Cambridge 19th July. 1802 Learly accept my thanks for the four ted accounts I your second experiment respecting the prophylactic power. I the there pock! I thought it would conduce to good to give I to the public through the Centinel. I wrote a few lines on the same paper to the printer personally, which he also printed a mean to publish in the Centime the week a prece on the abound notion, how industrionely depended that the line pook will only secure aprion for a short time. Perhaps it would annuar a good purpose and you to have it espeed into me offerer Portsmorth par for this doctrine is spreadiffer of wide, + discourages in a The Mr. Smith Swite byon about inventiting is the nother of William P. Smithy and as he has litely been unfortunate I could with not to be lacking in attention to her or him to be employed he. & will you please totale her that I alled at herhouse the day after the left Boston, and finding the west I gone had desired you to call on her in my behalf.
All can reciprocate this service, please to command your hemble fent. Benjul attehoules

man Spalding Portsmonths. and Jampshire

Extract of a Letter from Dr. J E N N E R, dated

LONDON, February 24, 1802.

THE most arduous task I have lately had to perform, has been making Practitioners sensible of the absolute necessity of attending to the QUALITY of the virus employed. You will receive with this some Rules compressed into a small space."

They are these which follow:

INSTRUCTIONS FOR

Vaccine Inoculation.

E T the vaccine fluid be taken, for the purpose of Inoculation, from a pustule that is making its progress regularly, and which possesses the true vaccine character, on any day from the fifth to the eighth, or even a day or two later, provided the efflorescence be not then formed around it. When the efflorescence is formed, it is always most prudent to desist from

taking any more of the virus from that pustule.

To obtain the virus, let the edges of the pustule be gently punctured with a lancet in several points. It will gradually ooze out, and should be inserted upon the arm about midway between the shoulder and the elbow, by means of a very small oblique puncture. A little red spot will appear on the punctured part on the third day, if the operation succeed, which on the fourth or fifth becomes perceptibly vesicated. It goes on increasing 'till the tenth day, when it is generally surrounded by a rose-coloured efflorescence, which remains nearly stationary for a day or two. The efflorescence then fades away, and the pustule is gradually converted into a hard glossy scale, of a dark mahogany colour. These progressive stages of the pustule, are commonly compleated in sixteen or seventeen days.

A fingle pustule is sufficient to secure the constitution from the small-pox; but as we are not always certain the puncture may take effect, it will be prudent to inoculate in both arms, or to make two punctures in the same arm, about an inch and a

half afunder, except in very early infancy, when there is a great susceptibility of local irritation.

If the efflorescence surrounding the pustule should be extensive, and occasion much local heat upon the arm, it may be cooled by the repeated application of pieces of folded linnen dipped in cold water; or still more expeditiously by a strong solution of the aqua lythargyri acetati* in water; an ounce, for example, of the former in five or six of the latter. If the scab should at any time be prematurely rubbed off, the part may be occasionally touched with the undiluted aqua lythargyri acetati.

Vaccine virus, taken from a pustule, and inserted immediately in its fluid state, is preferable to that which has been previously dried; but as it is not always practicable to obtain it in this state, we are compelled to seek for some mode of preserving it. Various means have been suggested, but from the test of long experience it may be asserted, that preserving it between two plates of glass is the most eligible. Let a piece of common window glass be cut into squares of about an inch each, so that they shall lie smooth when placed upon each other. Let the collected vaccine sluid be confined to a small spot (about the size of a split pea) upon the centre of one of these glasses; which should be suffered to dry in the common heat of the atmosphere, without exposure to the heat of sire or the sun. When dry it should be immediately secured by placing over it the other piece of glass. Nothing more is necessary for its preservation than wrapping it in clean writing paper.

The virus, thus preserved, when wanted for the purpose of inoculation, may easily be restored to its sluid state by dissolving it in a small portion of cold water, taken up on the point of a lancet. It may then be used in the same manner as when

just taken from a pustule.

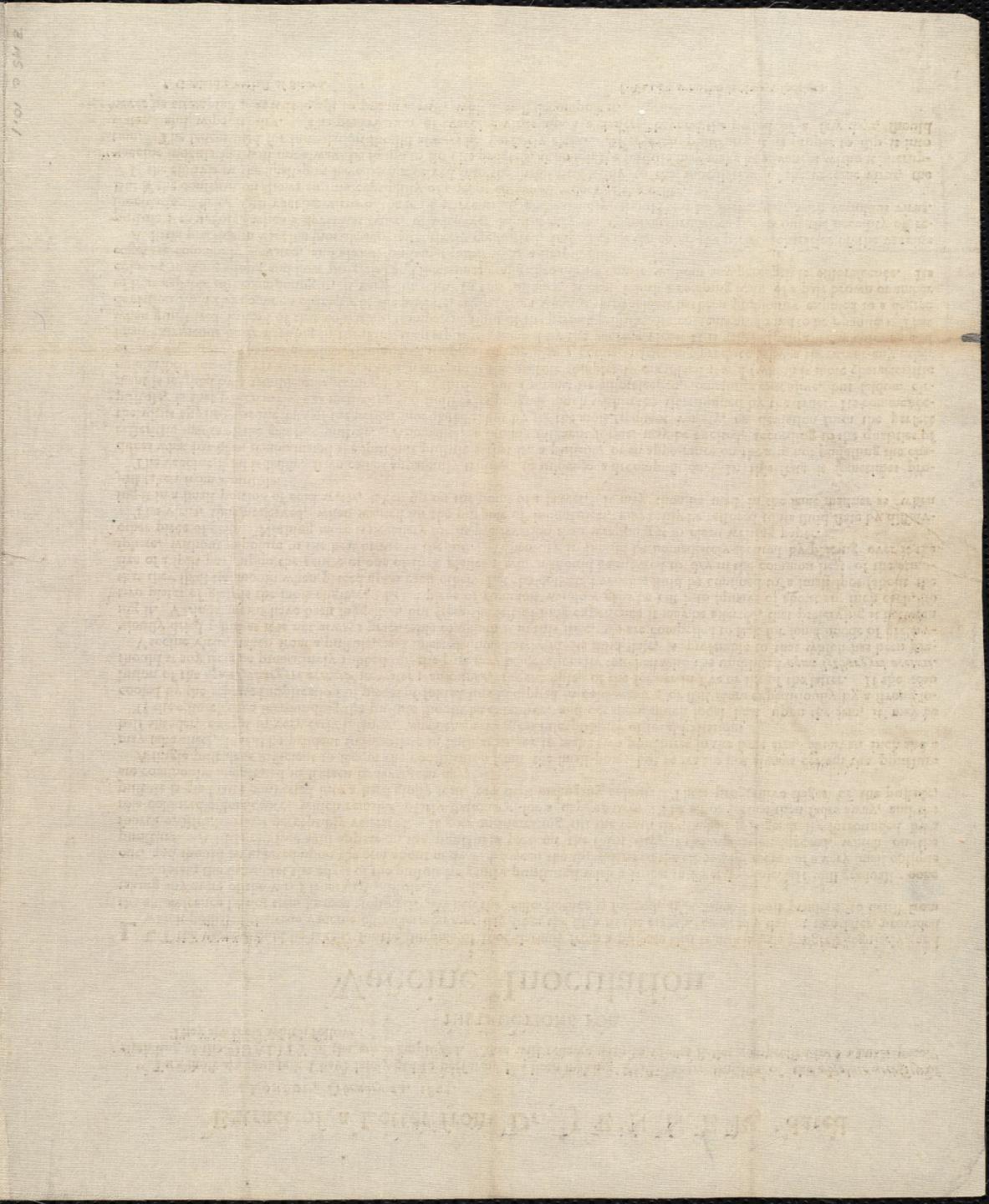
The vaccine fluid is liable, from causes apparently trisling, to undergo a decomposition. In this state it sometimes produces what has been denominated the spurious pustule; that is, a pustule, or an appearance on the arm not possessing the characteristic marks of the genuine pustule. Anomalies, assuming different forms, may be excited, according to the qualities of the virus applied, or the state of the person inoculated; but by far the most frequent variety, or deviation from the persect pustule, is that which arrives at maturity, and finishes its progress much within the time limited by the true. Its commencement is marked by a troublesome itching; and it throws out a premature efflorescence, sometimes extensive, but seldom circumscribed, or of so vivid a tint as that which surrounds the pustule completely organized; and (which is more characteristic of its degeneracy than the other symptoms) it appears more like a common seltering produced by a thorn, or any other small extraneous body sticking in the skin, than a pustule excited by the vaccine virus. It is generally of a straw colour; and when punctured, instead of that colourless, transparent fluid of the persect pustule, its contents are found to be opaque. That deviation from the common character of the pustule, arising from vaccine virus which has been previously exposed to a degree of heat capable of decomposing it, is very different. In this instance, it begins with a creeping scab, of a pale brown or amber colour; making a long and slow progress, and sometimes going through its course without any perceptible efflorescence. Its edges are commonly elevated, and afford, on being punctured, a limpid fluid.

A little practice in vaccine inoculation, attentively conducted, impresses on the mind the perfect character of the vaccine pustule; therefore, when a deviation arises, of whatever kind it may be, common prudence points out the necessity of re-inoculation, first, with vaccine virus of the most active kind, and secondly, should this be inessestual, with variolous virus.

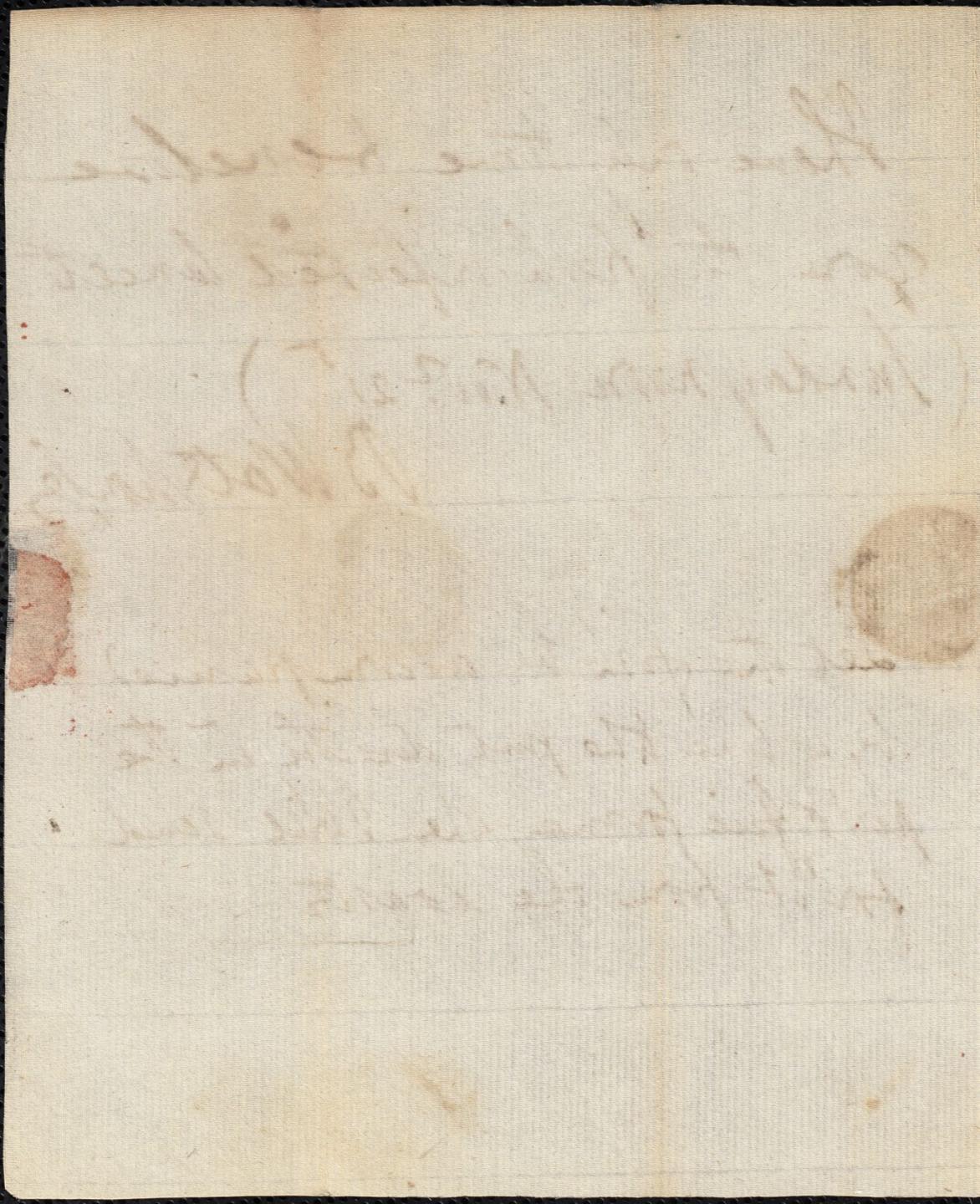
But if the constitution shews an insusceptibility of one, it commonly does of the other.

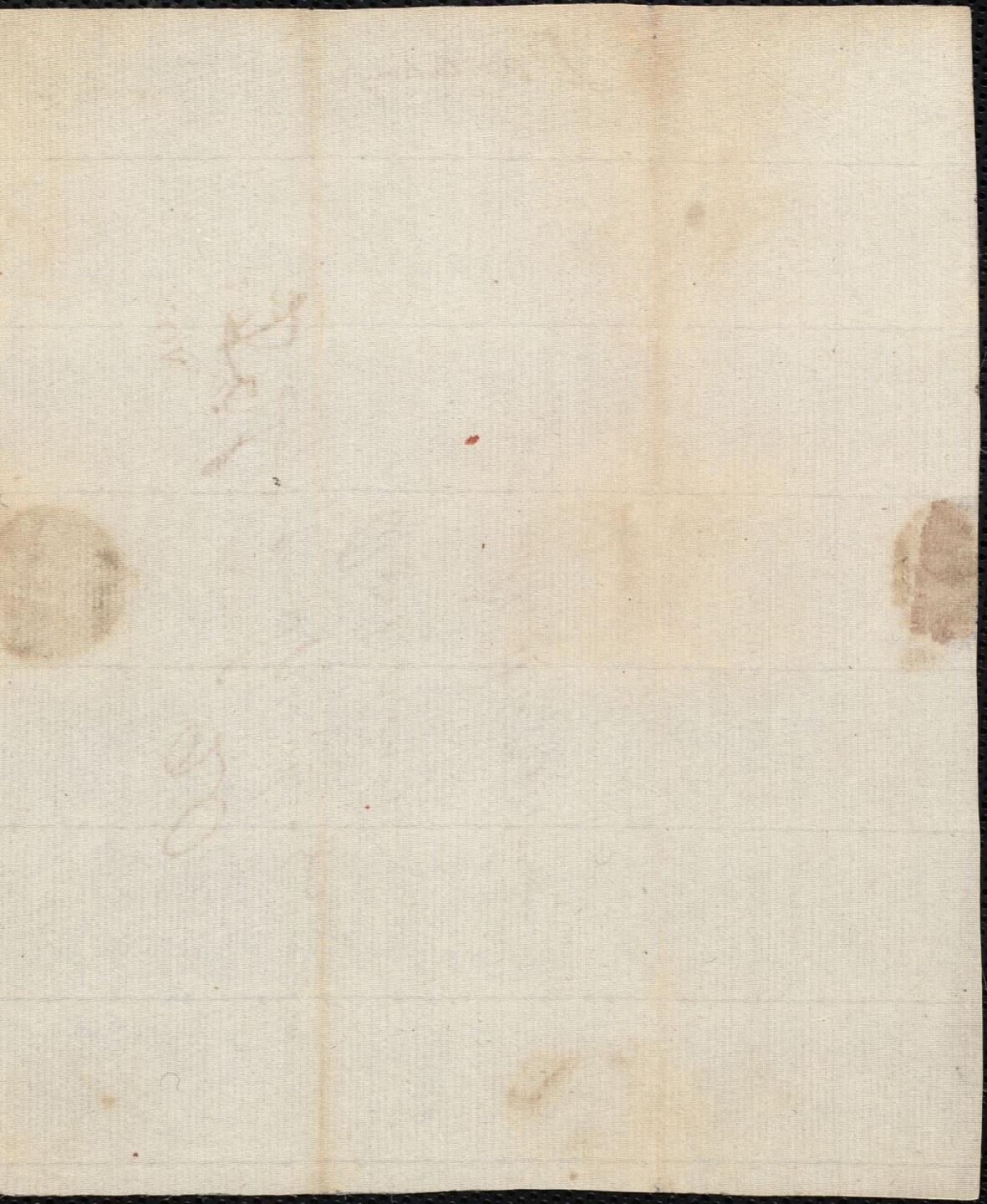
If the effluvia of the small-pox have been received into the habit previously to the inoculation of the vaccine virus, the vaccine inoculation will not always be found to stop its progress, although the pustule may make its advances without interuption. The lancet used for inoculation should always be perfectly clean. After each puncture, it is proper to dip it into water, and wipe it dry. The preservation of vaccine virus upon a lancet, beyond the period of a few days, should never be attempted; as it is so apt to produce rust, which will decompose it.

^{*} Goulard's extract of Saturn.



Have only time Lenedoze you they post infected lancet (Inaday noon Nov? 215)
Blotshorfs Let the fish be accompanied by a live the put direithy in the portofice forme, when I vice send for it from the coasts.





1.01 0 she Dilyman palding Mortmonth N. Harphina

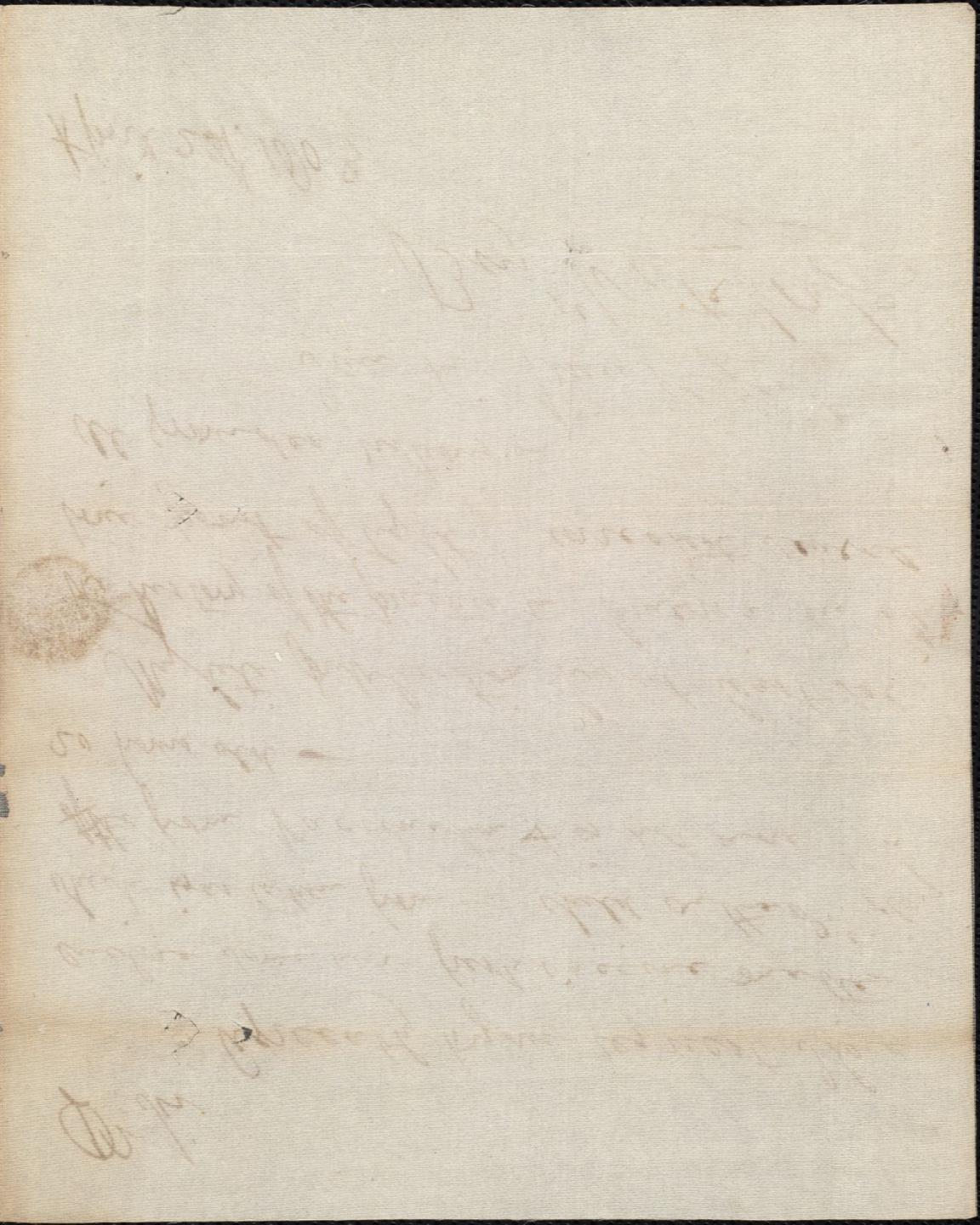
Cambrage 22. 100? 1010 Dearter the bearing this Mout is a res. - pectable hunter & Bookseller in Botton; Hey Helieve about printing a new edition of Thachers De - pensatory, and, of Imistake not, another workby the Same an thor. Whatever it may be, my respect for D' Thucker + Um wait, and the desire of for. -motory useful publications, induce me to re--command the latter to your notice & compilene. Sean seeme that I Thacker Tyon can benefit each Ther in your respective publications; and they you of the renforms of my growing mowait this letter of in. troduction to you. My family, such ala 1. as remain of it, de-- Ine to be remembered toyen, of yours. I correspond, as you know, more with medical men at a distance Than with those near tome. To hear of your health of prosperty will always give pleasure to your frend of hunble ferry Dyman Spalding Beny Waterhoufs.

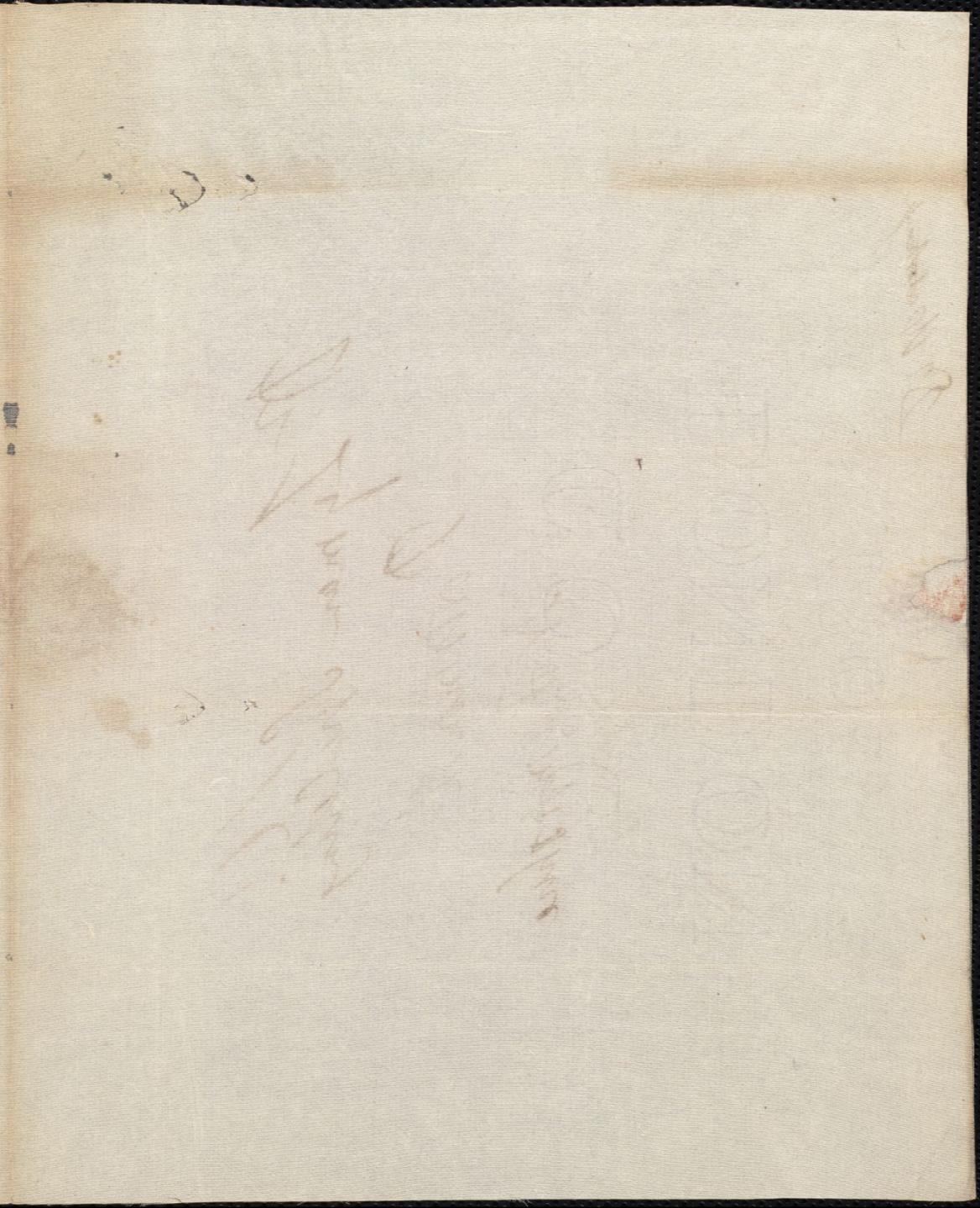
Mativeogh

Cambridge July 22 d' 100). Deartes Ithank you foryour communication res--pectuge the longlife of the Teal. I have friend the scal to communicate the time desease two months after it was taken from the arm. It seems to be the christalline state of the matter; but there thought or concerted that et occasioned more inflammation in the mistule produced. I would thank you to send me some of the matter on a quell enclosed in a letter that has been producedly the Ical un question, Ishould like to compare it with some taken at the usual period. I am be the helit of present -ing scabs, but have use them, when I can offair years lingrid matter - Hyon would send me a complet quille by the return of post you will oblige you for Hermble for D' pulding

New Hampshire De Matishance B 1/5 0 10.1

Mr. di I Represently byou request There enclose some more perhoaccine matter Thich igns taken from a child on the d. day He from Vacconetion & is not more than 20 hours old -My lete publication his at least set the history of the practice in America his et all provided nothery -Jan ki huntleter . By Montaling April 22/ 100 3





1.010 sha I Ly man Shalleting Pottsmonth N. Hampshie Judines M. C.

Cambridge Nov-4th 1002 agreeably byour reguest, There en--close a mall prother ofmatter I cannot tend more, at this time, having just sent force & Phi. - ladelphia, obere it is extend. There pust re--cemed a semilar request from - New york where it is also extend! and I have reason to thank there is none in Borton, my own cases excepted!! heather it seems is there any et Portmonth!!! How can practitioney be to in allentine. I am solged to here children tother the mountailed in Cambridge in order to keft up a continuity of the metter. - There pistre--ceried some on quills from Mr. Ning. 22 fenner has just sent me some in a solver tox. inlend art gold of exquente work narship with a complimentary unsurption by MorRingyou will find on reading losse that he has published in haste. He sent me the working freets

I southern the colored engraving of the pustate see copied it, but it fally varity short of the organe. De Coxe her just written tome for a fresh supply of matter. In haste Iremann All athorso your de P. S. flyon walk prouve me another quentat of such fish or you sentine last autumn , yout tirle settlette amount of it when we heet next, is hefore by sending the the till of it. We can get the ordering fish in Broston, but the best kind flage fish y noteary the found ber exp. stægnates for want of for x matter.



Ly Lyman Spalding Sortamonth New-Hampshire

Di Waterhange