upper lip, the eyelids, forehead and cheeks and destruction of the soft tissues of the nose. The structure of the growth at that time was ordinary carcinoma of the squamous cell type, and the case was considered inoperable. The above account illustrates the truth of the statement by Fordyce⁵ that these tumors are better left alone than carelessly treated. The histories of the other recurrent cases show that the temporizing treatment with local applications, no doubt the result of fear by operators of leaving unsightly scars, has been followed by recurrence and more rapid growth.

Two facts acquired considerable emphasis from a careful review of the literature pertaining to tumors presumably of this variety. The first of these concerns the long list of names which they have received, so numerous that even Krompecher hesitated to add a new one; the second, the almost universal tendency to consider them as closely related to carcinoma. The so-called "Rodent Ulcer" I regard as belonging to the styloid form of this class of tumors, but the term, even as a purely clinical one, is open to many objections. The name suggested by Krompecher, "drüsenartige oberflächenepithelkrebs," certainly carries with it no suggestion of an origin in the glands of the skin, although the development of these tumors from the basal layer of the epithelium, from hair follicles, or from the necks of the sebaceous glands, is definitely established. It has also been shown that the resemblance to glands is only apparent and chiefly due to disturbances of circulation in the stroma. The similarity to tubules, when single sections are examined, may be quite marked, and with much edema of the stroma pseudocysts develop. These tumors are not glandular, but gland-like; they are benign, superficial, and develop from the epithelium.

The usual conception of the development of a carcinoma of the skin includes proliferation of the epithelium and invasion of the deeper tissue. Both of these processes occur in the histogenesis of these tumors, and yet the majority of the clinical characteristics of carcinoma are certainly absent. Not even the loss of the protecting epithelium and ensuing irritation, ulceration, etc., are alone sufficient to effect their transformation into the familiar forms of cutaneous carcinoma. As before stated, in connection with recurrent cases, the evolution to carcinoma often takes place as a result of methods of treatment largely due, no doubt, to their location upon the face.

THE RELATION OF THE BURN TO THE BULLET HOLE AS EVIDENCE OF HOMICIDE vs. SUICIDE: REPORT OF THE NAGLE CASE.¹

BY JAY PERKINS, M.D., PROVIDENCE, R. I.

ON the morning of the 14th of November, 1901, the body of James Nagle was found lying on his bed at his home in East Providence, R. I., with a bullet wound

⁵ Journ. of Cut. and Gen.-Urin. Dis., 1902, xx, 147.

¹ Read at the Massachusetts Medico-Legal Society Meeting, Feb. 3, 1904.

in the right side of the head, 1½ inches above and a little anterior to the junction of the ear with the head. Singeing of the hair extended 1½ inches above the bullet wound, a little back of the ear and a little below the angle of the mouth, the beard being about a week's growth. The body was lying in a natural position on the bed, the arms at the sides, with a 32-calibre revolver between the right hand and the thigh. The tenement occupied by James Nagle and his wife, Rose, both French Canadians, was in a basement and consisted of a kitchen and sleeping room. Back of the house was a wood shed. Mrs. Nagle claimed that James came home the preceding night a little after eleven o'clock, drunk (Mr. and Mrs. Nagle were both frequently drunk and quarrelsome), and drove her out of the house. She was afraid to re-enter the house and spent most of the night in the wood shed, going to a window of their bedroom at intervals and looking in at her husband. At about four o'clock in the morning, hearing no noise and thinking he was asleep, she entered the house, but he was by the stove and drove her out with the poker. After hearing the five o'clock whistle, she again started to enter the house, and looking through the window of the sleeping room saw "some fire or something" and heard "an awful noise." Thinking that he had probably killed their dog she rushed into their bedroom and saw "Jimmy" with his two feet on the floor and his body across the bed. She placed his feet on the bed, laid him straight and pulled the blanket over him. At that time he was alive, but breathing very hard and lived for half an hour. She then went to a neighbor's and asked that he go for a doctor for Jimmy, and upon being asked what had happened to Jimmy she replied, "He is shot, for I heard such a noise."

At a little after five in the morning the Police Sergeant asked Dr. Allison, the medical examiner, to accompany him to Mr. Nagle's house. When they arrived there they found the body in a natural position on the right-hand side of the bed with a bullet wound as described above. At that time Mrs. Nagle stated that her husband had shot himself, and that she had found him lying across the bed with his feet on the floor and holding a revolver in his hand, and that she had placed him in the position in which he was then lying. On the pillow under his head was a blood spot three to five inches in diameter. No blood was found anywhere else on the bed. The fingers were relaxed, and though Mrs. Nagle tried to make them hold the revolver as she said she had found it they would not accommodate her. When asked where Jimmy got the revolver she said that she did not know, but later in the day she stated that he had traded a watch for it.

At this time the case was considered one of suicide, but later in the day it was learned that a woman said to be Mrs. Nagle had, a few days before, purchased at a hardware store in East Providence a revolver corresponding to the one found beside Mr. Nagle. After purchasing the revolver she asked the clerk to load it for her. This he refused to do, but he gave her five cartridges, not noticing whether she had selected a five or six chambered revolver. The revolver found beside Mr. Nagle had six chambers, one chamber being empty, one containing an empty shell and four containing cartridges. At the trial the identification of the woman purchasing the revolver as being Mrs. Nagle was not absolute, in that the one who purchased the revolver wore a thick veil so that the face could not be seen. Otherwise, the two corresponded, a special feature in the identification being the broken English with the French Canadian accent.

Mrs. Nagle was now charged with the murder and arrested and an autopsy was held. The bullet wound

and burn were as above described. In the autopsy report no mention was made as to powder marks or the character of the wound, but at the trial the medical examiner stated that there were some powder marks. There was a large opening through the skull, and the brain substance and pieces of bone and powder were scattered along the track of the bullet in the brain. The bullet was found lodged "in the cerebellum, just above the medulla oblongata."

Mrs. Lawson, who lived on the floor above the Nagle tenement, testified that as a regular thing "Jimmy came home and made a noise at night and that in the morning Mrs. Nagle made a noise and jawed him." On the night of Mr. Nagle's death she was awakened a number of times and heard quarreling in the tenement below. Most of the time she could distinguish only Mrs. Nagle's voice, and at about three or half-past three in the morning Mrs. Nagle "hollered out" two or three times "I'll kill you." At about quarter past five she heard "a short noise about like a revolver."

I did not see Mr. Nagle's body, but was called into the case by the Attorney-General, who sent me a copy of the autopsy report with a request that I should advise him from a medical standpoint. The report of the wound was very meagre, being only as stated above. I had observed in my work that when burning of the hair or clothing is present the bullet wound is not in the center of the burn, and so, in studying this case, one of the first things I did was to experiment with the revolver found beside Mr. Nagle's body, using the cartridges from the box from which those in the revolver were supposed to have come. I found that there was a uniformity of results, that the major part of the burn always corresponded with the hammer or "sight" side of the revolver. A perusal of medico-legal works at my command failed to show any reference to this with the exception of a small work by Reese. I then wrote to Dr. Draper in reference to these findings, and was pleased to receive an answer from him confirming my investigations and also giving me the reference to a paper read by Dr. Fish before this society and published in the *BOSTON MEDICAL AND SURGICAL JOURNAL*, Oct. 2, 1884, which treats the subject exhaustively, and shows that unless the revolver is held firmly, as in a vise, there is no exception to the rule as I found it.

At the first trial of this case, I therefore testified that with a bullet wound in the right temple, $1\frac{1}{4}$ inches above and a little in front of the upper part of the ear, with the hair singed $1\frac{1}{2}$ inches above the wound, some back of the ear, and the beard singed down to the angle of the mouth, the bullet following a direct line to the lower part of the cerebellum just above the medulla oblongata, with fragments of bone and powder scattered along the passage of the bullet through the brain, the revolver was held at a distance of between four and six inches from the head, the barrel pointing in the direction taken by the bullet, with the sight side of the revolver in the direction of the more extensive part of the burn, that is, in front of the right ear, and the trigger side towards the top of the head. The revolver in question being a cheap, Fourth of July variety,

and of very hard action, it was improbable that such a wound should have been self-inflicted by anyone, and for myself would have been impossible, while, with the body lying in a natural position on the right side of a low bed, this was precisely such a wound as would be produced by a person standing beside the head of the bed and shooting with the right hand at close range.

At the first trial the defence put in no medical testimony in contradiction of mine. A new trial was, however, obtained on technicalities, and at the second trial your President also appeared as an expert witness for the state and ably upheld the state's claim that the position of the revolver was as stated above, and that the wound was improbably, almost impossibly, suicidal. The defence, at this trial, had two medical witnesses, Dr. William H. Palmer, who had served for eighteen years as medical examiner in Providence and for some years preceding that as coroner, and Dr. Jerome B. Green. Both of these witnesses claimed that there was no such rule as stated above in reference to the relation of the burn and bullet wound, Dr. Palmer characterizing our statements as "fanciful." He stated that his experience and experiments, of which he said he had performed a good many, showed that there was no constant relation between the sight side of the revolver and the extension of the burn. He also stated that nothing could be told in reference to the position in which the revolver was held when the shot was fired, by the direction taken by the bullet through the brain, because of the possible deflection of the bullet. My testimony at the second trial was similar to that at the first, except that on further experimentation I changed the distance from the head at which the revolver was held to between three and six inches instead of four and six, because, with this revolver, it seemed as if I got more marked burning at four inches than at six. All of my work, however, makes me more firmly convinced than at first that in the relation of the burn to the bullet wound we have an accurate guide as to the position in which the revolver was held as regards the sight side of the revolver, this relation being more marked the farther the revolver is held from the object fired at until the point at which the burn fails to appear is reached.

At the second trial Rose Nagle was acquitted. It is the history of murder trials in Rhode Island that usually, when a second trial is obtained, the defendant is acquitted. In this case, the character of the man killed and the pitiful appearance of the defendant probably had as much to do with the acquittal as any lack of evidence on the part of the state.

Even the Attorney-General was moved by the defendant's appearance at the time he made his plea. She was partially blind, of small stature, and sat with her body somewhat doubled over and her feet on a box. In her hand she held a bunch of white pinks with a piece of newspaper wrapped about the stems, looking at them as if trying to derive some comfort from them. After the trial was over the Attorney-General remarked to the

counsel for the defence that he was moved to pity by the forlorn appearance of the defendant, and especially by the way she held the white pinks. An amused smile came over the face of the defendant's counsel, and, on being questioned as to the cause of it, he said that on his way to the court house in the morning he saw those pinks and, thinking that they would look well in the hands of the defendant, he bought a bunch, wrapped a piece of newspaper about the stems, put them in the hand of the defendant and instructed her as to the manner of holding them, which instructions she faithfully carried out.

Clinical Department.

A RÉSUMÉ OF THE RESULTS OF DR. F. B. HARRINGTON'S SERVICE, MASSACHUSETTS GENERAL HOSPITAL, FROM JUNE 1 TO OCT. 1, 1902, AS SEEN IN THE FOLLOWING JUNE OR LATER.

BY E. A. CODMAN, M.D., BOSTON.

DISEASE.	Total number.	Number traced.	Perfect result.	Good result.	No improvement.	Bad result.	Died in hospital.	Died after leaving hospital.
APPENDICITIS:								
General peritonitis from	3	3	..	..	..	..	..	..
Acute-wound drained	25	14	5	7	..	..	3	..
Chronic-wound closed	24	13	6	5	2	..	..	..
HERNIA:								
Strangulated	2	2	..	..	..	..	1	1
Inguinal	21	12	4	6	1	..	1	..
Ventral	8	7	4	2	1	..	..	..
Femoral	2	1	..	1	..	..	..	..
MISCELLANEOUS LAPAROTOMIES:								
Fibroid of uterus	6	5	1	3	..	..	1	..
Salpingitis	21	8	..	8	..	..	..	..
Ovarian or bnd. lig. cysts	9	7	..	7	..	..	..	..
Gallstones	8	7	2	2	..	..	3	..
Carcinoma of cervix uteri	4	4	..	1	1	..	2	..
Chronic Intestinal Obstruction:								
Carcinoma of large intestine	4	4	..	3	..	..	1	..
Volvulus	1	1	..	1	..	..	..	..
Adhesions	2	2	1	1	..	..	..	..
Meckel's diverticulum	1	..	..	..	..	..	..	..
Acute Intestinal Obstruction:								
Intussusception	1	1	1	..	..	..	..	..
Mesenteric thrombosis	1	1	..	..	..	..	1	..
Meckel's diverticulum	1	1	..	..	..	..	1	..
Extra-uterine pregnancy	5	1	..	1	..	..	..	..
Rupture of kidney	1	1	1	..	..	..	..	..
Tubercles mesenterica	1	1	..	..	..	..	1	..
Obstruction of both ureters	1	1	1	..	..	..	..	..
Other cases	16	12	..	5	..	..	7	..
GYNCOLOGICAL CASES:								
Carcinoma of cervix (curetted)	5	4	..	3	..	..	1	..
Pelvic abscess (vaginal puncture)	3	1	..	..	..	..	..	..
Dilating and Curetting	7	6	..	4	2	..	..	..
D. & C. ventral fixation or suspension	4	2	..	1	1	..	..	..
D. & C. cervix and perineum	11	9	1	5	3	..	..	..
D. & C. cervix and perineum, V. P.	10	7	1	6	..	..	..	..
Unclassified	5	2	..	1	1	..	..	..
Genito-Urinary Cases:								
Prostatic hypertrophy	4	4	..	2	..	1	..	..
Strictures	10	5	..	5	..	..	..	..
Hydrocele	7	5	2	3	..	..	..	..
Miscellaneous	12	6	..	5	..	..	..	..
HEAD CASES:								
Depressed fracture	3	2	..	2	..	..	..	..
Fracture of base	3	1	..	..	1	..	..	..
Concussion	4	1	1	..	..	..	1	..
Miscellaneous	5	3	..	..	1	..	2	..
Bone and Joint disease	30	18	11	5	2	..	..	..
Fistula in Ano	12	9	4	4	1	..	..	..
Empyema	2	2	1	1	..	..	..	..
Cancer of breast	8	7	2	3	..	..	2	..
Hemorrhoids	12	3	1	2	..	..	..	..
Tubercular glands of neck	8	4	1	3	..	..	2	..
Miscellaneous malignant cases	20	15	2	6	..	..	5	..
Accident cases	31	12	1	5	..	..	6	..
Miscellaneous cases	65	29	3	20	2	1	2	1
Fractures	25	11	2	7	..	..	1	..
	473	276	59	146	19	2	30	12

Explanation. — The results were seen personally by Dr. E. A. Codman, with the exception of a few who replied by letter. Those cases which replied by letter, even if they reported that they were well, are not classed as "perfect" because they were not examined, for it is found that patients frequently consider themselves well when they have hernia or other undesirable after-results. The results of cases as seen at the time of discharge and not heard from later are not given, because such figures can easily be obtained from the annual report of the hospital.

Perfect results are not discussed in the remarks at the end because they are perfect and speak for themselves.

Good results include those cases which, while they showed some benefit from the operation, were nevertheless not completely relieved. In what respects these lacked perfection is explained in the remarks. It must, therefore, be understood in reading the following that with a few exceptions, only the cases in which some undesirable symptoms remain after the operations are spoken of.

REMARKS ON THE CASES IN WHICH THE RESULTS WERE NOT PERFECT.
APPENDICITIS.

General Peritonitis. — In the above table only the cases which died of undoubted peritonitis are included under this heading. As a matter of fact, some of the acute appendicitis (wound drained) might justly be considered general peritonitis, but it is felt that classing them as such might give a false impression.

Wound drained. — Of the seven good results three were not perfect because they had ventral hernia or weak scars; four reported themselves well by letter, but since they were not examined cannot be called perfect.

Wound closed. — The two cases which were not improved complained of the same pain which they had before the operation. Of the five good results, four complain of constipation and indefinite pain. One wrote that she was well, but was not examined.

HERNIA.

Inguinal. — One case, where a double operation had been done, died from pneumonia on the forty-fourth day; the wounds were healed. One of the "perfect" cases was the huge hernia which Dr. Harrington operated on, on "Mass. Med." day; another small hernia has, however, appeared on the other side. Of the six good results, four only reported by letter, and therefore cannot be called perfect (one of these speaks of "a thickening" about the testicle). The other two had good anatomical results, but indefinite pain in the region of the scar, and one has a small hydrocele; the bad result was a recurrence ten months later.

Ventral. — The case which was not improved broke her stitches just after the operation and had to be resutured in the ward. The two good results had small, weak areas in the scars.

The femoral hernia was not examined.