Not debeat.
Sugerit ubi esset in lucem editus,
Humane vitæ variæ repugnantes mala:
At qui labores morte finisset graves,
Omnes amicos laude et latitia etegit.

Perhaps no subject in the medical students' curriculum is thought to useless, consequently, is so much neglected, as that of Medical Jurisprudence. Even medical men themselves, save those who make it a special branch of study, look upon it as an insignificant part of their practice. This should not be: for a moment's consideration will show, that it is not only a most important, but at the same time, a most difficult branch of their profession; for the scientific prosecution of which, peculiar attributes are required: that even with these, dexterity in manipulating, just conclusions, can only be attained by long study & experience.
But in the whole range of legal medicine, perhaps there is no subject upon the right decision of which, such important civil rights depend, or one in which an authoress is beset with so many, or to great difficulties, as in the one under consideration.

The "glorious uncertainty of the law," is proverbial, but in cases touching on "Presumption of Survivorship," this glorious uncertainty has usually been doubly uncertain, either ingenuity of counsel prevailing, or the litigants, like two skilful logicians, each afraid to begin or throw a chance away divide the stakes, & to compromise the matter.

Now it is the province of the medical juris, in these cases, to far as human ingenuity & skill can do, to reduce probabilities to certainties, & "id certum est, quod certum reddi potest," & thus he frequently can do, as for instance by certain tests he can tell whether or not a child was born alive.
Presumption of survivorship when a mother and her new-born child are found dead.

As a general rule it may be admitted, that from the delicate organization of a new-born child, and from the many dangers it runs in delivery, more especially in the cases under consideration, where in the moment of anguish the mother has delivered herself with more or less violence to the child, in such cases I say it may be admitted that the presumption of survivorship is greatly in favour of the mother.

In the Dublin hospital out of 16,414 women delivered, only 164 died whilst out of 10,199 cases of single births in the same hospital, 340 children were still born although the labours were natural.

There are circumstances however which would lead the medical jurispr to modify, nay altogether to negative such a presumption — I though these cases are comparatively rare yet they are not on that account to be overlooked — on the contrary...
I upon such evidence alone, in the English courts, will a right judgment be delivered.

As to the "Presumption of Survivorship," when two or more persons perish by a common accident, the French in the Code Napoleon, have given positive enactments; but the English law has no provisions whatever on the subject, so the question, as in other cases, is determined by the evidence produced.

It would be beyond the scope of this essay to give the various tests for deciding whether the child has been born alive—these will be found in the various works on Medical Jurisprudence. I take it for granted that this has been ascertained. I in fact the essence of the term "Survivorship," implies previous life.
strength left to overlay the child, is not likely to die immediately.

Case 3.

Thereupon examination it appears that the delivery took place in bed— but the child is found on the floor—we should argue that the child, being at birth almost powerless, could not have rolled out of bed, unless pushed out by the mother—that this would imply a certain amount of strength in her—that consequently she would be likely to survive the infant, after such a fall.

Case 4.

The mother is found in bed, but the child upon the floor— it appears from the state of the bed, floor etc., that the woman was delirious in the act of getting into bed— our decision & argument would be precisely as in the last case.

Cases where both mother & child have been destroyed by accidental causes.

Case 5.

When the bodies are found buried in ruins—as underneath a fallen roof—the position in
Note to Case 6

Since writing case 6, I have discovered a passage, which bears upon it, in Lucretius.
Nocturnumque recens extinctum lumen ubi acer
midone offendit manu, consopit ilidem
concidere et spumas qui morbo mittere suavit.
Lucut. de rer. nat. 11. 6 - 791
which they lie, must guide us in our decision. If the body of the child is protected by that of the mother, especially where the mother has received severe injury on some vital organ, as for instance the brain — the presumption of survivability will be with the child. If, however, they are found equally unprotected, the presumption will be the other way — for the child would be far less able to bear the effects of injury or suffocation than the mother.

Case 6

Where a mother and child have been destroyed by mephitic vapours — as from the burning of charcoal in their apartment — or where they are found near a lime kiln, common sewer or such like place, where sulphuretted hydrogen, carbonic acid or such like vapours are given off, the presumption would be in favour of the mother — for an infant is soon asphyxiated. In fact Dr. Head, in his lectures quotes a case which occurred at Leipzig — that of a young boy being poisoned by two men holding a candle under his nose, the candle being several times extinguished and relighted. In a recent case — for bodies killed
By sulphuretted hydrogen quickly become putrid. The clothes will smell of the gas. On opening the bodies the same odour will be emitted. In any case of death from asphyxia there will be livid appearance of the skin. The right cavities—pulmonary arteries—the great venous trunks, & the vessels of the larger viscera, as the brain, liver, spleen, & intestines distended with black blood & the whole venous system congested. The left cavities of the heart, the pulmonary veins, & the arteries generally, nearly or quite empty. When the death has been sudden the blood is either quite fluid, or but imperfectly coagulated.

Case 7

The mother has been cast ashore from a wreck.

In this case I am supposing the labour to have been brought on after the mother was cast ashore. For we know that the child is expelled by the involuntary action of the uterine, assisted by the action of the abdominal muscles, partly voluntary, & partly involuntary—& affections of the mind may at once cause it into action the most
powerful action - it has the power of continuing this action, uninfluenced by the disease, exhaustion, or almost independent of the life of the mother - may even under the influence of the most powerful anaesthetics, its powers are undiminished.

The bodies were found lying on the beach - the child unprotected, either by the body of its mother, or by external covering. He might predicate the speedy death of the child - for the power of a new-born infant to resist cold is extremely slight to the power of resisting heat. 2 from its delicate organization extreme heat would act injuriously upon it, by its depressing agency, as well as by probably causing inflammation of the brain or its membranes. But the mother was in a more or less exhausted state before delivery. This makes the case exceedingly difficult - complicated, though I have not placed it under that class of cases - considering those as complications proper which arise from the malformation of the mother or child, or those occurring from extrinsic causes. The case however under consideration
is not the less difficult or important - I must therefore give more time to its consideration.

In whatever way the body has been cast ashore she has most probably been the subject of more or less asphyxia - the kind of asphyxia must be ascertained by examination of the brain.

I would here give the examiner the caution once & for all, never to give an opinion without this examination - Effusion on the brain from rupture of a vessel may have taken place; the woman, in the efforts of labour may have died of asphyxia - which would probably lead us to a decision totally opposite to the one we had previously arrived at. To return to our case then - If we find the brain gorged with blood we conclude that the woman has been affected with asphyxia congestiva - if on the other hand, which would be more likely, we find the brain & all parts of the body in a normal state, without marks of congestion - she has had asphyxia syncopea - & this is usually the kind from which patients recover after being long immersed in water. for in this condition the system does not require the support of the respiratory process.
the vital susceptibilities may linger for a longer time than when impaired by the poisons of the misplaced venous blood. The very efforts of labour might cause her from her state of stupor, but having been thus raised, I taking into consideration the unprotected state of the infant, we should give our opinion in favour of the mother.

Case 8.

In such a case as the preceding, where the body may have been seen by breathers, or in any case where they have been subjected to violence — discoverable from bruises or on the body — the probability is that the mother perished first — for she would be the first and perhaps only subject of their violence, for the sake of her clothes, trinkets, &c. — the child being in prone naturalibus — might be left to perish by a natural death.

Case 9.

Where a mother has given birth to twins, all one found dead — the presumption would lie in favour of one of them — for the mother having given birth to one — might die from exhaustion before the other was born.
But of the dead from exhaustion after the first was born the second was expelled, it would be wrong dead.

In such case the last might have been born alive, for the reasons we have stated in case 7.

In any case the novel thing has been divided but not tied, it will increase the chances in favour of the mother's delivery. Similarly where the cord has been tied, but given way, though in this last case, if the child had sucked, from the appearance of the cord at the time, the child has lived sometime, our decision might be otherwise. Milk might be discovered in the stomach intestines.

In all cases where there is nothing to show that the mother died immediately when the child has sucked and lived sometime we should conclude that the mother died from exhaustion before the child afterwards from starvation.

The medical jurisprudence should look for traces of necromancy having passed the bowels: for marks of starvation shown of the emptiness of the alimentary canal, from appearances of having being fed.
Before we treat of complicated cases we may state that in general the earlier the period of gestation at which the fetus is expelled the less is its chance of life: an exception however may occur—viz where the pelvis of the mother is exceedingly small.

A child at eight months weighs only 3 or 4 lbs. whilst one at nine months weighs almost double that weight—it is therefore easy to imagine that an eight month child born without much obstruction, would have a better chance of life than one at nine months subject to the pressure of a much contracted pelvis. Pressure is exceedingly dangerous to the life of a child, and it is on this account from their greater size, that the proportion of male children born dead is as 150 to 100 females or as 3 to 2.

Excessive size of the child in proportion to the maternal organs—abnormal configuration of any part as Hydrocephalus tumours—great ossification & consequent unyielding of the bones of the head—
ascites in the child—monstrosities—particularly where twins are united, from the obstruction & consequent delay which they would cause to delivery—would be attended in most cases with greater danger to the child than to the mother—delivery being accomplished, as in the cases under discussion—our decision would undoubtedly be in favour of the mother.

Contraction in the pelvis, either natural, from deformity, or eustoches—tumours such as fibrous polypi within the uterus—stone in the bladder—would cause great danger to the mother from pain & exhaustion—& to the child from the pressure & obstruction & consequent delay in delivery. The obstruction however not being great enough to prevent the delivery—the presumption would be in favour of the child. For in such cases the injury to the child will probably have caused its instant death whilst the mother might survive sometime.

Tumours of a malignant kind are generally soft & yielding—& cause little obstruction,
If the cord is found twisted round the child's neck, the probability is that the labour was delayed & the child destroyed by the retardation of the return of blood from the head. The child however might have been born alive yet death would be speedy.

Knots upon the cord would arc more or less compact the circulation - the child if born alive would be in a very weakly state and as in the case above - the presumption would be much in favour of the mother.

The mother may have suffered from partial or complete inversion of the uterus - from her attempts to extract the placenta - or where she has been suddenly surprised with violent pains - the child dashed upon the floor before she could reach the bed; by which means the cord has received a violent jerk, or even has been broken. In this Heman-shape accompanies the strangulated inversion.

The pain is excessive - the woman suffers from nausea, vomiting, cold clammy sweat, fainting & convulsions. If the child was found dashed upon the floor - most probably the mother survived.
If the child however was in a normal condition
we might probably decide in its favour.

If upon examination we find that the
mother has suffered from rupture of the heart
rupture of the liver from abscess in its substance
rupture of the spleen, from being enlarged &
softened - rupture in various parts of the uterus
locus glass contraction of uterus - placenta being
un-related -

And if on examination of the child we
find the cord shrivelled & - we should decide
in favour of the child.

If the mother had rupture of the heart
she must have died instantaneously - as also
she would from the bursting of an aneurism
either of that organ or the aorta.

A woman with any disease of the heart is
during labour in imminent danger - cases
are on record where the patient has died
immediately after expulsion of the child.

The existence of heart or chest disease forms
a kind of complication in labour - not
only extremely antious in itself, but which
generally incapacitates the patient from bearing
with impunity the struggles & efforts of a pro-

Rupture of the liver from abscess, the
matter & escaping into the cavity might occasion
fatal peritonitis. From whatever cause arising
acute peritonitis is often fatal in a few days
or even hours, when under treatment. How
speedily fatal must it be in these cases under
consideration.

Rupture of the liver & spleen would also
prove mortal from their great vascularity.

The inner coat of the uterus might be
ruptured & the child expelled at the same time.
The mother would speedily die from the
shock & hemorrhage; our decision would be in
favor of the child.

Rupture of the bladder would speedily
prove fatal from the inflammation & gauze
caused by the acidity of the urine.
Manipulated hernia would be highly
dangerous to the woman during delivery.
If placental presentation is found to have taken place discoverable by the gauzyous looking mark within the 63 uteri, where it has been attached - if we find that the child has been born alive - we should probably give our decision in favour of the child. The violent hemorrhage which takes place in these cases, quickly proves fatal to both mother & child - but the child being born alive - we decide in its favour.

Now grass contraction of the uteri, the placenta being unpelled - is exceedingly dangerous to the mother - it is not unlikely to arise in these cases if the desire to remove the placenta - the cord is frequently pulled at & attempts the 63 uteri is excited to contract. The placenta is partially separated - hemorrhage takes place & the woman speedily perishes. In this as in every case it will make a great difference in our decision whether the cord has been divided & tied or not. If it has been divided but not tied, the chances will be in the greater majority of cases, in favour of the mother. The exception would be in cases where she had died from rupture of the heart.
bursting of aneurisms of that organ or of the conten-
t salute of other very vascular organs - apoplexy - or
for in these cases the death of the mother would be
instantaneous.
Appearances of the umbilical cord at different periods after birth —
Gathering of the cord takes place soon from five hours to three days after birth.
Desiccation - not generally on the first or second day after birth - is complete on the third day. This process takes place during life only.
Separation of the cord generally takes place during between the fourth and fifth days.
Cicatization takes place from the tenth to the twelfth day —

A child is born with a considerable quantity of urine in the bladder. Therefore the bladder is found empty it is a proof that the child has lived sufficiently long to have passed its urine. This however is not an infallible test - for sometimes the urine is voided before death - or it may have been born alive, it died before it has done so.
Summary of the whole

In natural labours, the presumption of survivorship is in favour of the mother.

Where the child is overlaid by the mother, the presumption will be in her favour.

In deaths arising from exposure to cold, syphilitic vapours, & such-like cause, the presumption is in favour of the mother.

In labours difficult from the size, malformation of the child, or contraction from any cause in the pelvis of the mother, or soft passages of the mother—there is danger to both mother & child. But expulsion of the child having being accomplished, the presumption is in favour of the mother.

Where the mother has died from rupture of some important organ—a from haemorrhage such as would arise from the partial separation of the placenta—a from some acute disease, such as peritonitis—& the child has
lived some time - the presumption would be in its favour.

In all cases where the child has sucked and appears normal - the probability is that the mother died first - then the child from want of nourishment.

In cases where both mother & child are destroyed by accident or violence - the presumption of survivorship must be determined by the evidence gathered from inspection of the bodies.
Presumption of survivorship when two, or more persons, perish by a common accident.

Every member of a civil community who obeys its laws, is entitled to be protected by those laws. And the law of every country should contain, so far as it can, positive enactments, whereby the rights of every man may be secured to him, with as little delay and litigation as possible.

With regard to the subject under consideration however, the necessity for such enactments has been differently considered by the legislators of each nation. The Roman law laid down positive regulations; the French following its example, has done the same. The English law however has no rules on the subject—considering that such cases, as all others, should be determined by the evidence produced: and this is no doubt right in the main: but in the absence of such evidence, I think, positive enactments could not be attended otherwise, than with benefit to all the
parties interested. Yet I can see extreme difficulty if not impossibility in framing such cases as will apply to all cases.

I am not prepared to go the length of those, who have considered, that in the absence of evidence, the order of nature should be followed, i.e. that it should be established that the natural succession had taken place, as if no accident had occurred. That the child survived the parent, the nephew the uncle, legates testator, generally that the younger had outlived the elder. See Paris Med. Juris. col. 12998.

For suppose that a father aged thirty, his child aged five years, had lost their lives by the upsetting of a boat at sea, or otherwise, where there were no witnesses of the fact. Who for an instant could suppose that the presumption of survival rested with the child? Common sense would dictate a totally opposite conclusion. So that by following the order of nature, the greatest injustice would be done to the representatives of the father. I think therefore that regulations of such a nature, cannot for a moment
If positive enactments are thought desirable, I am of opinion, that those contained in the Code Napoleon, should be our guide—nevertheless these are capable of much improvement.

**Code Napoleon**

"If several persons, naturally heirs of each other perish by the same event, without the possibility of knowing which died first, the presumption as to survivorship shall be determined by the circumstances of the case, or in default thereof, by strength of age!"

"If those who perished together were under fifteen years of age—the eldest shall be presumed the survivor."

"If they were all above sixty years of age, the youngest shall be presumed the survivor."

"If some were under fifteen years of age and others above sixty, the former shall be presumed the survivors."
"If those who have perished together had completed the age of fifteen, + were under sixty, years of age — the male shall be presumed the survivor, whereas ages are equal, or the difference does not exceed one year."

"If they were of the same sex, that presumption shall be admitted, which opens the succession in the order of nature — of course the younger shall be considered to have survived the elder." — Black's Ind. Juris.

The third article I consider as extremely faulty — for it will I think be readily admitted that the generality of men at about sixty years of age would have more resources, more courage, & more presence of mind in the hour of danger, than the generality of boys of fifteen years of age + under + that unless far advanced beyond sixty, would endure hardships such as hunger for instance, for a much longer time.

The fourth article, I consider equally faulty — for it appears to me that the generality of boys above fifteen years of age, would be
more likely to assist & preserve themselves in the hour of danger, than the generality of females of any age whatever.

The matter however is attended with more difficulty than at first might appear; & it is evident that to meet every contingency would require most copious enactments. For instance it is extremely difficult to meet those cases where some of the persons perishing are under fifteen & others above sixty years of age - a boy of fourteen might have a greater chance of surviving than a man of sixty five or seventy - yet I think the latter would have a greater chance than a child under ten. I have therefore inserted a clause which I think might meet such a case - taking seventy as the allotted period of man's life. A dispute however might arise where one of the parties was above seventy. There must however be some limiting age - I in this as in other cases - no enactment can be sufficiently copious to meet every case.
Enactments proposed

1. If several persons, naturally heirs of each other, perish by the same accident, without the possibility of knowing which died first, the presumption as to survivorship, shall be determined by the circumstances of the case, or in default thereof, by strength of age and sex.

2. If those who perished together were under fifteen years of age, the oldest shall be presumed the survivor.

3. If they were all above sixty years of age, the youngest shall be presumed the survivor.

4. If some were under fifteen and others under sixty years of age, the latter shall be presumed the survivors.

5. If those who have perished together were of different sexes, between the ages of fifteen and sixty, the males shall be presumed to have been the survivors.

6. If those who have perished together were of the same sex—infants and children under ten years of age shall be presumed to have perished first.
If some of those who have perished together were between the ages of ten and fifteen, or others between sixty and seventy—that presumption shall be admitted which opens the succession in the order of nature.

In offering these suggestions I am far from supposing that they will meet every case. They are as it were only a starting post, from which we must branch off in every direction, as circumstances may require: the deviations we must make, will be most readily perceived, as the various kinds of accidents by which persons may perish, in the presumption of survivorship from those accidents come under consideration.

I have given extracts from one of the latest cases on the subject— I noticed those referred to by counsel in their arguments. I have given my own opinions on the subject. I quoted the experiments of others, as far as they bear me out in my own. I have endeavored however to avoid slavishly following the steps of previous writers. Thinking
That advancement in any subject can only be attained, by each author giving his ideas on it (however humble they may be). Otherwise an essay must be a mere copy.

This case was tried before the Master of the Rolls as to what parties were entitled to administration. It appeared from the evidence that husband & wife, being nearly of the same age, were washed overboard from a ship in distress, during a gale of wind, & drowned; it was held that they perished simultaneously.

On the 13th Oct. 1853, Mr & Mrs Underwood & their three children, embarked on board the Dalmatia for Australia: this vessel was wrecked off Beachy Head on the coast of Sussex, & every soul on board perished, except Joseph Reed, a Seaman. From his evidence it appeared that Mr & Mrs Underwood & their two sons were washed overboard together by a wave — that he never saw them again — but he had no doubt they were swept...
into the whirlpool — that he did not think that a swimmer could have struggled against it, so as to have come up again. The daughter Catherine Underwood, with some others, was lashed to a spar (by Reed).

John Underwood was aged about forty three — in robust health, a good swimmer. His wife about forty, in a weak state of health. A great deal of evidence was gone into upon the probability of the husband or wife being the survivor.

On one side it was argued, that it must be presumed that the husband survived his wife — he was a strong man — a good swimmer — she was a woman in weak health, from her sex, more liable to syncope — while he was more likely to retain his presence of mind, & to have a more ready suggestion of resources in danger.

The wife also was more likely to have died of asphyxia, & it was probable that the period at which death took place was earlier in the case of the wife, than of the husband, as she must have died within two
Minutes after submission. It must therefore be presumed that he was the survivor. The following authorities were referred to—Tayloe Ind. Juris. 596

The Master of the Rolls in delivering his judgment, said, referring to the evidence of Reed: "By this evidence it is established that those four persons sank at once, I never appeared again. Can I then, under those circumstances, presume that the husband survived the wife? On this the evidence is all one way—that insensibility takes place in about a minute, that death takes place in two or three minutes; it is totally impossible to determine exactly.

This apparently does not depend upon any peculiar circumstances of constitution; although it may no doubt depend upon the circumstance that one person may die from a cause produced by an immersion, which is not the immediate effect of drowning: upon that there is no evi-
time. It might just as well be assumed, that the husband died from asphyxia, as that the wife died from any other cause—because it appears from the evidence of a medical man, that asphyxia is the cause of death, in the case of a sudden immersion in water, as well as asphyxia.

"The probability is that all became insensible at the same moment, so that death followed as nearly as possible at the same time. The evidence that the wife screamed could not have been disregarded, had the screaming been at the moment she was immersed in the water—But the evidence is distinct, not that the scream was at the moment she was immersed in the water, but that it preceded her immersion, and that the effect of screaming would be to draw in the breath immediately afterwards. There is therefore no evidence to show who was the survivor, so the conclusion of law is, that both died at the same moment."

We know that counsel, like drowned men, are apt to catch at straws if it appears
to me, that the arguments in this case, were not very forcible.

The argument, that because females are liable to syncope, therefore the wife must have been the first to perish, is contrary to facts. The liability of females to faint, is frequently the means of their preservation, under the most trying circumstances — it is in such cases that persons have recovered, after a long immersion. Forde mentions the case of a young woman who was condemned to be drowned, who fainted at the moment of immersion in the water — having remained under its surface for three quarters of an hour, was taken out and recovered. Under such circumstances the powers of life seem to lie dormant, without marked arterial circulation — persons in this state are in fact like hibernating animals — the system does not require the support of the respiratory process. See Case 7. P. 8 where the reasons are more fully stated.

With regard to the argument that the husband was more likely to retain his presence of mind, to have a more ready suggestion of resources— the evidence annulled
any such presumption; I showed that even if resources were at hand, he failed to avail himself of them.

And with regard to the wife being more likely to have died from asphyxia—the probability is that both died from asphyxia—it is equally probable that the husband died of asphyxia congestion; the wife of asphyxia syncopea; in which case the presumption of survivorship would have been in favour of the wife.

The case was again argued on appeal to the Lord Chancellor. 24 law-jour. Reports, N. & N. Chanry, 293 when the decision of the Master of the Rolls was confirmed. Justice Wrightman, who delivered the judgment, saying: "In the French code the rule of survivorship is made a matter of positive regulation & enactment, varying according to age & set of the persons dying in the same shipwreck; but in our law it is not so. The question of survivorship is the subject of evidence to be produced before the tribunal which is to decide upon it, & which is to determine it as it determines every other fact."—"The Master of the Rolls.
is reported to have said: "The conclusion of law is that both died at the same moment." According to our view this is not to correct; we think there is no conclusion of law on the subject. In fact we think it unlikely that both did die at the same moment of time, but there is no evidence to show who was the survivor."

The reason I have quoted the above case at such length is because the majority of cases on the subject of survivorship, which have come before our Courts, have been arisen from shipwrecks. This case seems to contain the principle on which all the other cases have been decided. The arguments must however depend upon the circumstances attending each case, so we shall proceed to show what cases may arise, how they should be decided.

Supposing those whose survivorship is in question have perished on a raft, or barren rock, the question would be had they died from thirst, hunger, heat or cold.

I first recall it has been shown by Dr. Beattie, that of thirst adults perish first—then the young, 2 of the sexes males survive.
And Zacharia has said that of hunger, the young perish first—then infants, lastly old men—and of
the males females probably survive.

A very important question might arise
where one of the persons whose survivorship is in
dispute, had been without water—& the other without
food—& the cases bearing on it are these—

Elizabeth Woodcock was buried under
the snow for eight days, was taken out alive—
which is to be attributed to the snow which she
sucked.

Luc Antoine Citelli who was confined
in the prison of Bastia, starved himself to death—
taking nothing but a mouthful of water occasion
ally—he survived nineteen days.

John Brown, a Scotch miner, lived
23 days in a coal mine without swallowing anything
except chalky cement water, which he sucked through
a straw, was taken out alive. Traill Ind. Juris.

Redi instituted a series of experiments
on a number of capons—which he kept without
either food or water, 2 not one survived the
ninth day. But one to which he gave water,
did not perish until the twentieth day.
Persons without water die in about eight days, it does not appear that food would in such cases prolong life. For instance those who perish for want of water, in crossing the desert, are unable to swallow food.

In such cases then, I apprehend, ceteris paribus, that the presumption of survivorship is greatly in favour of those in possession of water.

From repeated observations on the effects of heat and cold, it has been shown, that of the former adults and males perish first - of the latter, infants and young children.

Persons immersed in water, survive those in a dry air.

If a ship is wrecked by being thrown on her beam ends, not righting herself again, adults and young boys may be presumed to survive, their activity enabling them to go aloft, whilst the aged and females crowd in the cabins or on deck, and consequently the first to perish.

If the ship is dashed to pieces on a rock or otherwise, yet there has been time for some to save themselves, adults and boys, as in the other case, might be presumed to have survived, their activity giving them the best chance.
In all cases where presence of mind can avail, the presumption is that the brave survive the nervous and fearful.

Senecie concidere et animi tenore videmus. Sape homines. Lucut. de rer. nat. lib. 6

Of course sailors who are used to brave dangers may generally be presumed to survive landsmen—this presumption however may of course be rebutted by facts. In the dreadful wreck of the East Indianman "Reliance" off the coast of Boulogne about the year 1843—2 of which ship I was midshipman, the previous voyage, Dr. Walsh, the chief mate, a brave man & good swimmer, was one of the first to perish—this however may probably be accounted for, by his previous state of exhaustion from discharging his onerous duties.

When the bodies of those whose care is in dispute, have been seen cast ashore in their clothes, & are afterwards found stripped—one of them bears marks of violence, the presumption of survivorship is in favour of this latter—For wrecks don't use violence to dead bodies, but to those in whom the sparks of life still linger.

A most melancholy case of this kind.
happened to a beautiful girl, with some of those family I am acquainted.

The "Conqueror" East Indianman was wrecked on her homeward voyage from Calcutta soon after it off the same coast as the "Reliance".

Trip Turton, who was handsomely dressed, & saw a considerable quantity of jewelry, was seen by one of the few survivors (a sailor) lying on the beach dressed, & with signs of life—when she was afterwards seen, she was stripped of everything, & bore marks of violence on her body.

In every case, when the bodies are recovered, the brain & lungs should be examined. & the presumption of survivorship, where such difference exists, will be in favor of the one who has died from asphyxia synopalis & of course against the one who suffered with asphyxia congestion. For the appearance of the bodies in these cases, see p. 19.
When persons have perished by the falling of a building, by a railway or such like accident, the severity of the injuries found on the bodies, must guide us in our decision—and I think I cannot do better than quote the excellent remarks of Zacharia on the subject—which I may state were exactly my own, before I had seen his work.

"Si praetu oppressione, al edificii ruina perpressam, omnis qui sub ea extincti sunt, committere, eius personae cadaver superatus, nulla late contaminatum, alterius vero olvere gravissimo combustum, testa vero etiam capite compacto; ac penitus comminuto, quis locus dubium esse potest, quis minus primum illam personam duabus aliis supervisisse affigisse, secludam vero superiorum testia, ac tertiae demigne omnium primam animam ethalasse."

Zach. ib. 5. quest. 12. sect. 29

If one of the bodies retained some warmth when found—"ceteris partibus it would be strong grounds for believing that it survived the other."
These persons perish through the inhalation of mephitic vapours—such as sulphuretted hydrogen, & carbonic acid gases, or in any way from suffocation the female survives the male adult—De Vergev states that out of three hundred and sixty cases of asphyxia which occurred in Paris, between the years 1824 & 1835 (19 being double cases of male & female affected at the same time) there only recovered 2 these were female—and that out of seventy-three females, eighteen were saved whilst out of eighty-three males only nineteen recovered. Zacheus has a remark to the same effect. "Modo illud centum est, mulieres et inspiratione multo minus ladi quam viri, he goes on to give the reason, to which however I am not inclined to subscribe. "Quod ita evince, ob pectoris latitudinem dicendum, a natura erim ita instituta est, ut mulieres late pectoro datori, centum, ob profis nutritiorem." This increased size of chest, is to be attributed to the larger size of the circumference in females, it had nothing to do with the internal capacity of the thorax. The lungs of the male are in proportion to his body as one to forty-three—thirty-seven—whilst those of the female are as one to forty-three—
From the larger size then of the lungs of the male, a greater quantity of blood (venous) has to be arterialized— if then from any cause atmospheric air is withheld, a much larger quantity of poisonous unorganized blood will be circulating in his body— or if he has been destroyed by the inhalation of mephitic vapours— at each inspiration he will have inhaled a much greater quantity of the poisonous gas, from the larger capacity of his lungs & thorax, & consequently will perish before the female.

From the larger size of the female breast— & from its spongy & fatty consistence, it might probably have been argued that with more show of reason, that this would add to her buoyancy in water.

In all cases of suffocation, as from a house on fire, or from fire damp in coal mines, those near the outlets may be presumed to survive & those with diseases of the brain or lungs to perish first. And Zaccaria states that when persons are destroyed in a fire, those who are suffocated expire before those who are burnt to death— bib 5. ch2. greg 12.
In cases where persons perish through violence, as in battle or if the attack of robbers—the presumption that the brave survive the timid does not hold good. In such cases the presumption is the other way. The brave are format in battle, & to robbers offer most opposition & consequently are more dreaded than the timid.

In the latter case, women & children frequently go un molested; whereas all however suffer the presumption will be that women survive men & children women.

In every case where a body bears out blackish marks, they should be cut into, in order to ascertain whether they be the effect of the effusion of coagulated blood, or merely infiltration of the skin, which takes place in the adjoining parts of bodies after death.

When persons perish through an explosion, as in the making of fireworks, those nearest the explosive mixture will be presumed to have perished first.
Outline of the Legal Division of the Subject

As I before stated, I have given the case Underwood v. Thing, as being one of the latest, if not the latest case, on the subject of survivorship - as appearing to contain the principle upon which all the cases have been decided. In the convenience of those who wish to make further references, I have given the cases and authorities relied upon by the counsel in their arguments. With regard to this the legal division of the subject, it may be stated that in the Roman law, if father and son perished together in battle or in shipwreck, the son was under the age of puberty, it was presumed that he died first; but if above that age, that he was the survivor. Upon the principle, that in the former case the elder is generally the most robust, and in the latter, the younger.

(The same rules as in the French Code, which I have discussed ante Page 254 following) were in force in the territory of Orleans, at the time of its cession to the United States, I have since been incorporated into the Code of
Louisiana.

[(By the Mahomedan Law of India when relatives thus perished together "it is to be presumed that they all died at the same moment, & the property of each shall pass to his living heirs, without any portion of it resting in his companions in misfortune. Bailey's Mahomedan Law of Inheritance, 172.)]

Such was also the rule of the ancient Danish Law. "Filius in communione cum patre et matre deditus, pro non nato habetur?" Anslojet Lindrica lit. c.9, p.21.

This question first arose in the Common Law Courts, upon a motion for a mandamus in the case of General Stanwit, who perished together with his second wife & his daughter by a former marriage, on the passage from Dublin to England - the vessel, in which they sailed, having never been heard of. Hereupon his nephew - applied for letters of administration as next of kin - which was resisted by the natural uncle of the daughter, who claimed the effects upon the presumption of the Roman
law that she was the survivor."

"The Master of the Rolls refused to decide the question by presumption, but directed an issue, to try the fact by a jury. Mason v. Mason 1 Merivale's Reports 308. But the Prerogative Courts adopted the presumption that both perished at the same time, so that therefore neither could trans-mit rights to the other. In the absence of all evidence of the particular circum-
stances of the calamity, probably this rule will be found the safest & most con-
venient, but if any circumstances of the death of either party can be proved, there can be no inconvenience in submitting the question to a jury, to whose province it peculiarly belongs." Greenleaf on the Law of Evidence Vol.1 48 29 30

On Taylor the latest English
writer on the subject Law of Evidence 1st
P.171 2nd ed. 1855 says. "In cases of this nature, the law of England, whether administered in the Courts of Common Law, the Courts of Equity, or the Ecclesiastical Courts,
recognizes no presumption of survivorship; 
but in the total absence of all evidence 
respecting the particular circumstances of 
the calamity, the matter will be treated, 
as if both sufferers had perished at the 
same moment; and consequently neither party 
will be held to have transmitted any rights 
to the other.

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It remains only to observe 
that if any circumstances, connected with 
the death of either party can be proved, 
the whole question of survivorship may be 
dealt with as one of fact; i.e. the comparative 
strength, or skill, or energy of the two 
sufferers, may then very fairly be taken 
into account.

If then this remark 
of Dr. Taylor be well founded, how very 
important must the medical question 
of survivorship be to the English law. 
I how necessary for every medical man to make 
himself thoroughly acquainted with this, as with 
every other branch of Medical Jurisprudence.
This division of the subject may be concluded by the case of Underwood v.
King, previously quoted, which appears to be the latest and most authoritative decision of
the English Courts. The more authoritative
as declaring at the same time, the concordance
on this subject, of the English Courts of Law
& Equity. The Lord Chancellor having called
to his aid, two of the Judges of the Common
Law Courts, one of whom delivered the judgment,