

Surgical delusions and follies : a revision of the address in surgery for 1884 of the Medical society of the state of Pennsylvania / by John B. Roberts.

Contributors

Roberts, John B. 1852-1924.
Medical Society of the State of Pennsylvania.
Francis A. Countway Library of Medicine

Publication/Creation

Philadelphia : P. Blakiston, son & co., 1884.

Persistent URL

<https://wellcomecollection.org/works/b7fhjgm3>

License and attribution

This material has been provided by This material has been provided by the Francis A. Countway Library of Medicine, through the Medical Heritage Library. The original may be consulted at the Francis A. Countway Library of Medicine, Harvard Medical School. where the originals may be consulted. 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>

SURGICAL DELUSIONS

AND FOLLIES

JOHN B. ROBERTS

BOSTON
MEDICAL
LIBRARY

23

A

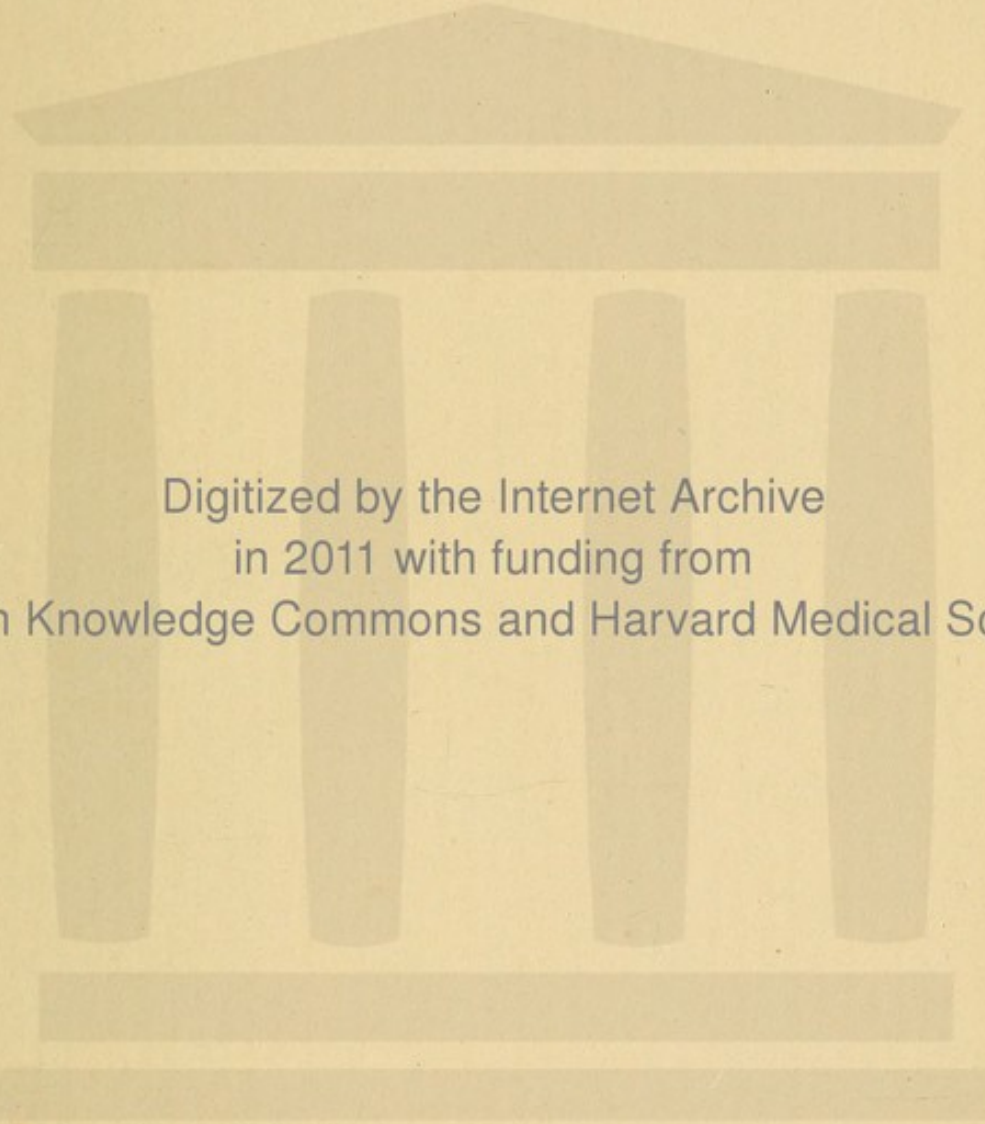
917

Handwritten:
J.P. 366
97 v.l. pan. 48
(2) 366
12

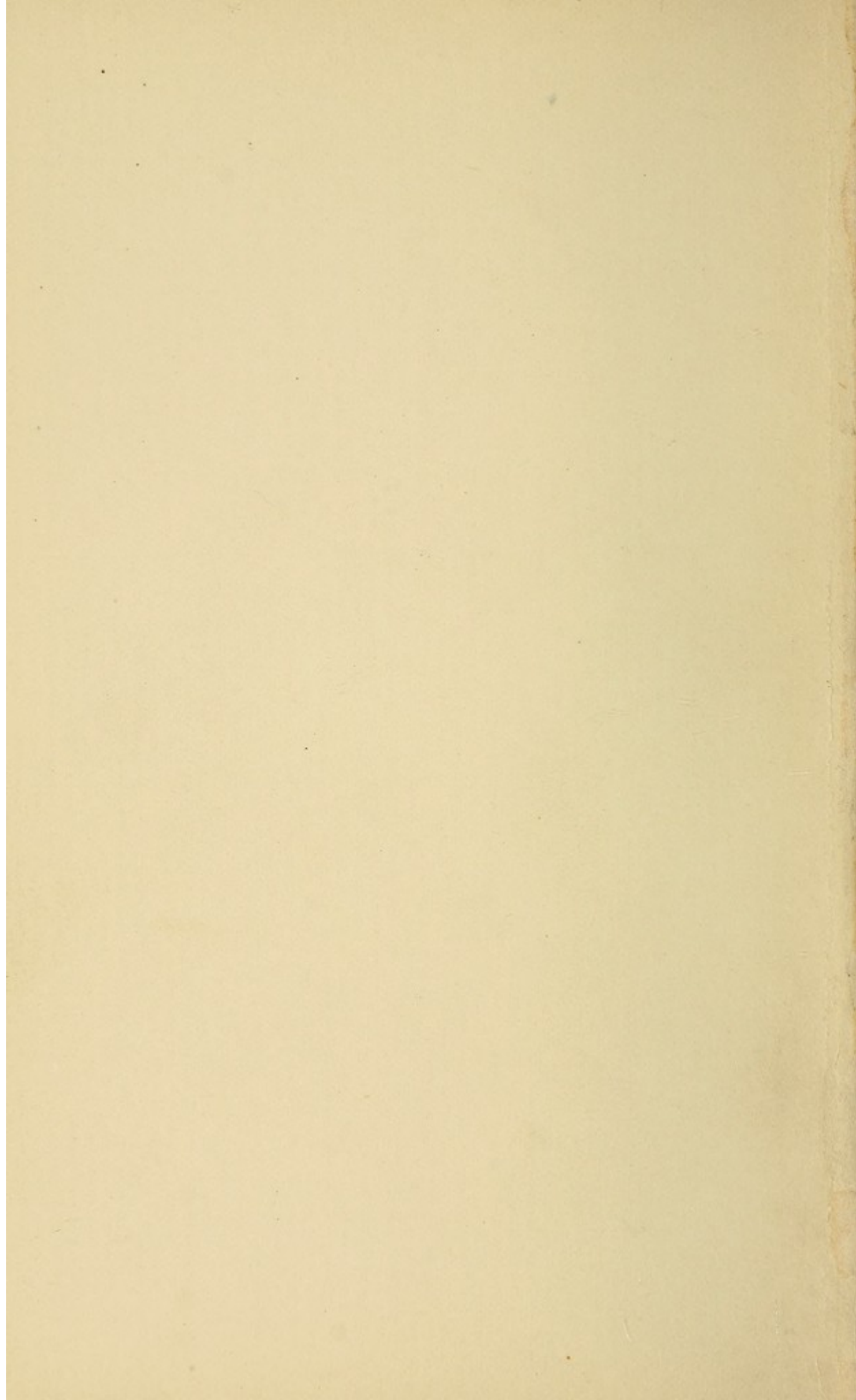
BOSTON
MEDICAL LIBRARY
8 THE FENWAY

Dr. J. B. Roberts

Handwritten text, possibly a signature or initials, in the top left corner.



Digitized by the Internet Archive
in 2011 with funding from
Open Knowledge Commons and Harvard Medical School



SURGICAL DELUSIONS AND FOLLIES.

A REVISION OF THE ADDRESS IN SURGERY FOR 1884
OF THE MEDICAL SOCIETY OF THE STATE
OF PENNSYLVANIA.

C BY
JOHN B. ROBERTS, A.M., M.D.,
PROFESSOR OF ANATOMY AND SURGERY IN THE PHILADELPHIA
POLYCLINIC, SURGEON TO ST. MARY'S HOSPITAL.



PHILADELPHIA:
P. BLAKISTON, SON & CO.,
No. 1012 WALNUT STREET.
1884.

232917

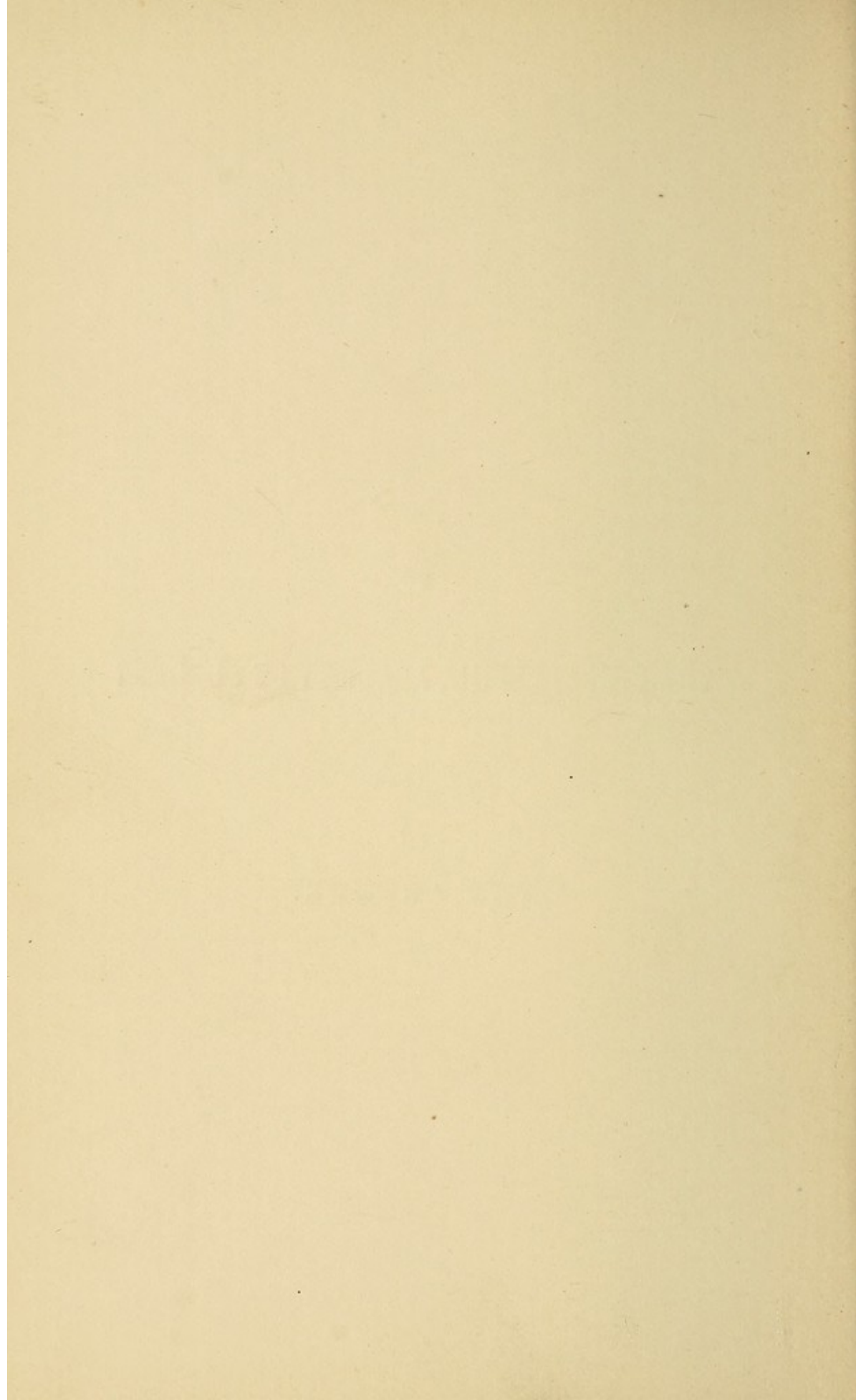
COPYRIGHT

By JOHN B. ROBERTS.

1884.

TO
THE PHILADELPHIA ACADEMY OF SURGERY

Inscribed
BY
THE AUTHOR.

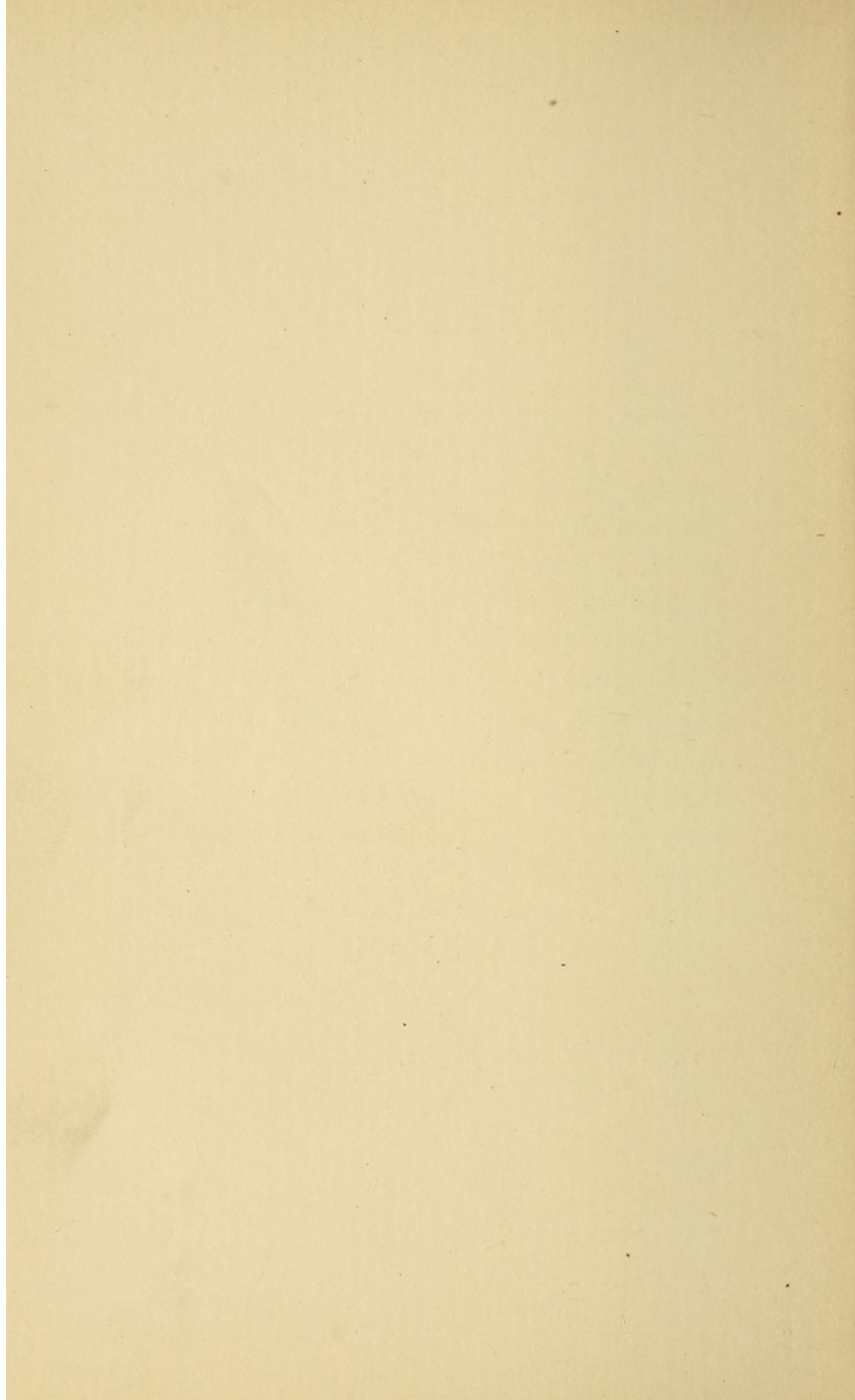


P R E F A C E.

THIS diminutive volume contains the Address which I was appointed to prepare for the thirty-fifth annual meeting of the Medical Society of the State of Pennsylvania, augmented by a number of paragraphs on kindred topics that have for the most part appeared in the columns of the "Polyclinic." Of those who honor these pages with perusal, many will doubtless find much that is trite; but others will perhaps discover that they have been suffering from some of the delusions or committing some of the follies described. Had I not believed that such was the case, the Address would never have been written.

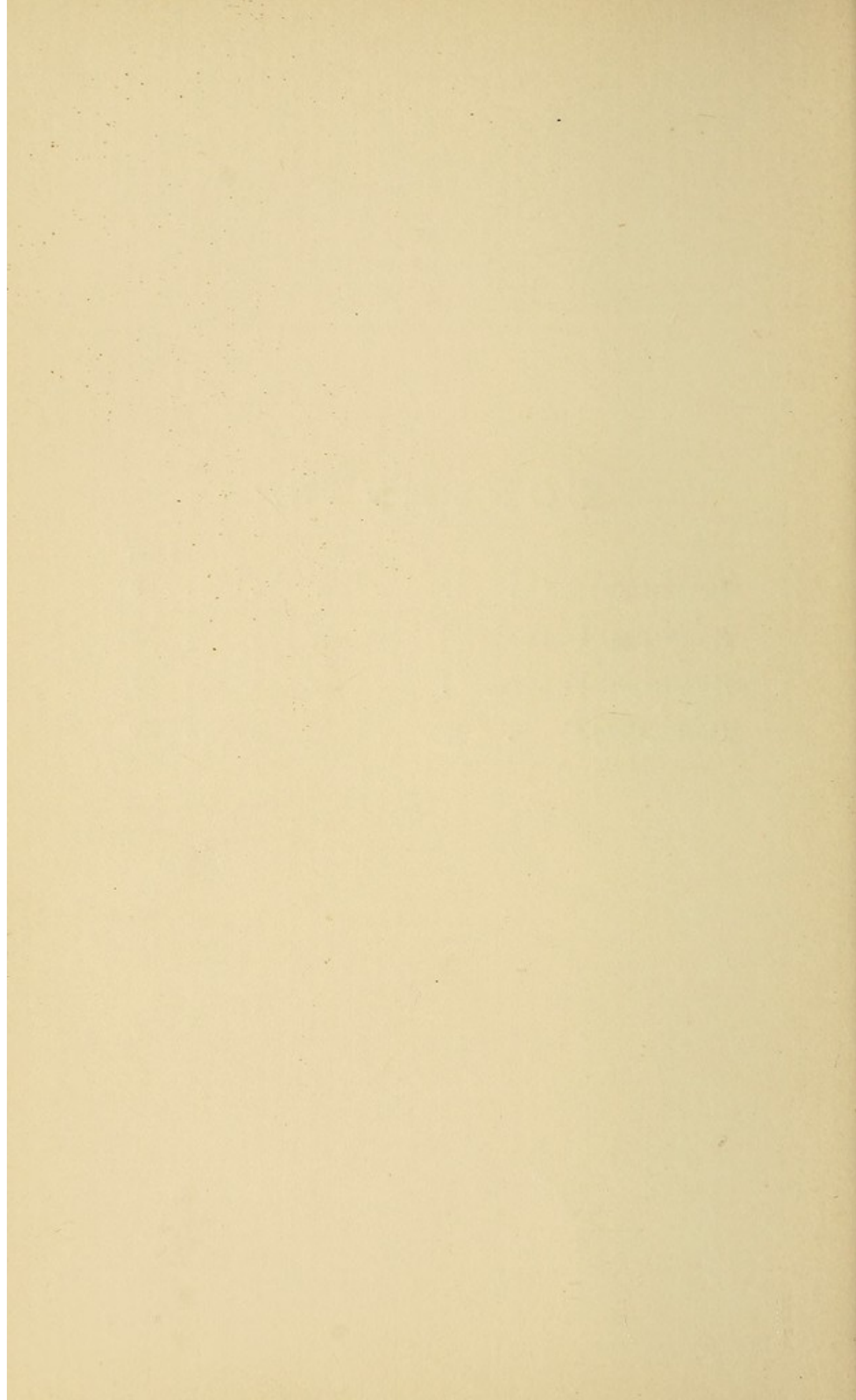
JOHN B. ROBERTS.

1118 ARCH ST. PHILADELPHIA,
August 1, 1884.



CONTENTS.

	PAGE
INTRODUCTION	9
SURGICAL DELUSIONS	12
SURGICAL FOLLIES	37
CONCLUSION	50



SURGICAL DELUSIONS AND FOLLIES.

INTRODUCTION.

THE appointment to prepare the Address in Surgery for this Society carries with it the duty, not to report a mere series of cases, nor to advocate a favorite method of operation or treatment, but either to bring to the notice of the members a recapitulation of what has been accomplished in surgical fields during the past year, or to discuss such generalizations in the science and art of surgery as may afford food for reflection, criticism, and discussion during the coming twelvemonth.

I shall follow the second path and endeavor, under the caption "Surgical Delusions," to formulate my personal appreciation of some of the doctrines held and taught by surgical practitioners of the day. I may not always teach orthodox creeds, but trust to convince you of my conscientious sincerity.

It was, I think, the Professor at the Breakfast Table who said that the learned professions had but recently emerged from a state of quasi-barbarism. If clinging to ancient fetiches with the superstitious awe of equatorial Africa is an evidence of barbarism, much of the surgery of to-day is indeed barbaric. Many surgical theories and procedures having become traditional, are accepted as true and correct, merely because reverence for antiquity or careless acceptance has not questioned their right to be classed as surgical facts. The present age, however, is an incredulous one; it not only demands accurate investigation of all such claims, but calls for a non-partisan expression of opinion that will dispel any surgical delusions that are found to exist.

The field for such investigation is large, for progress in surgery, as in other departments of science, has been greatly retarded by the influence of theorizing writers with monochromatic vision, by the example of non-seeing and non-looking devotees, and by the convincing effect of a constant repetition of false statements. I shall have time

to-day to present for your consideration only a few of many topics, but I shall select those which have interested me most and those concerning which I probably differ most widely from many in the Society.

SURGICAL DELUSIONS.

CHLOROFORM ANÆSTHESIA.

THE tenacity with which many cling to the delusion that chloroform is a safe anæsthetic is to me astonishing. The reports of numerous cases of sudden death, occurring subsequent to a few inhalations of chloroform by individuals in perfect, or almost perfect, general health, seem to fall on deaf ears when told to the man who can say "I never saw one die from it." Is one individual's experience to weigh against the physiological, the experimental, and the clinical experience of the whole world? Dare we employ chloroform instead of ether when recognized authorities state that in chloroform anæsthesia death occurs without warning in the hands of experienced administrators;¹ when some five hundred chloroform deaths have been reported;

¹ Trans. Med. Soc. State of Penna., 1880, p. 153.

when the physiologists Schiff, of Switzerland, and Dalton, of New York, reject it for ether in physiological experiment, because it unexpectedly kills their cats; when the Scientific Grants Committee of the British Medical Association has, after long investigation, asserted that chloroform is more dangerous than ether?¹ This last evidence is the strongest of all, because the profession of Great Britain was for many years the strong advocate of chloroform anæsthesia.

A mixture of chloroform and ether is, in my belief, as objectionable as chloroform alone, for it contains the dangerous ingredient.

Ether is, I admit, not an absolutely safe anæsthetic, and I have reported deaths from its use;² but it is far safer than chloroform.³ The adherence to chloroform as a generally used anæsthetic, when ether can be obtained,

¹ British Medical Journal, Dec. 18, 1880, p. 957.

² Philadelphia Medical Times, June 4, 1881.

³ The most recent paper on this subject that I have seen is that read at the meeting of the American Surgical Association, May, 1884, by Dr. B. A. Watson. See Medical News, May 3, 1884.

is in the face of such testimony criminal. The assertion that it is often impossible to produce anæsthesia with ether is, I am sure, the result of inefficient methods of administration. Ether, if administered as chloroform is given, is in truth a useless anæsthetic, but given properly it is efficient.

VALUE OF STYPTICS.

The belief that styptics are usually necessary in surgical practice is a delusion less dangerous to the welfare of the patient than that just discussed, but is given even more extended credence.

By styptics I mean those astringent chemical agents that are employed to stop bleeding, because of their tendency to produce contraction of the vessels and surrounding tissues, and because of their effect in inducing rapid coagulation of blood. Such agents are seldom, probably never, needed in the practice of surgery.¹ When occlusion of each bleeding vessel by ligation, torsion, or acupressure is not necessary (and it rarely is for arteries smaller than

¹ Philadelphia Medical Times, January 27, 1883.

the facial), moderate direct pressure, obtained by means of the dressings, is the only hæmostatic agent the surgeon need employ. Styptics are of no use to me; nor do I want many ligatures. The practice of delaying the progress of an operation while styptics are applied is unsurgical, unscientific, and sometimes actually deleterious. Let the surgeon proceed with the operation, stopping only to tie large arteries, and when he has finished, he will find that most of the small vessels have spontaneously stopped bleeding. A few ligatures, a few sutures, and moderate equable pressure by the bandage complete the process, without resort to hot water, alum, tannin, or that vilest of all styptics, Monsel's solution.

The objections to styptics are these:—

Their traditional reputation leads to their use when ligation, torsion, or acupressure is needed. If they fail to arrest the bleeding, valuable time has been lost, and the pasty clots often formed by their use render isolation and ligation of the vessels difficult. Many styptics, though not all, delay union by irritating the cut surfaces and inducing suppuration.

As they are not needed, and are objectionable, they should be discarded. In my hospital and college work moderate pressure and ligatures are the only hæmostatic agents I require. In truth, pressure will often take the place of many ligatures.

I often see many unnecessary ligatures applied in cases of operation ; but in these days of absorbable ligatures, the practice is not as objectionable as in former years, when many long strings, to act as setons, were left hanging out of the wound.

FATALITY OF SMALL HEMORRHAGES.

There is much misapprehension about the quantity of blood that an injured man, otherwise healthy, can lose with impunity. Many of you who often look with equanimity upon a parturient woman losing a pint of blood from the uterine sinuses, would start back in dismay at a man losing half or quarter that amount while you were removing a tumor. The probability is that in neither case will such hemorrhage do harm.

I do not advocate needless waste of blood ; and especially do I regret it in patients suf-

fering shock ; but I assert that there is an unnecessary fear of blood spurting from a few little vessels. Bleeding from the largest arterial trunk can always be arrested by less pressure than it takes to ring the electric bell in your hotel room. Hence, there is always sufficient force in your fingers to obviate fatal hemorrhage until strings of some sort can be obtained and applied as ligatures.

DANGER OF TREPHINING THE SKULL.

The dislike to make exploratory incisions in closed, the so-called simple, fractures of the skull, which is evinced by many surgeons, and the objection that others have to trephining, and thus opening the diploic structure, in open, or compound, fractures, are, in my opinion, delusions of a most disastrous tendency. To wait until symptoms of cerebral compression or inflammation have supervened, is to lose the most favorable opportunity for mechanical relief. I have seen such a Fabian policy followed by death, which early operation would probably have averted.

In using the term trephining I apply it to all methods of removing portions of the cranial wall, whether by the trephine, saw, burr of the surgical engine, gouge or cutting forceps.

The treatment of open and closed fractures of the skull should not be looked upon as very different; since, with the present improved methods of dressing wounds, the successful issue depends almost entirely upon the cerebral rather than the cranial phase of the injury. There are no displacing muscles, no danger of non-union, and very little liability to septicæmic conditions. Indeed, if such fractures were not in the vicinity of the brain, the surgeon would consider them almost trivial. The feature of closed skull-fractures that renders them so troublesome to the conscientious surgeon, is the obscurity that surrounds them. Hence, for four years past I have strongly advocated¹ the practice of making the closed

¹ Surgery in the Penna. Hospital, Phila., 1880, p. 264; Bryant's Surgery, edited by Roberts, p. 185; and Polyclinic, Philada., June 15, 1884.

fracture an open one by means of an exploratory incision, whenever there is the least suspicion as to the existence of depression and splintering. I have recommended this, I admit, when the incision disclosed no fracture whatever; but of what moment is a simple scalp wound compared with the risk incurred by the existence of an obscure, depressed, and splintered fracture of the skull? Who of us would hesitate to take the risk of such incision in the scalp, done under ether with proper surgical precautions? I could, on the other hand, if I had time, tell of life I have saved by such exploratory incisions.

In open fractures, operative means to remove comminuted fragments, to elevate depressed portions, and to get rid of splinters of the inner table thrust into the membranes, should be employed rather than avoided. It is better to err on the side of action than that of inaction. Careful manipulation and proper dressings, at an early stage, are sources of less risk than that which is incurred by the surgeon, who leaves unseen and unsuspected ragged fragments of the inner table thrust into the membranes and brain.

I am not a believer in the pathology that teaches that the symptoms which we call "compression of the brain" are due to displacing pressure exerted on the brain substance. How can a slight or even a considerable depression of a limited area of bone produce much pressure upon the brain substance? How can the usually limited extravasation of blood under the seat of fracture fatally compress the brain, which is of firmer consistence than the blood itself? A rapidly acting heart, after violent exercise, will throw enough additional blood into the cerebral vessels to produce more intracranial pressure than the ordinary depressed fracture. The complexus of symptoms called compression of the brain may possibly be the result of a disturbance in the local capillary circulation of the membranes and subjacent nervous tissue; but I cannot believe it to be due to compression or displacement of the brain itself. It is more probable that compression symptoms are the results of encephalitis, due to injury from spicules of the inner table, or to the irritation of intracranial bleeding.

As soon as the profession repudiates the idea that brain displacement is what causes compression symptoms, so soon will every surgeon be convinced that early trephining is a proper exploratory procedure in order to determine what measures are demanded to avert encephalic inflammation.

“Compression of the brain,” as seen after injury, should be translated “inflammation of the brain,” and looked upon as probably due to unrelieved irritation of the brain periphery, from traumatic causes. Not until this is so understood will the discussion as to the utility of trephining in depressed fractures cease.

I repeat, then, that trephining is often an exploratory operation; and, as such, is demanded with much greater frequency than is usually supposed. If it is to be employed for exploratory and diagnostic purposes, early resort thereto needs no defence.

To conclude, I assert that in all subcutaneous injuries of the head with probable existence of depressed fracture, an immediate exploratory incision should be made in the scalp. In all instances of depressed

fracture with *possible* existence of splintering and spiculation of the inner table, an immediate exploratory trephining of the skull should be done.

OPERATIVE DELAY IN STRANGULATED
HERNIA.

A similar delusion of fatal issue is that which leads to postponement of operative interference in strangulated hernia. Repeated and protracted attempts at taxis, often violent in the amount of force employed, and medical pow-wow-ing with temporizing measures have ended more lives than has the knife.

Herniotomy done within twelve hours is almost always followed by recovery; but if the gut has been unduly bruised by violent manipulation, or left two or three days in its strangulated condition, death is to be expected, even if the constricted knuckle of intestine is finally liberated by operation. Taxis under ether, a half day's treatment with cold applications, and morphia internally, and then a second *moderate* attempt at taxis, followed if unsuccessful by im-

mediate operation, is the sequence to be followed by every rational surgeon in cases of strangulated hernia.

When symptoms of strangulated hernia, such as umbilical pain, stercoraceous vomiting, and obstinate constipation, exist, the slightest fulness and tenderness in a groin over either of the rings are a sufficient localizing indication to warrant operation. If no hernia is discovered, the patient may indeed go through life with a scar in his groin, but that is better than to run the risk of dying in a week from concealed strangulated hernia.

OPERATIVE DELAY IN ACUTE PHLEGMONOUS INFLAMMATION.

No insane delusion, no Spanish inquisitor has caused the human race so many hours of excruciating physical torture as the hallucination that acute abscesses and furuncles must not be incised until pointing has occurred. All the world knows that evacuation of the imprisoned pus in phlegmonous inflammations means instant relief of the agonizing throbbing pain. Yet how few of

the medical profession freely incise such inflamed tissues, unless they see the yellow pus under the thinned skin, or feel the fluctuation of the fluid in the abscess cavity!

The pain is caused by the endeavor of the pus or sloughing tissue to make its escape. Is it not more rational, then, to make a free incision to-day, than to wait a week for such thinning of the overlying tissues as will make the pus apparent to the eye? To wait for spontaneous evacuation is still greater evidence of mental aberration. If you know by the symptoms that pus is beneath the surface, why wait till you see it? Make a free incision, evacuate it, and give immediate relief to the writhing patient. Early operation in these conditions not only saves the patient several days of poultices and purgatory, but prevents the destructive burrowing of pus that often occurs when incision is delayed. In no affection, perhaps, is early incision so urgently demanded as in abscess under the palmar fascia.

I hear some one object that the surgeon may perchance incise before pus has yet been formed. So much the better, say I;

for then the relief of tension, due to the bleeding and gaping of tissues, and the anti-septic lotions applied, will usually prevent the formation of pus except in small amount upon the surfaces of the wound. As a result, the patient will suffer little or no pain during the further progress of the inflammation, and will recover much sooner than if operation had been delayed until pus formed in the interstices of the inflamed area.

That early incision lessens the pain as well as the duration of acute suppurative inflammations should be remembered by every practitioner in the land. "Ye who enter here leave pain behind," could then be read by all such patients when entering the door of a doctor's office.

OPERATIVE DELAY IN MALIGNANT TUMORS, ETC.

Much bad surgery results in a variety of affections from a delusive postponement of operative interference. If a malignant tumor, for example, is discovered, it should be removed without a day's delay. Every

additional week adds to the possibility of secondary infection of glandular masses in the neighborhood, and to the probability of the tumor becoming larger and requiring more extensive dissection. The dislike of patients to think of operation and the timidity of surgeons in earnestly recommending it have led to many melancholy deaths, which could have been averted or greatly delayed by prompt, decisive surgical action at a time when the operative procedure would have been almost devoid of danger. These remarks apply to many conditions other than malignant growths.

NECESSARY FATALITY OF TRAUMATIC TETANUS.

It is an opinion very commonly held both by the laity and the profession that traumatic tetanus is a necessarily fatal disease. Proper treatment is sometimes neglected because of this belief in its hopelessness. That tetanus is an affection of extremely unfavorable prognosis I do not deny; but that cases of a severe type recover is undoubted. Many writers, and I among

others, have reported such instances.¹ The best treatment is that by chloral given in large amounts, but in divided doses. From one to two hundred grains in the twenty-four hours will be the usual amount needed to keep the patient free from violent pain and spasm. An occasional quarter-grain dose of morphia may be given if the pain is not relieved by the chloral; but the latter drug is to be looked upon as the anti-tetanic treatment. Good food, stimulants, and tonics may be needed in addition to combat the depressing effects of the affection. It should be remembered then that a fair number of cases of tetanus have recovered under this, and, indeed, under other methods of treatment.

FATALITY OF PERICARDIAL AND CARDIAC WOUNDS.

The prevalent notion of the excessive danger of pericardial and cardiac wounds is, I am sure, delusional—delusional at least in so far as it teaches that these structures

¹ American Journal of the Medical Sciences, October, 1877.

will not brook surgical interference. I have elsewhere shown that the pericardial sac should be dealt with exactly as the pleural sac, by aspiration, incision, irrigation, and drainage, according to the character of the lesion.¹ That simple puncture or aspiration of the heart itself is not accompanied by the expected risk to life has also been indicated;² though I am not yet prepared to recommend its general adoption for trivial cardiac conditions.

NON-INTERFERENCE WITH INFLAMED SYNOVIAL MEMBRANES.

The opinion, which teaches that suppurating joints should not be subjected to free incision, is founded on delusion. Purulent collections in synovial sacs should be evacuated, as are pus formations in other situations, by laying open the cavity and establishing provisions for free drainage. As-

¹ See Paracentesis of the Pericardium, 8vo., Philada., 1880; and also, Surgery of the Pericardium, Annals of Anatomy and Surgery, Brooklyn, Dec. 1881.

² Medical News, Jan. 13, 1883.

piration is permissible at first to determine whether the fluctuation in the joint is due to serum or pus; but when pus is once discovered, further temporizing with the aspirator is a dangerous delay. Great destruction of cartilage and bone, burrowing of pus, and septicæmia have often followed such dilatory surgery.

Acute serous synovitis, with marked distension of the sac, is often benefited by withdrawal of the fluid. This can be accomplished by the aspirator; or, if the fluid is too thick to flow through the needle, by subcutaneous section of the synovial membrane with a tenotome, which allows the fluid to drain into the cellular tissue. This method of relieving tension and pain, and of hastening the cure in acute synovial inflammation is ably advocated by Mr. Barwell;¹ whose example should be followed by those who have still clung to the traditional assertion that synovial membranes should not be incised.

¹ International Encyclopædia of Surgery, vol. iv. p. 274.

FATALITY OF PERITONEAL WOUNDS.

The teaching of former days insisted upon the exceeding danger of wounding the peritoneum. Recent surgical exploits in abdominal and pelvic affections have scarcely yet dispelled this delusion. It will in time, however, be admitted by all that this and other serous membranes accept injuries inflicted by the surgeon, with great tolerance, provided the occurrence of septic poisoning be prevented.

SYMMETRY OF NORMAL LIMBS.

Another delusion which I think has not been entirely dispelled from the mind of the profession is that the lower extremities are usually of the same length. I place no reliance whatever upon measurements of the length of legs to determine the existence of the degree of shortening after fractures of the femur. Clinical observation, as well as anatomical research,¹ has shown that asymmetry in the length of normal limbs is of

¹ Philadelphia Medical Times, Aug. 3, 1878, p. 518. New York Medical Record, April 26, 1884.

common occurrence. Why waste time then measuring legs, when we know not whether the shorter or longer limb has been injured? Similar want of symmetry occurs in other portions of the body.

USELESSNESS OF TREATING VICIOUS UNION
OF FRACTURES.

It is a fact not sufficiently appreciated that many cases of deformity from improperly treated fractures of the long bones can be remedied by refracture. Over and over again have I seen cases of grave disability and deformity cured by the application of sufficient force to break the callus uniting the misplaced fragments.¹ Five or six months is not too late to resort to this expedient for correcting what otherwise must be a lifelong evidence of defective surgical attendance. It is a sad delusion that permits such patients to be dismissed without active surgical treatment.

¹ Refracture for the relief of deformity following badly-treated fracture of the extremities, by John B. Roberts, M.D., *Edinburgh Medical Journal*, July and August, 1878.

PRIMARY BANDAGE TO FRACTURED LIMBS.

Some surgeons still follow the practice of applying a roller bandage to a broken limb, underneath the splint. This is seldom, if ever, of use, and may be productive of much evil. It causes inelastic constriction, which, in the event of unexpected inflammatory swelling, is liable to induce gangrene. As it does not prevent this swelling, its use is objectionable because so dangerous to the integrity of the limb. The *elastic* pressure made by the padded splints, held in place by the outside roller, is not likely to exert this undue constriction. The belief in an inner bandage is not only a delusion, but a snare, that has probably sacrificed many limbs.

TIME OF CONFINEMENT FOR FRACTURES OF
TIBIA, FIBULA, AND RADIUS.

There are two other delusions relative to fractures that still affect the minds of many practitioners. They both refer to the time at which patients may be given increased liberty of motion. Cases of closed fracture

of the tibia or fibula, or of both, unattended by marked overlapping or inflammation, should not, as a rule, be kept in bed more than one week. After the lapse of this time, and sometimes even earlier, the adaptation of a gypsum splint will permit the erect posture and walking with crutches. Many such patients are kept in bed for five or six weeks to undergo the wearisome imprisonment attendant upon a fracture-box, and that probably not suspended as it nearly always should be. In the ordinary non-comminuted fracture of the lower end of the radius the splint can usually be substituted by a simple roller bandage at the end of two weeks, if the fracture has been properly reduced at the time of injury. If the patient has not sufficient discretion to avoid subjecting the arm to strains and falls, the splint may be retained for three weeks. Longer confinement by a splint is useless and unnecessary annoyance to the patient. Of course, he will not be able to use his injured hand so early, but the inconvenience of an unsightly splint is averted by its early removal.

PROPRIETY OF EARLY LIGATION IN CONTINUITY OF ARTERIES FOR HEMORRHAGE.

Ligation of an arterial trunk in continuity is never allowable for primary or secondary hemorrhage until the impracticability of securing the bleeding vessel in the wound has been established. It is a delusion as to the efficacy and propriety of ligation in continuity that impels surgeons to adopt this step before resorting to the surer procedure of attacking the actual seat of bleeding.¹

HOPELESSNESS OF MALIGNANT RECTAL DISEASE.

That malignant disease of the anus and rectum is unamenable to treatment has been until recently the opinion of both the laity and the profession. Early excision of the lower end of the rectum or early lumbar colotomy holds out to sufferers from these affections a hope which is by no means vain. These procedures have greatly alle-

¹ See Polyclinic, Philadelphia, Dec. 1883.

viated distress and prolonged the lives of many patients. They are in my opinion to be ranked nearly as high as excision of the breast. Yet many, who habitually advise operation for mammary disease, discourage efforts to obtain operative relief in similar disease of the lower bowel.

OTHER DELUSIONS.

There are many other prevalent surgical delusions that I should like to discuss, did time permit. The opinion which teaches that bony union of transverse fracture of the patella and of fracture of the femoral neck, within the capsule, is impossible; the idea that chronic purulent aural discharges do not need active treatment; the belief that hypermetropia and hypermetropic astigmatism can be properly estimated and corrected without paralyzing the accommodation; the notion that it is injurious or improper to perforate the nasal septum in cases of great deviation; the idea that crooked noses are unamenable to treatment; the conviction that carved or manufactured splints are needed in treating fractures; and

the foolish practice of padding with cotton and tying up eyes that have been subjected to corneal operations and cataract extractions—are all delusions that need frequent and loud-voiced condemnation.

SURGICAL FOLLIES.

IF one watches with careful scrutiny any series of operations done for various lesions and by various surgeons, he will have frequent opportunity of observing the commission of the follies that I shall describe. Sometimes he will see a single operator commit nearly every one of them in as many minutes.

THE ETHER FOLLY.

This is almost universal. Often have I heard physicians say of a patient, "He couldn't be etherized; I had to give chloroform." Now, the fault was not with the patient, but with the doctor. I doubt there being an individual or animal in the world that cannot be anæsthetized with ether properly administered. It must, however, be given in large quantity and with little air. If given in small quantity and with

much air, as chloroform must be administered, the excitement stage will only be overcome with much difficulty and loss of time.

When the napkin saturated with ether has once been placed over the patient's nose and mouth it should not be removed. As it becomes necessary to replenish the anæsthetic, let the etherizer turn up the corner of the ether napkin and quickly dash upon it a fluidounce of the anæsthetic; or let him pour it on the outside of the napkin, and cover this with a large, dry towel.

To remove the napkin entirely from the face, while the stopple is being taken from the bottle, and the ether slowly poured out, is too ridiculous for credence. Yet it is the usual method. During this interval the patient takes two or three inhalations of pure air, and thus neutralizes the effect of most of the ether previously inhaled.

There is one symptom, however, that demands removal of the ether towel for a moment. It is the blue and congested face, due to spasm of the respiratory muscles, that often occurs soon after the commence-

ment of etherization ; when this is seen, the patient should be given an opportunity to take *one* deep inspiration of air. The towel should then be immediately replaced.

A tendency to retch does not indicate cessation, but continuance, of etherization, since a fully etherized patient never vomits. If food actually comes up into the fauces, the patient must be given a chance to expel it, lest a particle get into the larynx. This, however, takes but a moment, after which the ether must be quickly resumed. If the trachea becomes full of rattling mucus, the patient should be turned on his abdomen with the head dependent and the ether perhaps removed from his face for a moment, until the mucus has an opportunity to escape from the mouth.

I do not advocate giving ether carelessly, but I assert that it is usually given inefficiently. More danger is to be found in this long-continued inefficient etherization than in the prompt method I describe. To gain the patient's confidence, I get him to breathe deeply, with his face covered with a dry towel, for about a minute before pouring on

the anæsthetic. Squibb's ether is in no way superior to that of other reputable manufacturers.

THE ANÆSTHETIC INHALER FOLLY.

The use of complicated inhalers for administering ether as an anæsthetic is a folly. A small porous napkin saturated with ether and covered with a large dry towel of less porous texture is more simple than any apparatus, is just as efficacious and probably more so, and, being always clean, can never be a vehicle for conveying syphilitic saliva from one patient to another.

THE TOURNIQUET FOLLY.

In amputations, except in the rarest circumstances, Esmarch's elastic apparatus should supersede the old-fashioned screw tourniquet of Petit. The latter, while indeed arresting the flow through the arteries, nearly always engorges the parts with venous blood, thus inducing venous hemorrhage and causing the seat of operation to be obscured.

An even worse folly is that of applying a tourniquet to the femoral or brachial artery to stop bleeding from a crushed leg or forearm, while awaiting reaction prior to amputation. Pressure should be made *immediately upon and just* above the crushed tissues by an elastic or common roller bandage tightly applied. These structures are already irretrievably damaged and will soon be removed. A tourniquet placed far above the seat of injury on the main trunk interferes with the arterial and venous circulation of the whole limb. Amputation, if by necessity delayed for a few hours, must then be performed through tissues that have become œdematous and liable to gangrene, because of the stupidity of the surgeon. Pressure over the crushed structures stops all oozing and free bleeding, and is probably less distressing to the patient than the tourniquet applied high up. It can do no harm to the structures already irretrievably damaged and soon to be removed.

THE INCISION FOLLY.

This is not quite as common as some of those discussed. Still it is often exhibited in both hospital and private operating. It consists in making a cramped cutaneous incision, instead of one sufficiently large to fully display the tissues needing examination. A cut of the skin three inches long is no more dangerous in itself than one two inches long. Indeed, in many cases it is less so, because the surgeon, having sufficient room to see, does not tear and stretch the underlying tissues so rudely; hence, less suppuration occurs and more rapid union is possible. In opening abscesses, as in general operating, a free cut is more satisfactory to the surgeon and more beneficial to the patient than a mere puncture or button-hole incision. Let us keep from this folly, then, by using a keen edge and a free hand in making cutaneous operation wounds.

THE SPONGE FOLLY.

What I term the sponge folly, is the habit of employing sponges for absorbing

blood from wounds, when napkins or towels are always attainable, and are far less liable to introduce septic material into the wound. Sponges, while too expensive to be thrown away after each operation, are cleaned with great difficulty. Servants and nurses, therefore, not appreciating the importance of thorough cleansing and disinfection, often neglect this duty. Hence I prefer towels, and if I do an operation at a patient's house, always use clean towels obtained there. Thus I secure an almost certain immunity from purulent or septic dirt in the articles used for absorbing blood.

Perfectly clean surgical sponges are the exception, but clean household towels are the rule. At the Polyclinic I use, for this purpose, to a considerable extent, Japanese paper napkins, which are thrown away after being once used. Absorbent cotton is too expensive for such uses, except to a limited extent, and, besides, has a tendency to leave filaments entangled in the wound.

The paper towels, however, answer the same purpose as cotton ones, and are so cheap that they can be thrown away after

being used. They cost from \$6 to \$7.50 a thousand. The cost of washing a large number of ordinary towels is thus avoided. The paper towels are scarcely suitable for drying hands, after washing, unless several towels are used at once, because the large amount of moisture on the hands soon saturates a single towel. For removing blood from wounds, paper towels are crumpled up into a sort of ball, and then used as a sponge. Such balls absorb blood rapidly. The crude ornamental pictures, in color, on the towels are of no advantage, nor are they, as far as known, any objection.

THE SUTURE FOLLY.

This next claims attention. I do not refer to the erroneous opinion, long held, that sutures should not be used in the scalp. This tradition has been disproved so often that few surgeons would now hesitate to use sutures as freely in the scalp as elsewhere. What I call the suture folly is the adherence of many to the theory that silver wire only should be employed for suturing purposes.

Nothing could be more fallacious. Do we use silver hare-lip or acupressure pins? Why, then, employ silver sutures, when iron wire is stronger and far cheaper? When large and gaping wounds require the sutures to stand much tension, silver wire, if used, must be very thick. Iron wire of much smaller diameter, and therefore much more flexible, gives an equally strong suture, and in addition to being better adapted to the purpose, is much cheaper.

I recollect that, in hospital practice, nearly eight years ago, I discarded silver wire, which cost one dollar for each small coil, and bought at a hardware store enough iron wire for ten or fifteen cents to last many months. The nicest iron wire I have seen, and which I now use for the purpose, because it is strong, very flexible, and free from elasticity, can be bought for five cents a spool. It is No. 34 "IXL" wax-flower wire. If it becomes a little rusty, it can be rubbed clean in a moment, should the operator object to the small amount of oxide of iron upon it.

THE ADHESIVE PLASTER FOLLY.

This is common. You all have seen stumps, after amputation, enveloped more or less completely in strips of adhesive plaster placed between the sutures. Of what use are they? They obstruct free drainage, become softened and loosened by the pus, if there is much discharge, give more or less pain when removed, and do no good. If the flaps are properly made, the sutures correctly applied, and the stump neatly and evenly bandaged, the adhesive plaster becomes useless, and is merely a disadvantage to the patient's comfort and recovery. Adhesive plaster has little or no value in surgery, except for making extension and preventing motion in cases of fracture.

THE ASPIRATOR FOLLY.

The aspirator has probably done as much harm by encouraging "shrinking surgery" as it has done good in providing a safe means of puncture for serum-evacuation and diagnosis. Many pus collections are repeatedly aspirated by timid hands and

heads, when salvation of life demands free incision.

THE DRAINAGE TUBE FOLLY.

To leave a drainage tube in a wound after the sanguinolent and purulent discharges have obtained a widely patulous exit or have ceased is an egregious folly. Yet the cry for drainage has doubtless led to many thoughtless commissions of this error, whereby a properly applied drainage tube or strand has been allowed to become a seton.

NITRATE OF SILVER FOLLY.

The local use of nitrate of silver for the intended destruction of a virus or for the disintegration and removal of fungous or malignant tissue, is founded on error. Nitrate of silver, though popularly called "caustic," is not a caustic; it is a mere irritant, scarcely more active than tincture of iodine. The caustics to be used by surgeons for the purposes mentioned are chromic, nitric, carbolic, and acetic acids, potassa and similar active drugs, and the hot iron. Under many circumstances a sharp scalpel is the best *caustic*.

LEAD-WATER AND LAUDANUM FOLLY.

The practice of treating contusions with lead-water and laudanum is useless and foolish. Interstitial hemorrhage from subcutaneous vessels ruptured by a bruising force can only be removed by absorption through the action of the veins and lymphatics. Lead-water and laudanum exert no such specific influence.

THE DOSE FOLLY.

I should, perhaps, term it the *small* dose folly, for I refer to the practice of administering insufficient doses of medicines. This fault pertains, of course, to medical as well as to surgical practice.

Nearly every year of my professional life leads me to increase the dose of some one or other of the articles that I am accustomed to use. Of what use is a sixteenth or an eighth of a grain of morphia to a man with severe pain? Give him a quarter of a grain or even a half, repeated if necessary, and he will soon be comfortable and thankful.

The medical requirements of to-day are

drugs and doses with inherent power. You can't lift a block of granite with a weak crowbar; neither can you cure agony with a debilitated dose of anodyne. So it is with all other remedies. If any medication at all is required, give that which will do the work and do it promptly. A few large doses will dispel the symptoms and cure the patient, when months of nonsensical drugging with emasculated remedies will bring nothing but discredit to the practitioner and obloquy to medical science.

I have spoken of morphia as a type, but the same remarks hold good concerning quinia, atropia, strychnia, digitalis, iodide and bromide of potassium, mercury, pilocarpia, and, indeed, of all our remedies. Use the alkaloids or active principles in every case. Then you will know what you are giving, and you will soon learn that much larger doses are tolerated than is usually thought possible. Many physicians and surgeons fail to cure, not because of faulty diagnosis, not because of inappropriate remedies, but because of insufficient dosage.

CONCLUSION.

THE sooner the delusions and follies mentioned have one and all been dispelled by the broad light of discussion and clinical observation, the greater will be the efficiency and hopefulness of surgical art. Much that is believed and practised in surgery is false; its only virtues are its hoary antiquity and its very general acceptance. I do not, however, condemn these opinions and methods because they are old, but because I believe them to be wrong. Old age is indeed to be revered, but its errors are none the less egregious. Devotion to traditional ideas has delayed the progress of scientific surgery very many decades. It is our natural adherence to what is traditional that impedes progress in this as in other branches of scientific learning. We need, indeed, a Leo and a Constantine to destroy these valueless relics of ancient surgical worship, as we

need an Alexandrian fire to consume the thousands of worthless splints and instruments that are still described in surgical text-books to the confusion of the student and the damage of the community. Pains-taking investigation, accurate anatomical knowledge, and common sense have already uncovered and dispelled many surgical superstitions. The delusions and follies just described, with many others that I might have discussed, will, I trust, soon have few believers and followers.

The surgery of the present day should not only be free from the traditions of the barber surgeon, but should be sufficiently aggressive. I am an earnest advocate of conservative and of reparative surgery; that is, of the surgery which saves without operation, and the surgery which, replacing and directing, waits for nature to repair damaged structures. When, however, operative surgery is demanded, it must be aggressive, and I believe in making it sufficiently aggressive to repulse the death-bearing attack of the enemy. In our warfare against disease, Hygiene must play the

part of the engineering corps which builds advanced earthworks and places torpedoes ; Medicine that of the garrison in the citadel which repairs breaches in the walls and keeps the attacking army at bay ; but Operative Surgery must be the rally that, unexpectedly rushing out upon the enemy, captures his siege-guns before they have been twice discharged against the city. A sortie to be successful must be prompt, spirited, and bold ; so operative surgery must be undertaken early, energetically, and thoroughly. Delay, indecision, and inefficiency impair the value of much surgical work, and are often the legitimate result of a superstitious faith in delusive surgical dogmas.

INDEX.

	PAGE
ABSCCESS.....	23
Anæsthesia, Chloroform.....	12
Anæsthetic Inhaler.....	40
Arteries, Ligation in Continuity of.....	34
Aspirator	46
Astigmatism, Hypermetropic.....	35
 Bandage to Fractured Limbs, Primary.....	 32
 Chloroform Anæsthesia.....	 12
CONCLUSION	50
Confinement for Fractures.....	32
 Delay in Acute Phlegmonous Inflammation.....	 23
Delay in Malignant Tumors.....	25
Delay in Strangulated Hernia.....	22
DELUSIONS, SURGICAL.....	13
Doses.....	48
Drainage Tube.....	47
 Ear, Purulent Discharges from.....	 35
Ether.....	37

	PAGE
Fatality of Pericardial and Cardiac Wounds.....	27
Fatality of Peritoneal Wounds.....	30
Fatality of Small Hemorrhages.....	16
Fatality of Traumatic Tetanus.....	26
Femur, Neck of, Fracture of.....	35
FOLLIES, SURGICAL.....	37
Fractured Limbs, Primary Bandage to.....	32
Fracture of Neck of Femur.....	35
Fracture of Patella.....	35
Fractures, Carved Splints for.....	35
Fractures of Fibia, Fibula, and Radius.....	32
Fractures, Vicious Union of.....	31
 Hemorrhage, Ligation in Continuity for.....	 34
Hemorrhages, Fatality of Small.....	16
Hernia, Operative Delay in Strangulated.....	22
Hypermetropia.....	35
 Incisions	 42
Inhaler, Anæsthetic.....	40
INTRODUCTION	9
 Lead Water and Laudanum.....	 48
Limbs, Symmetry of Normal.....	30
 Malignant Rectal Disease.....	 34
Malignant Tumors, Delay in.....	25
 Nasal Septum, Perforation of.....	 35
Nitrate of Silver.....	47
Noses, Crooked.....	35

	PAGE
Patella, Transverse Fracture of.....	35
Phlegmonous Inflammation, Acute.....	23
Plaster, Adhesive.....	46
Rectal Disease, Malignant.....	34
Septum, Nasal, Perforation of.....	35
Silver, Nitrate of.....	47
Skull, Danger of Trephining.....	17
Splints, Carved.....	35
Sponges	42
Styptics, Value of.....	14
Sutures.....	44
Symmetry of Normal Limbs.....	30
Synovial Membranes, Inflamed.....	28
Tourniquet.....	40
Traumatic Tetanus, Fatality of.....	26
Trephining, Danger of.....	17
Tube, Drainage.....	47
Value of Styptics.....	14
Vicious Union of Fractures.....	31
Wounds, Pericardial and Cardiac.....	27
Wounds, Peritoneal.....	30

