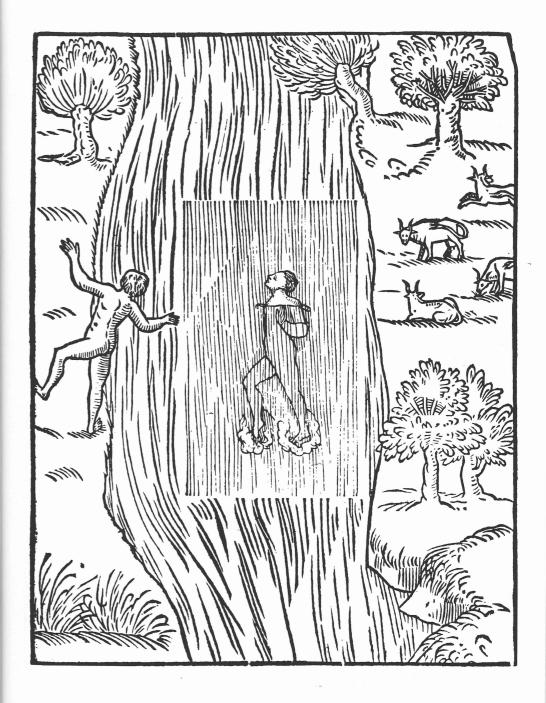
To show his toes above the water

This is also done by lying straight upon his back, stretching out his feet together at length, and moving with his hands in the water as in the former example, and so lifting up his feet till he hath brought all his toes above the water, as thus: (II. 21)



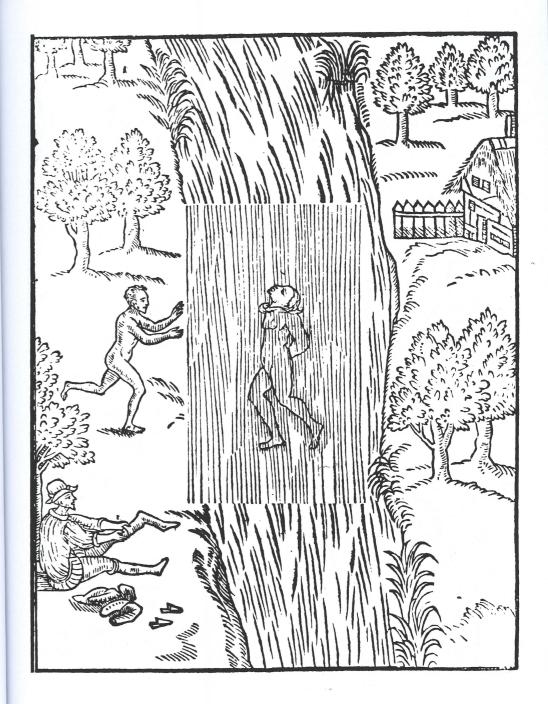
To hang by the chin in the water

When he is swimming upon his back, let his feet sink easily down towards the bottom, and withal let him strive as much as in him lies to bend in his back, bowing backwards his head, until his face be the uppermost part of his body. And then draw his feet somewhat upwards, his hands holden behind his back and his body bending also that ways like unto a bow, so that the water, working up and down in the concavity of his back, will so easily hold up his body that he shall not need to stir either with hand or foot, as thus: (II. 22)



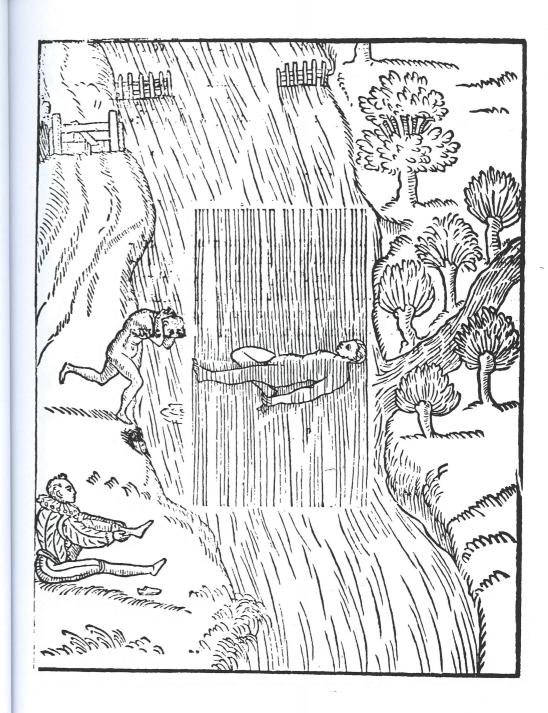
To tread the water

This is only standing bolt up as it were in the water, and pulling up your feet and thrusting them down again, after the same manner as he doth swimming upon his belly, which have the same force to keep him that way which they have to thrust him forwards the other way, as you may see in this picture next following: (II. 23)



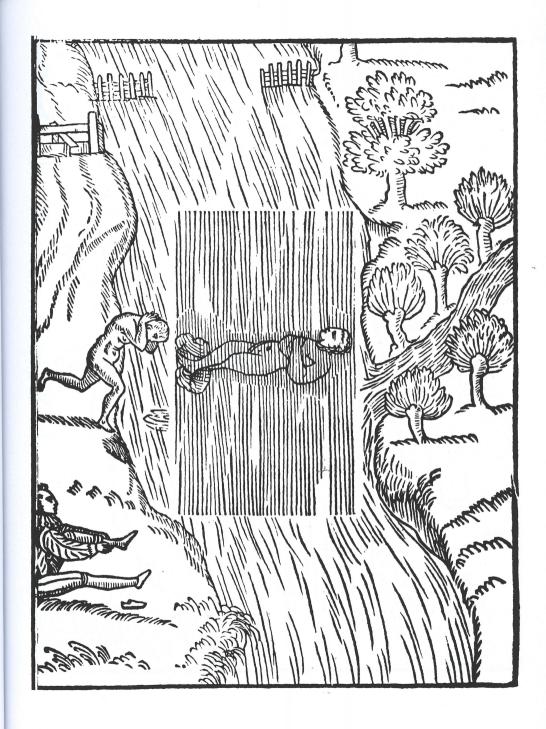
To swim with one hand and one foot upon his back

This is the same upon the back which the other was upon the belly: to lie upon your back, and behind you take your left leg in your right hand, and forcibly move your other leg as when you swim upon your back, thus: (II. 24)



To swim with his hands and feet bound

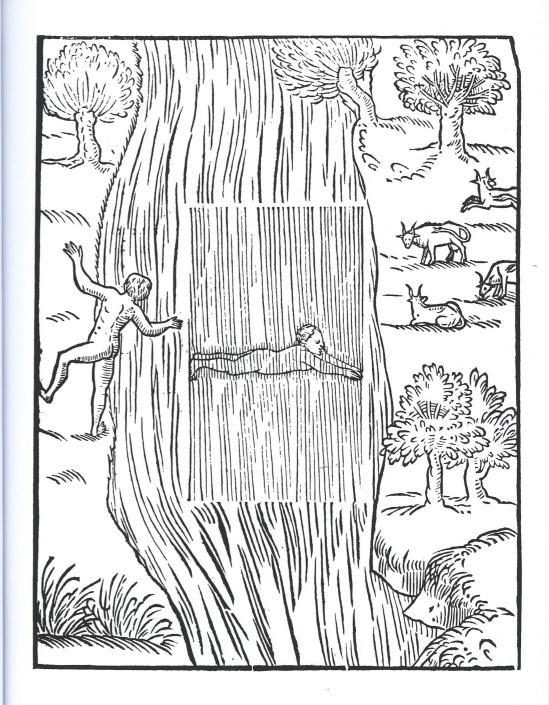
This kind of swimming is easiliest done by lying very straight upon his back, drawing in his legs and thrusting them forth again, after this manner: (II. 25)



To slide forwards upon his belly in the water

This must be thus done. He must keep his hands together with their palms downwards, by which he must draw the water towards him; and his feet also and legs kept close together, he must easily thrust out and keep in as well as he can, keeping them together in this wise:

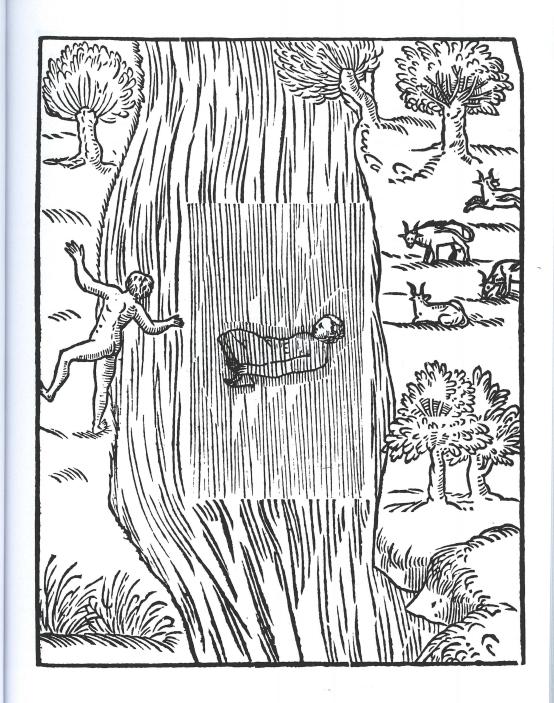
This is best to be used in those rivers where are many high weeds, for that swimming upon his belly thus, he shall safelier slide over them. (II. 26)



To sit in the water

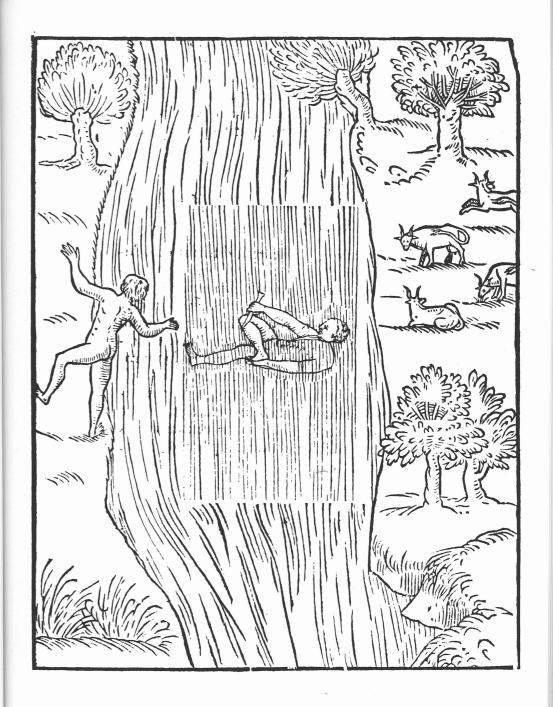
He that will exercise this kind of swimming must be such a one as is not troubled with the cramp, for that the forcible bending backward with his body is otherwise very dangerous, which must be thus done. Lying upon his back, he must draw in his feet towards his hips, and use some motion with his hands under the water to sustain him till he hath gotten his legs in his hands, thus:

And then, using some small motion to put him forwards, keeping only his breast and head above the water, the stream will easily keep him up by reason of the concavity in the back. (II. 27)



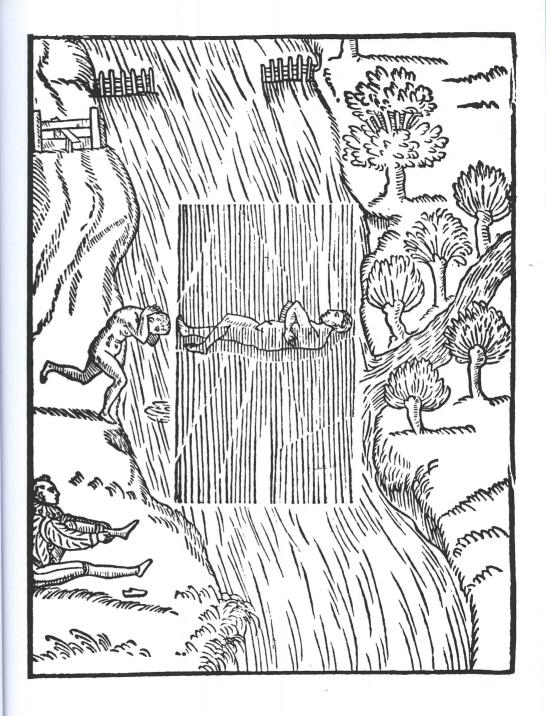
To pare his toes in the water

Swimming upon his back, let him draw up his left foot and lay it over his right knee, still keeping his body very straight, and then having a knife ready in his right hand, he may easily keep up his leg until he hath pared one of his toes, as thus: (II. 28)



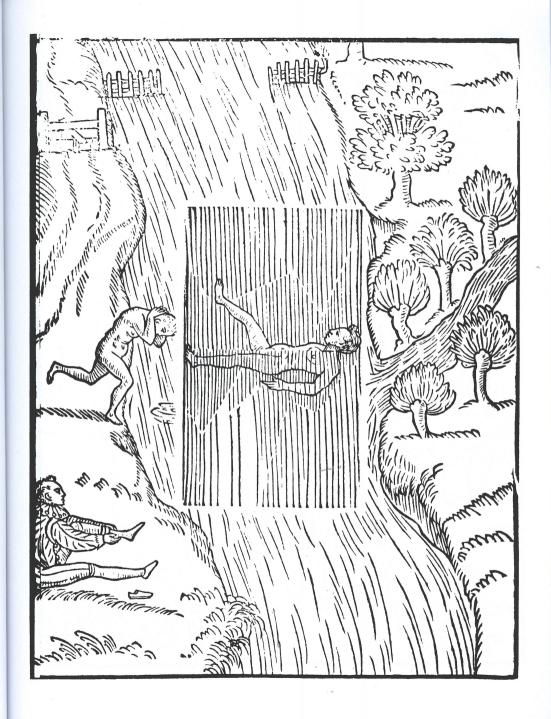
To show four parts of his body above the water at once

He must lie straight upon his back and lay one leg over the other knee, so that the uppermost knee may easily be seen above the water. Then he must, setting his hands on his breast, hold up his elbows above the water, and so he shall at once show his head, his elbows and one knee, as thus: (II. 29)



To swim with one leg right up

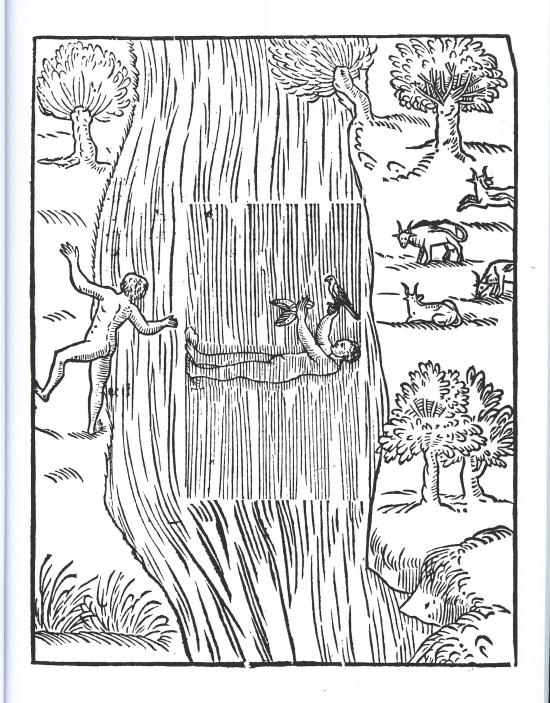
That must, as the rest, be done by lying straight upon his back and lifting one leg as high above the water as he can, and striking under the water with his other leg to drive him forwards, his hand easily moving by his side the better to keep him up, as in this example: (II. 30)



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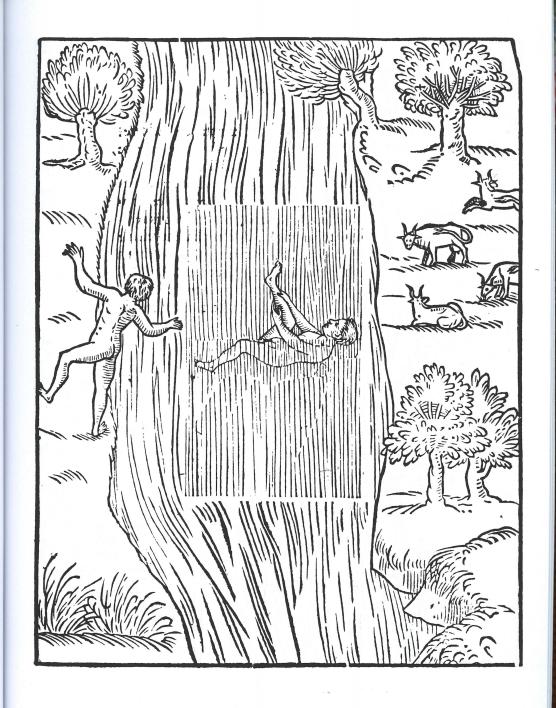
To carry anything dry over the water in his hands

This is only done by swimming upon his back and straining himself to lie straight with his body, so that he hold his arms straight up, which will else force him to bend his body and so he shall sink. And holding his arms upward as afore, he may easily carry or recarry any thing over the water without wetting, as for example: (II. 31)



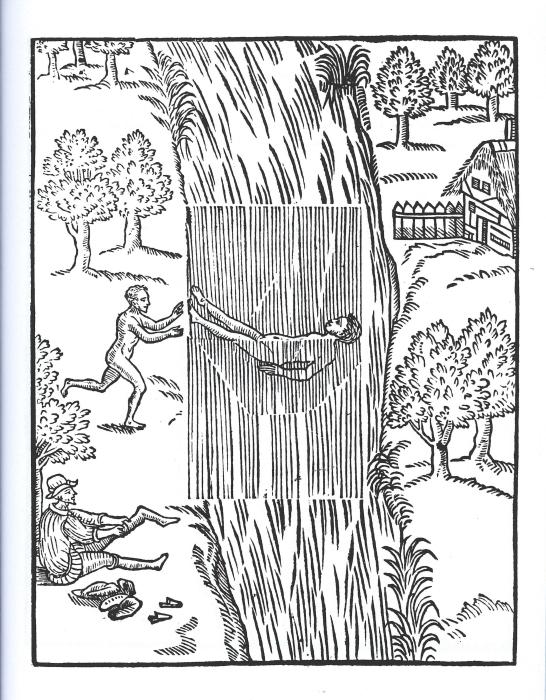
To stroke his leg as if he were pulling on a boot

This is nothing else but lying straight upon his back, as are all the other extraordinary feats, and suddenly lifting one leg above the water, stroke with both his hands in this manner: (II. 32)



To caper with both his legs at once above the water

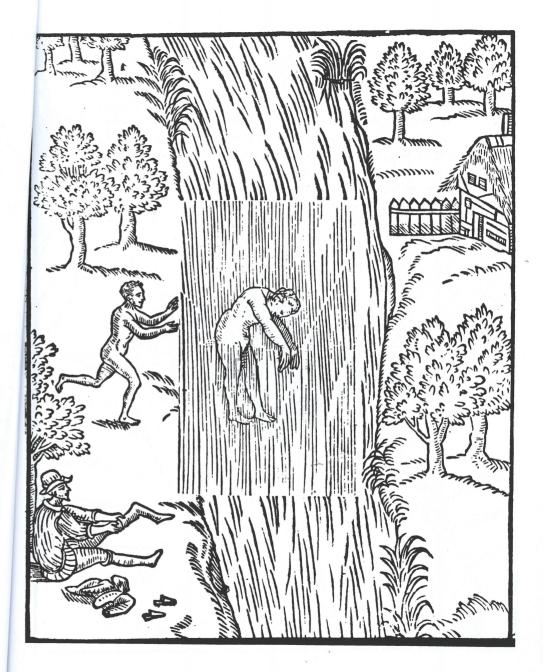
Lying upon his back, straight as afore, his hands with their palms downwards pressing the water the better to keep him up, he must cast both his legs out of the water at once, and caper with them upward as men use to do downward in dancing, as thus: (II. 33)



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To dive underneath the water

He must, if he be in a place where he may stand upon the ground, with as much force as he can, leap up, and bending his head towards his breast fall forwards down into the water, as thus: (II. 34)



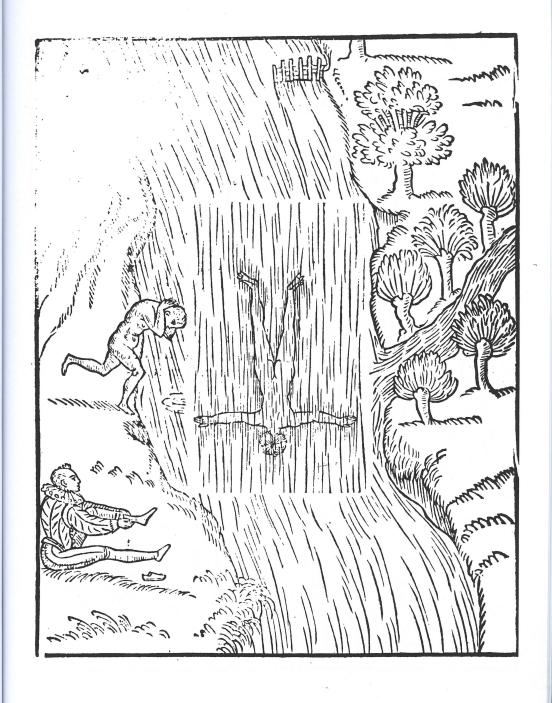
To descend beneath the water

His hands must he hold before his head with their backs together, that they may be ready to pull him as it were forcing him down under the water, and he must, pulling them out and in, now use them to help him down which were afore a means to hold him up. His feet also must strike upward, moving them after the same manner as he doth swimming above the water upon his belly, after this example: (II. 35)



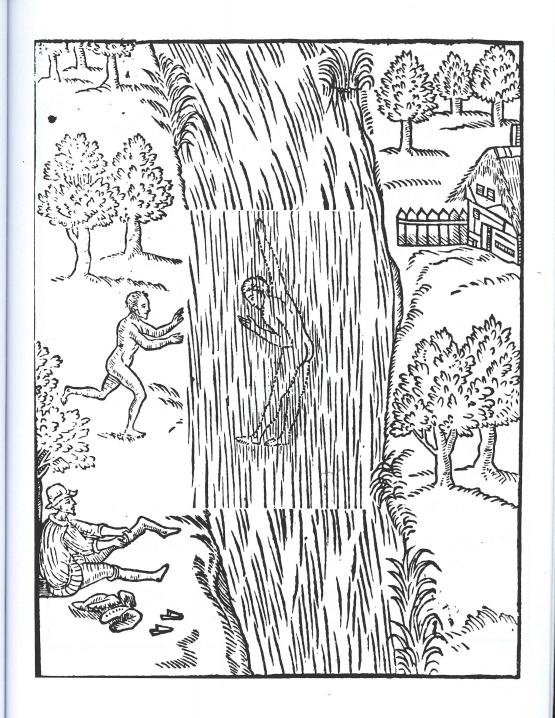
To swim under the water

When he hath thus buried himself in the water, he must thrust his hands forth before his head and, as it were, draw the waters which are before and beat them behind him, <u>[and]</u> strike with his feet as swimming upon his belly, but somewhat upward that they may the easilier keep him down, as in this example: (II. 36)



To rise from the bottom

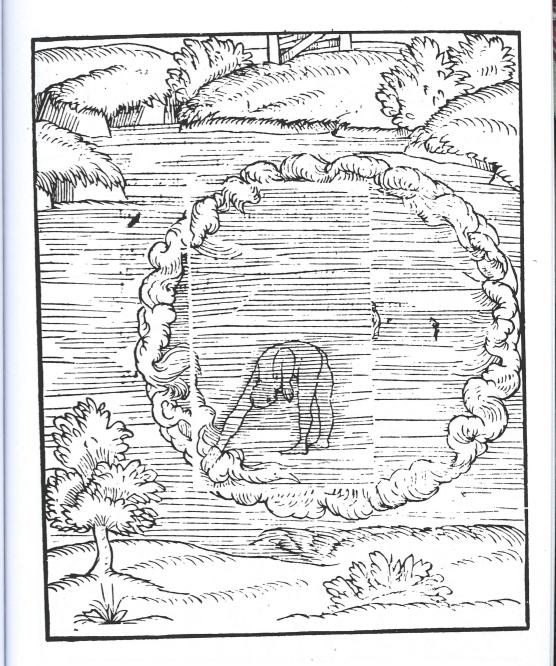
That is done by the speedy turning upward of his body and with one hand, the palm being downwards, press down the water beneath him, and with the other hand draw down the water which is above him, and then striking downwards with his feet it will easily bring him up, as thus: (II. 37)



To seek any thing that is lost in the water

He must swim under the water as afore but as near the bottom as he can, so that he touch it not lest he raise any mud to thicken the water, his eyes open that he may see where it lieth. And if so be that he have any occasion to turn himself, or to seek round about as thinking himself near the thing he seeketh, if he will turn towards the left hand, he must with his right hand pull towards him the water which is on his left side, which will easily turn him about, as this picture next following showeth by example:

But thus much to him which learneth to dive: let him never swim further than he can see the bottom, for it is either very deep or else he is under some bank, or in some such danger. (II. 38)



To swim like a dolphin

This is nothing else but in diving to lift his head above the water, and when he hath breathed, presently dive down again, as afore: (II. 39)

FINIS

