

An account of the distemper among the horned cattle, at Caulk in Derbyshire, in 1783 : and of the remedies recommended, for the cure, with observations / By Thomas Kirkland.

Contributors

Kirkland, Thomas, 1722-1798.

Publication/Creation

Ashby-de-la-Zouch : Printed for, and sold by J. Beadsmoore : May be had of Mr Gregory, Leicester; and Mr Drewry, Derby, [1783]

Persistent URL

<https://wellcomecollection.org/works/vrxkwqbu>

License and attribution

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



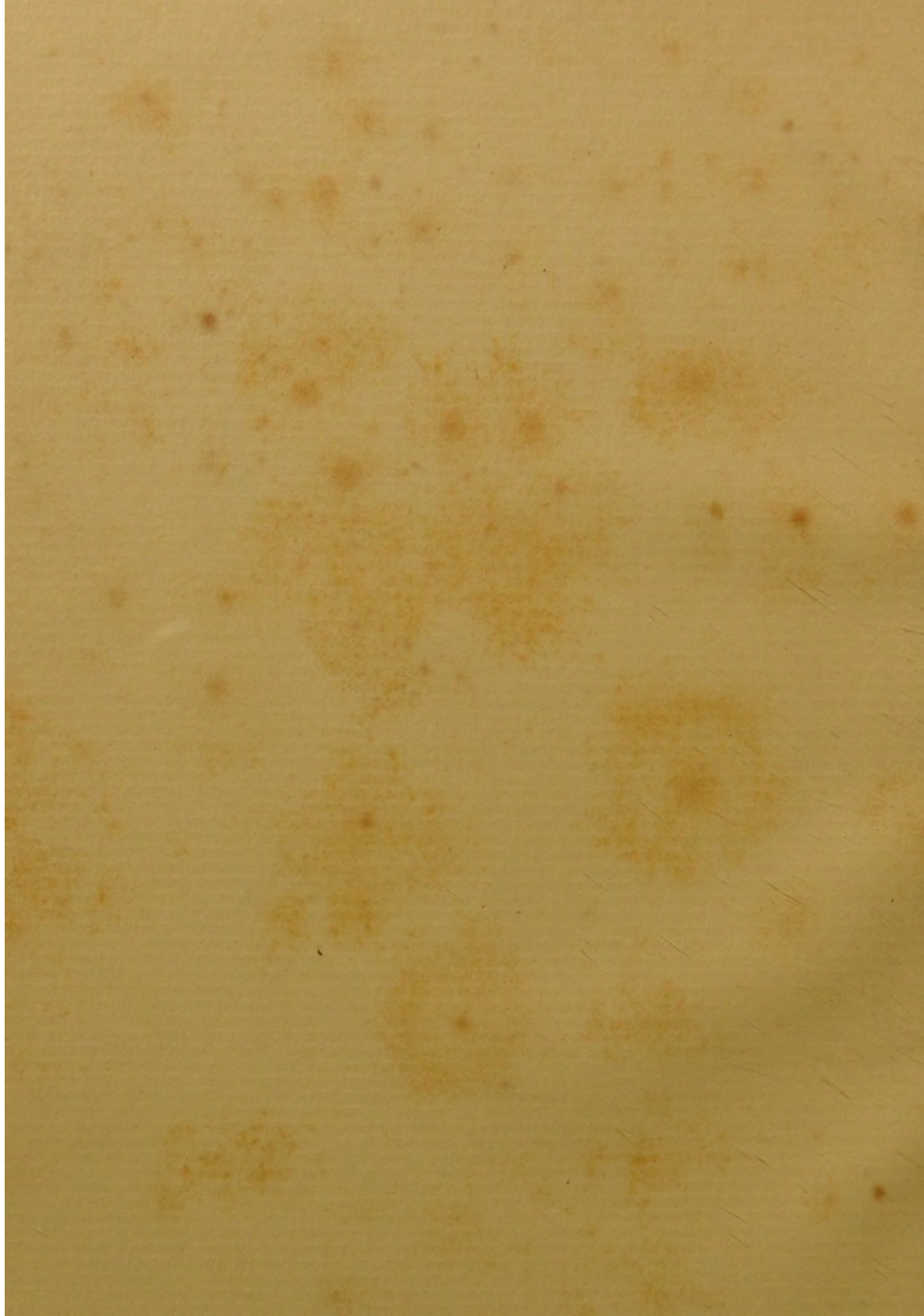
Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>

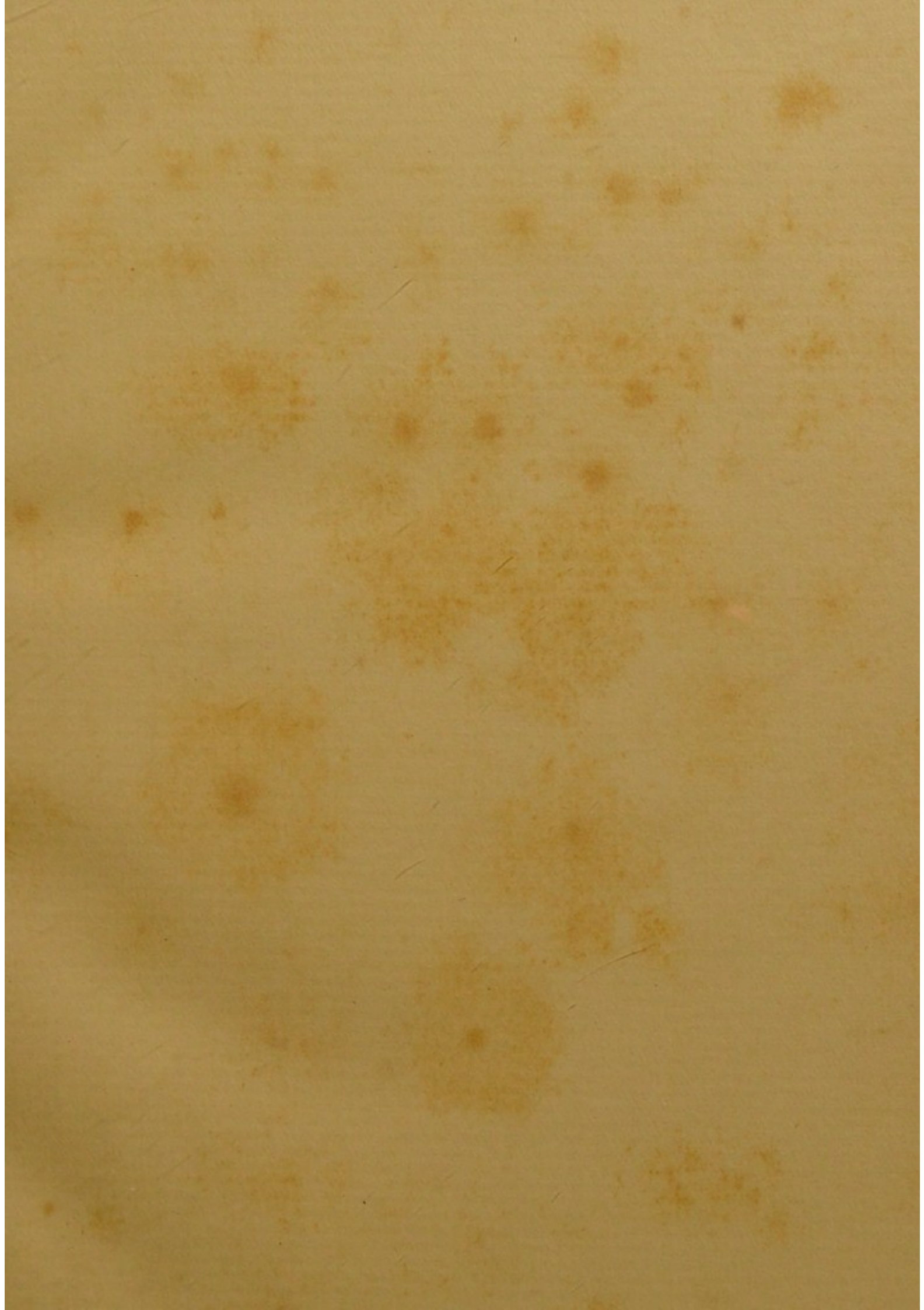


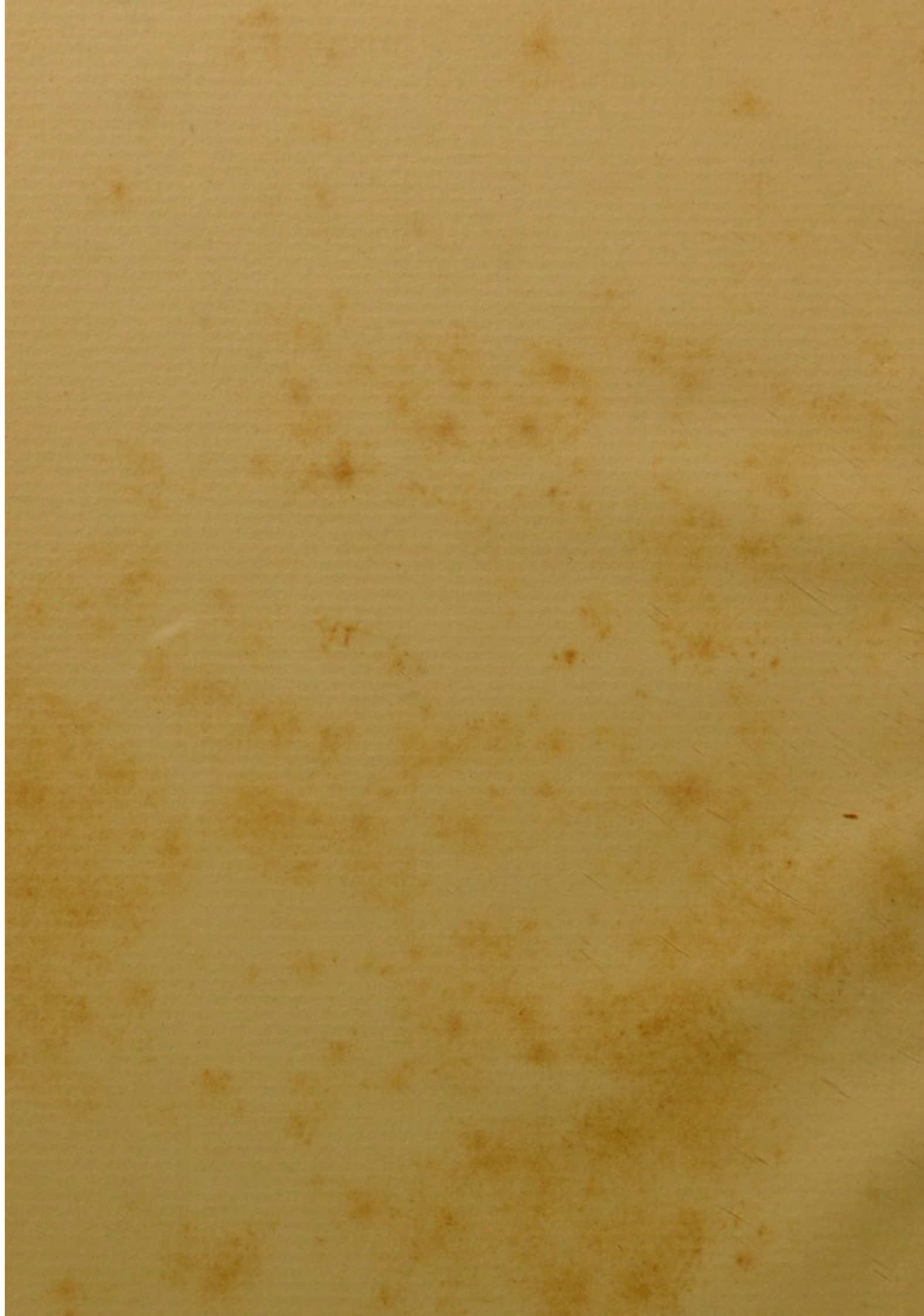
Supp. 59618/B



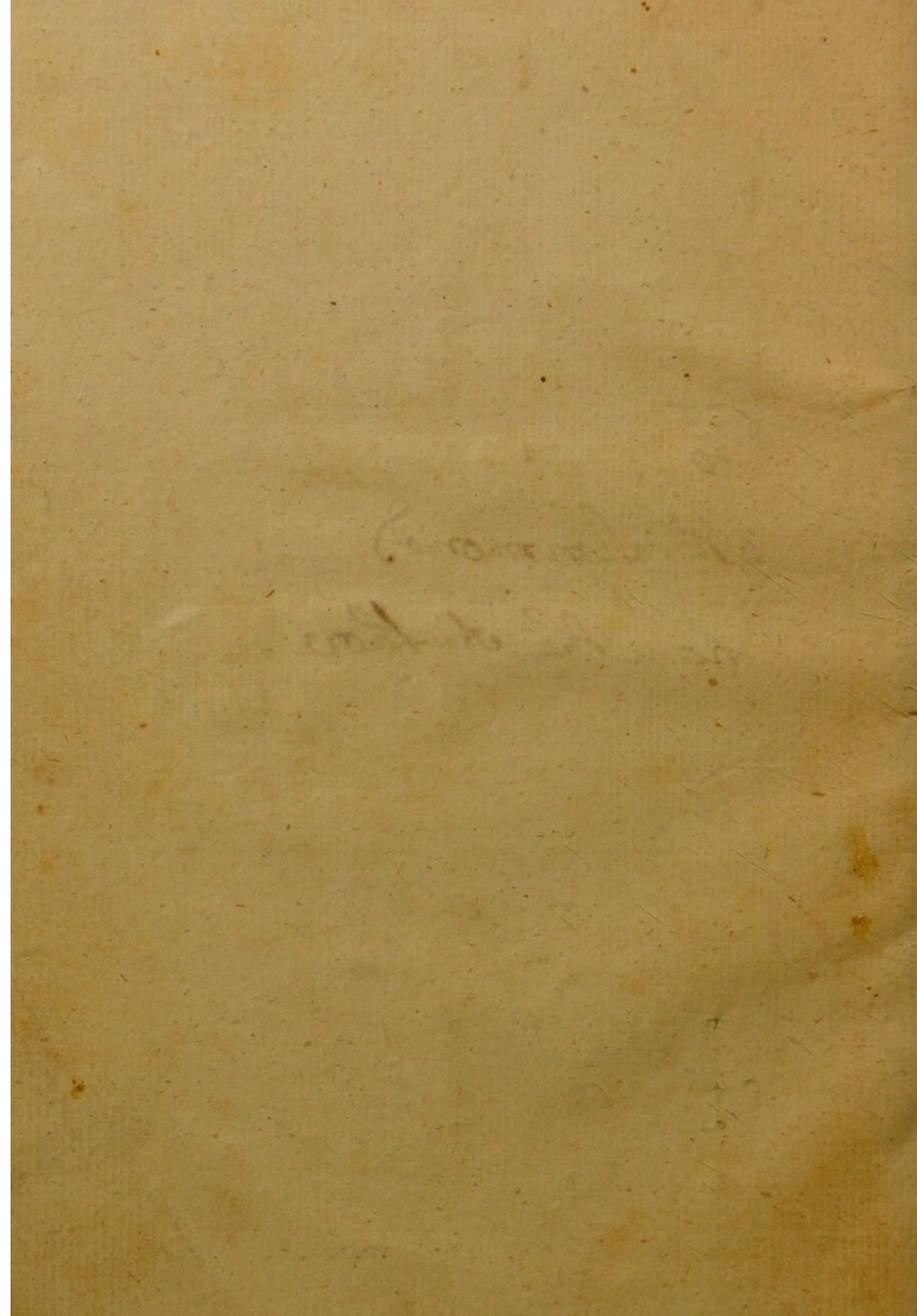
Preservativa con suero de cuervo







To
M^r. Simmonds
from the Author



Thos. W. D. Culley

Ashby de la Zouch

Jan'y 1837

AN
A C C O U N T
OF THE
DISTEMPER

Among the HORNED CATTLE,

AT
C A U L K

IN
D E R B Y S H I R E,

In 1783.

And of the REMEDIES RECOMMENDED, for
the CURE, with OBSERVATIONS.

By THOMAS KIRKLAND, M. D.
Member of the Medical Society at Edinburgh.

ASHBY-DE-LA-ZOUCH:

Printed for, and sold by J. BEADSMOORE: — may
be had of Mr. GREGORY, *Leicester*; and Mr. DREWRY,
Derby.



ERRATA.

The Author not having an opportunity of examining the proof sheets, begs the reader to make the following alterations with his pen.

PAGE 3, line 1, after disorder add of. l 8, after treatment put a comma. p. 6, l. 14, *dele* and. p. 7, l. 1, for mordid *read* morbid. l. 17, for appearent *read* apparent. p. 8, l. 18, *dele* the semicolon after the word and, and put a comma after the preceding word body. p. 10, last l. for fymtons *read* symtoms. p. 12, last l. for in much a shorter *read* in a much shorter. p. 15, l. 8, for Welfrod *read* Welford. l. 10, comma after place. p. 18, l. 1, after uncertain *read* and. p. 19 l. 1, for aggrivated *read* aggravated. p. 20, l. 6, for fymtons *read* symtoms. p. 24, last l. after half add of. p. 27, for soar *read* sore. l. 19, for after *read* often.

ADDRESS.

To

The GENTLEMEN GRAZIERS
and FARMERS.

GENTLEMEN,

BEING to the best of my knowledge, the only person of the faculty, who examined the dead cattle at Caulk, and attended to the different stages of the distemper that killed them; I beg leave to offer you my observations on this subject, with a view of making known to you, as far as I have had opportunities of learning the nature of a malady, hitherto not well understood. You will readily discover, from what is said about

about the appearances upon dissection, that the disease in general will become incurable in a few hours after its commencement, and the chief hope is in preventing its happening. This indeed is the most desirable part of medicine, and in the present instance it seems capable of being accomplished. I sincerely wish you success in this pursuit.

And am

Gentlemen

with great respect

Your most humble Servant,

Ashby, September

5th. 1783.

THOMAS KIRKLAND.

An account of the distemper
among the Horned Cattle at
Caulk in 1783.

NOTWITHSTANDING the disorder
which we are going to treat is nearly,
if not quite stopped; yet as accounts may be
given of it, which have a tendency to mislead;
it seems necessary to describe the appearances
upon dissection, the progress of the disease,
and the events of different methods of treat-
ment, that we may be less alarmed in future,
and be provided with means, to prevent the
fatal effects of a malady, which at different
times has visited one part or other of this
Kingdom.

About the middle of August 1783, *Sir
Henry Harpur Baronet* lost three of his milk-
ing

ing cows, in three successive days, the first dying suddenly, and the others day by day, in a few hours after it was discovered they were ill. A fourth and fifth dying in the same manner in another pasture soon afterwards, I received a Card from *Sir Henry*, desiring me to examine the carcase, to discover if possible the nature and seat of this disease, in hope of finding out a proper remedy.

Upon seeing the body opened, I found the membranes (or inward coat) which lines the windpipe, amazingly inflamed and thickened ; and this inflammation was extended to the lungs in a violent degree. All the membranes and spaces in and about the lungs, were loaded abundantly with a yellow lymph, the inside of the chest was in a similar situation, and the liver especially about the gall bladder, shewed signs of being affected. Nor can there be any impropriety in calling this malady, a gangrenous inflammation of the lungs, using the word Gangrene in its original sense, which signifies the height of inflammation

Inflammation, where the parts &c. are not actually corrupted, but corrupting.

At this time, there was not the least suspicion of these appearances being occasioned by infection, nor did the blood discover any signs of putridity, being rich and thick. The venal blood was fizy, and what is called inflamed. The blood in the arteries was red and very compact, which must of course happen in the state these beasts were in, for they were fat, strong, and vigorous; or in the situation physicians call a tense fibre. The weather was excessive hot, and I concluded that the mischief described, arose from a junction of the above causes, and to prevent the consequence, (Gangrene) I advised bleeding, purging, nitre, diluting liquors, and screening the beasts from the heat of the sun: for when gangrene is the consequence of extreme inflammation, as often happens, the method which lessens it is dictated by common sense; and bleeding and purging stand foremost, among the remedies recommended by

by the ablest physicians for this purpose. Neither did experience forbid this practice, in the inflammatory state of this disease, for when three cows out of the dairy, and two in another pasture had died unassisted, the remaining thirty one in the dairy were bled and purged, and the whole of that herd have ever since remained well, except one, which at three weeks end was seized with a swelling in her jaw and died. So fully persuaded were those who had the management of the cattle, of the utility of this practice, that they imagined it would intirely stop the progress of the disease; ~~and~~ they had reason to believe that it was prevented by this method, and it at least seems certain that, these evacuations were no way injurious. Besides, it is well known, that unloading the gall bladder and its ducts, is serviceable where the bile is tainted, because nothing more powerfully aggravates febrile disorders; and the glaubers salt which was the purge given, had most probably a good effect, by occasioning an evacuation

vacuation of morbid bile. Indeed, these seemed to be the only possible means of giving relief, except altering the seat of the disease, for if inflammation and gangrene of the lungs were not prevented, a recovery was impossible.

An unexpected event however happened, which altered the seat of the malady, and though it cured several, it ended in the death of others; for the wound made by the fleam in bleeding, inflamed, swelled, and in some turned to a gangrene. Upon this, an ounce of bark and three drachms of spirit of sea salt, in a decoction of herbs which resist putrefaction, was ordered every three hours; and ten doses I am informed were given to one cow, but without any apparent effect, except that she became, what cow leeches call maw bound, and made it necessary to give an aperient. I saw her. The brisket and neck were swelled to an enormous size, and a gangren-

ous Emphysema * extended itself down the sides, and almost over the whole body. Upon incisions being made, the fat membrane that lies immediately under the skin, was found to be loaded with a yellow gangrenous lymph; and it was discovered by making incisions to apply dressings, that all those which died from these swellings, were affected in the same manner. Others however were under more favorable circumstances; for though the parts about the wound swelled violently, and threatened a gangrene, yet by fomenting and applying poultices, the disorder became local, a gathering came on, and they recovered: and what should be observed, the swelling of the neck after bleeding diverted the disease from falling on the lungs to the outside of the body, and thus by relieving the vital parts, gave time for something to be done; for several days now passed, before

* A windy swelling accompanied with more or less acrimony in the stagnating juices,

Among the HORNED CATTLE. 9

before the disease ended fatally in those that died. The account I have received from those immediately concerned in the business is as follows.

“ Three dairy cows first died, the rest thirty one in number, were then bled and purged, and these all remained very well for three weeks after, at which time one of them was seized with a swelling of the jaw and died, but no symptom of disease has since appeared in any of the others.

“ August 21st. Four cows and eight heifers that went in the park were bled, three of which died with a swelling in the neck, that came upon the wound.

“ The same day fourteen cows and fifteen calves were bled, and five of these also died, with a swelling about the wound in the neck.

“ August 22nd. Twenty one cows were bled in Repton Park, one of which only died, and the

“ this with a swelling about the wound in
“ the neck.

“ August 23d. Twenty six cows and heifers
“ were bled at Swarkston, and one of them
“ died of a swelling about the wound in the
“ neck.”

One hundred and nineteen were bled in
all, ten of which died of swelled necks.

One died three weeks after she was bled
with a swelled jaw.

And eight died that were not bled.

So that one hundred and eight that were
bled, were on the seventh of this present
month alive and well, those that died with
swelled necks, did not die in consequence of
a loss of blood, but from the violence of the
swelling &c. and it may be observed that
none escaped, but those from which blood
was taken.

Regarding the symptoms of this disease, few
of

of them could be collected in the beginning, owing to the sudden death of the cattle. One cow shewed a difficulty of breathing in the morning, only upon being stirred hastily about, she appeared to be choaked, and the usual methods were taken to unchoak her, which discovered an inflammatory swelling in the upper part of the throat, and she died in a few hours. Those I saw had an acute fever, breathed and gulped with great difficulty, their eyes were somewhat inflamed, and watery, they seemed willing to inspire as much air as possible, appeared to be very full of pain, and had not power to cough with freedom, but the swelling in the upper part of the throat, though it did not happen to all, was esteemed the characteristick of the complaint. All which accounts for the sudden deaths just mentioned; for in inflammations of the lungs, being unable to cough, is a certain sign of the violence of the obstruction. In the human subject, suffocation upon dissection, has been known to be the consequence

quence of such a situation; and I can have no doubt, but those cattle which died suddenly, were strangled from the blood being incapable of passing through the lungs. One cow had seven quarts of blood taken from her, and though the disease was too far gone to admit of a cure, yet she lived several hours longer, than others under the same predicament which had not lost so much blood; owing probably to its torrent against the lungs being abated.

Various have been the opinions about the cause of this malady, but the most prevalent is, that it was owing to infection, for upon the swelling which happened to the wound appearing, it was imagined the beasts were inoculated by the fleam. But though this is possible, yet the wound had not the appearance of inoculation, for upon examining, I found the swelling did not begin in the *lips* of the wound, and that in many instances, it increased to an enormous size, in ^a much ~~5~~ shorter

shorter time than inoculation could have taken such effect. Very acrid juices will often circulate long in the body, without inconvenience, provided they meet with no obstruction, but upon this taking place, their acrimony is increased by stagnation, and by irritating and inflaming they often bring on a train of horrible consequences. A man of a bad habit of body breaks his skin, the wound festers, and sometimes even a mortification is the consequence. And just so I apprehend the swelling &c. might arise from bleeding these cattle. Their juices were become acrid in the manner hereafter to be described, and stagnating at the wound, occasioned a swelling, and a determination of the disease to that part.

But if the disorder was taken by infection, a question arose, in what manner did this happen to the first beasts that fell? It was remembered, that a dead cow was brought from Mr. Kinsey's of Melbourn to the dog kennel, and

and upon inquiry it appeared, that she died with a swelling in the upper part of her throat; but though she had long lived among her companions, being an old dairy cow, she infected none of them, for no one in the herd has been ailing since. Nor did it satisfactorily appear that her flesh could affect the dairy cows at Caulk, which were the first that were seized, their pasture being along way from the kennel, without supposing that some of this flesh was brought up to the dairy house, but upon strict inquiry, it did not appear to have happened, or that the cows were ever near any of it, wherefore the whole about infection being spread this way, amounted to nothing more than mere conjecture.

For my own part I imagine it to be a distemper of a particular kind, as it now and then shews itself among the cattle in different parts of the Kingdom. Every one knows that sore eyes sometimes prevail, at other times
sore

fore throats which are sometimes inflammatory but at others putrid. At one time coughs are troublesome, at another a pleurisy, or inflammations of the lungs, &c. and why may not the same happen to cattle? The disease was not confined to the neighbourhood of Caulk, but shewed itself near the same time at Welfrod in Northamptonshire forty miles distance, of which Mr. ORTON *Surgeon* of that place, has very obligingly given me the following account, in a letter dated the 16th of this month.

“ The disease which has been among the
 “ cattle here, seems generally to attack the
 “ head, attended with a copious discharge of
 “ saliva from the mouth, running at the nose,
 “ a swelling chiefly in the throat, intense
 “ thirst in the beginning, and at last a diffi-
 “ culty of swallowing and breathing. Some-
 “ times they are dull and stupid, others are
 “ remarkably wild and fierce, but the disor-
 “ der is seldom of longer duration than three
 “ or

“ or four days, and generally ends in death. ”

“ Few or none have been attacked since the
“ cold weather came on. ”

In a conversation lately with a very sensible grazier upon this subject, he informed me that he very well remembers this disorder appearing about forty years ago, at Dalby in the further parts of Leicestershire, being called the *Gangrenous Gulp*y. Most, or all of the beasts that were seized with it, died of swelled throats, with a difficulty of breathing, but the disorder disappeared in a short time, without extending into the neighbourhood.

There are many other similar accounts to be met with, shewing this to be a particular kind of disorder, happening probably from the habit of the cattle, and a particular state of the air, &c but as different constitutions of seasons, produce differences even in the same disease, (witness the small pox,) we shall confine ourselves chiefly, to that which
has

Among the HORNED CATTLE. 17

has lately presented itself to our notice, which appears in the beginning to have occasioned death by an inflammation in the lungs.

It must be very evident from what has been said, that both great inflammation, and great acrimony were joined in this disease, owing probably to the causes assigned. Nevertheless, tho' *Kinsey's* cow did not infect her companions, yet a disease thus brought on, may I think be propagated by infection, from one cow to another; and as all inflammatory fevers, sooner or later if not removed, are liable to become putrid, there cannot be any doubt, but the carcasses and skins of these animals, affected in the manner described, would soon after death, be capable of spreading this, or bringing on a new complaint; but which, or if either happened in those said to be infected this way, I know not, having seen no one that could inform me with certainty. Many of the reports which have prevailed, I find to be groundless, others uncertain,

tain, ^{and} upon strict inquiry it does not appear, that any animal except horned cattle, have been affected. Nor could we learn, whether this mode of infection took place at Caulk, though a few of the cattle in the beginning, were skinned and given to the dogs; but no sooner did suspicion of contagion take place, than those that died were directly buried whole.

There is a singular circumstance however in this complaint, which cannot pass unnoticed, which is, that it confines itself nearly to the spot where it begins. We have already seen what my Leicestershire friend said upon this occasion. It has not spread to any extent that I hear of in Northamptonshire. By letters before me, I am informed it has lately appeared in distinct places in Nottinghamshire, the cattle had swelled necks, and died suffocated in a few hours, and yet the neighbourhood scarce knew at the time, that such a disease was existing. When it happened in a Vale
near

near Southampton with aggravated circumstances, in 1770, * and occasioned great mortality, it did not spread itself beyond the Valley, which is about fourteen miles in length, and eight or ten in breadth. Nor has it been experienced at any great distance from where it began in this neighbourhood; whence it seems evident, that if it at any time happens to return, a general alarm may be avoided, by proper caution, in preventing communication betwixt the cattle that are diseased and sound.

Now regarding the cure, very little seems capable of being done except we can prevent the disease, for when it has made any considerable progress upon the lungs, it seems to be incurable, and the best way is to kill and bury the beasts immediately, to avoid untoward consequences, unless in an early stage,
we

* This is from a very good news paper account at that time, but having only seen this paragraph which was then cut out I do not know the paper it belongs to.

we first try what *Jam's's* powder will do; which I am told has been serviceable in similar instances. * But surely, from the stopping of the disease after bleeding in the dairy cows, we are authorised to recommend the same practice in future, before the symptoms of infection appear. In another part of Mr. ORTONS letter, "it appears that few remedies were used, except bleeding, which did no service in an advanced stage of the disease, but on the contrary bleeding has been practised on whole herds as a preventative, and none have been seized since," and is it not reasonable to suppose that by preventing inflammation we also prevent its immediate consequences. It is true a *Gangrenous* inflammation, may be said to have a putrid tendency, or even to be a putrid disease, but there is not any thing which differs more, than the different kinds of putridity, all putrid diseases are not attended with great debility, nor

* There is a sort sold for cattle.

nor is the disorder we are speaking of, the same as those putrid or malignant fevers, in which bleeding and purging are found to be injurious, an account of which it would be superfluous to enter into, as these disorders, and all the doctrine belonging to them, are very well known.

Seeing the disorder was prevented from falling upon the lungs, by the irritation in a particular part, which happened in consequence of bleeding, and the relief it afforded to some of the cattle; is it not reasonable to suppose, the practice of pegging, so frequently recommended in similar instances, may be serviceable by way of prevention? I am assured that many have been saved by this method, and hastening a discharge of matter from the part, by proper dressings. In one account I have received, the chief dependance was in buttoning in the dewlap with Hellebore or Bearsfoot; but these irritating substances can only be safely applied, (if we
may

may judge from the wound in bleeding,)
sometime before any symptoms of disease appear. If remedies of this kind are used on the approach of the disease, rowels or rather setons &c. seem preferable, and knowing what is to be expected, the danger may be provided against, by applying early, pledgets of digestive, and over them a softening pultice with extract of lead. Nor should these drains be closed up of some time, for reasons that will presently appear.

Besides these, as preventatives, Tar, Assa-fœtida, Sulphur, Camphor, either by themselves or mixed together, have been rubbed upon the noses and rumps of the sound cattle, but though the ascertaining facts about the effects of such means, is very difficult, yet they carry the appearance of being proper, and it is to be said in their favor that they can do no harm.

If an external *Gangrene* is come on, incisions
must

must be made into the affected part, that the dressings may have proper effect. This is the state in which fomentations made of worm-wood, century, sage, water and vinegar and the like, should be used, and spirit of sea salt diluted with water, (four or five parts of water to one of spirit) at this time deserves preference, being laid into the incisions with lint, over these the stale beer poultice should be applied till digestion comes on, and then the common digestives may take place.

But internal medicines in this situation must not be neglected. At first while the inflammation is considerable, the spirit of sea salt alone, three drachms to a dose, in a strong decoction of rue and chamomile flowers, may be given every three or four hours, to which at the end of twelve hours or thereabouts, an ounce of bark may be added; and if the beasts becomes costive, the bowels may be occasionally opened, with four ounces of lenitive electary, and an ounce of epfom salts in
gruel.

gruel, repeated if necessary till it has the proper effect. Vinegar also in gruel has been found serviceable in similar instances, and ale wort in a state of fermentation seems to be a good remedy.

But notwithstanding bleeding and purging seem to have prevented death happening by suffocation, they are not to be depended on, as an absolute cure, for we see one cow died three weeks after, and two more of those which apparently got well, above a month ago, are lately dead; owing either to a fresh seizuer, or what I am rather inclined to believe, to a sharpness or a *Gangrenous* acrimony in the juices, because I have known such a disposition in the human subject, after lingering six weeks, sometimes shew itself in a mortification of one part or other of the body, and proper correctives should now therefore take place. For which purpose, soon after bleeding, &c an ounce and half of salt petre, and a drachm and half^{of} oil of vitriol, in a pint and half

half of water, given once a day has been found beneficial. Others have great dependence on a decoction made, of three pints of water, one handful of burnt salt, one handful of rue, and two handful of wormwood, boiled to a quart, to which an ounce of diapente may be added, as supporting the power of the nerves after four or five days should be attended to. But when either of the above remedies have been given about a week, and there is no reason to apprehend danger from inflammation, the bark and spirit of salt once a day, and keeping the bowels open if necessary for eight or ten days longer, should have the preference, if we may be allowed to reason from analogy. The cattle may be kept up a few hours in a day, and made to drink if possible, water or gruel with verjuice or vinegar in it, and then to be turned out upon dry land. The practice long used of giving mashes of malt, oats, &c. and of throwing before the cattle cabbage, turnips and carrots, ought to have preference I believe to other food.

RECAPITULATION.

From the whole it appears, that the disease treated of, begins with an inflammation of the *Mucous Membranes*, * lining the nostrils, windpipe, and lungs ; that unless this is prevented or stopped very early, death is the consequence, and that bleeding and purging have had a desirable effect. Blood therefore should be taken away, cooling purges given in proportion to the strength of the beast, and in the very beginning of the complaint, *James's powder* for cattle may be tried; but it cannot be expected to do service, when the symptoms of oppression in the chest are considerable.

Rowels &c may be applied by way of preventive, and if a *Gangrene* happens to seize the part, fomentations are to be used, and incisions made, which are to be dressed with
spirit

* These passages are lined with a membrane, which is covered with a mucus or slimy moisture to defend it from irritation and are hence called *Mucous Membranes*.

spirit of salt and water and over these a stale poultice. The same spirit must be given inwardly by itself at first, as directed, and afterwards along with the bark; but the method recommended to prevent this accident, should not be omitted, if any untowardness in the sores appears. But supposing no *Gangrene* to shew itself, the drinks at page 24 and 25 should be given.

The following preservative has been commonly used.

Tar two pounds, assafoetida and sulphur each four ounces, make the whole into an ointment, by dissolving the gum in a little water and stirring them well together. Besmear the nostrils and rump of the cattle once a day.

Nor can there be any inconvenience in these attempts, to prevent the disorder from ending fatally, if the cautions so often given to avoid its spreading, be duly observed; and we must again observe, that if notwithstanding the means advised, it does come on, and makes any considerable progress, we think it
is

is incurable, and that the order of Council dated September 1783 should be strictly observed.

POSTSCRIPT.

Since the last cow died at Repton Park, all the rest of the herd have been drenched with the *Burnt Salt* and *Diapente &c.* mixture, which keeps their bowels gently open, without at all taking them off their food, and they are all now very well. Should it prove successful in future, the process to prevent this complaint will be reduced to a very narrow compass. First bleed and purge, and give the nitre medicine for three or four days, and then the rue and diapente or the bark and spirit of salt, with burnt salt, for a week or ten days, or a fortnight longer, for this aperient seems preferable to those before recommended; as cheap, and always at hand.

I have omitted to observe, that the cows which died in the common way, did not abate of their milk till the meal before their death, when they were actually dying, which being suffocated readily accounts for. Whereas had their disease been brought on by putrid contagion, the abating of milk would have been one of the first symptoms, as experience sufficiently proves.

