In this way the louse, if present, was killed and we avoided the danger involved in crushing by scratching or rubbing. Not only does the chloroform kill the louse, but it neutralizes the virus in the bite.

Protection of the personnel in the hospital lies mainly in the efficiency of the delousing and disinfecting squad. As is commonly known, typhus is not directly infectious; therefore, if the patients are properly disinfected there is absolutely no danger to the hospital personnel. In this respect typhus is similar to malaria. There is no danger from a patient with malaria, nor is there any danger from a patient with typhus.

At Milina all cases coming from the hospital were put through a delouser. All the hair was clipped from the body, head, armpits and pubis, and the patient was scrubbed thoroughly with soap and hot running water. Then the hairy areas of the body were anointed with kerosene (coal-oil). Clean pajamas were placed on the patient, and he was wrapped in a clean blanket and transferred to his bed in the hospital. The clothes were at the same time put through a pressure steam sterilizer, and furs were put through a sulphur bath. In this way only louse free patients arrived at the hospital.

Any person finding a louse on a patient or on the clothing of the personnel was required to report this immediately to the physician in charge of the hospital or to the chief nurse, at which time special steps were taken to discover from what source the louse came and to delouse the patient or person suspected.

It is seldom necessary for physicians or nurses to expose themselves by handling louse infected patients and articles of clothing, as there are always present persons who have had typhus, who can handle typhus patients and their clothing. The work of the physician and the nurse should be directing and not the handling of the patients and articles of clothing. Too many overenthusiastic persons think they must demonstrate the fact that they are not afraid of typhus or of work. These people are "penny wise and pound foolish." They are sure to become infected sooner or later, and then their work must be done by some one else.

J. R. RANSON, M.D., Saloniki, Greece.
American Red Cross Sanitary Inspector.

"EXPERIMENTAL STUDIES ON TRACHOMA"

To the Editor:—If you look in the 1920 Transactions of the American Academy of Ophthalmology and Otolaryngology, page 196, you will find my contribution to the rôle of the fly in the dissemination of trachoma; and the facts therein related may be of interest in the light of Nicolle and Guénod's research which you have just given editorial notice (THE JOURNAL, September 17, p. 943).

H. B. YOUNG, M.D., Burlington, Iowa.

[COMMENT.—In his paper Dr. Young made the suggestion that the fly may convey trachoma, and supports his contention with the statement that where trachoma abounds, flies also abound and that he has observed a diminution of the number of cases as screening and other sanitary measures were introduced.—ED.]

DANGER IN SIMILARITY OF ETHER AND CHLOROFORM CONTAINERS

To the Editor:—A large manufacturer of anesthetic supplies is now dispensing chloroform in tin cans which closely resemble those containing ether. The very great and real danger of confusing these two containers, as well as the possibility of the operating-room personnel pouring the contents of one half can into another half can is sufficiently obvious to cause the prompt and complete exclusion of such containers from the operating-room. P. J. FLAGG, M.D., New York.

Queries and Minor Notes

ANONYMOUS COMMUNICATIONS and queries on postal cards will not be noticed. Every letter must contain the writer's name and address, but these will be omitted, on request.

WILDBOLZ AUTO-URINE TEST FOR TUBERCULOSIS

To the Editor:—Please publish the technic of the method used by Lanz in the auto-urine test for tuberculosis. Kindly omit my name.

M. A. P., Pennsylvania.

ANSWER.—The reaction referred to was first described by Wildbolz (*Cor.-Bl. f. Schweiz. Aerzte* **49**:793 [May 31] 1919) as a means of differentiating between active and inactive tuberculosis. The article was abstracted in THE JOURNAL, Aug. 9, 1919, p. 456. Lanz merely reported his observations on the use of the method (*Schweiz. med. Wchnschr.* **50**:321 [April 22] 1920). Wildbolz demonstrated that when there is an active process of tuberculosis the urine contains an antigen which, injected by the Mantoux intradermal technic, induces infiltration and redness. This does not occur with urine from healthy persons or in urine from persons with healed tuberculous processes. It never occurs unless the person gives a positive response to injection of 1:10,000 tuberculin, but it seems to occur whether the urine is from the person being tested or not, so long as he has an active tuberculous process anywhere in the body, in glands, peritoneum, lung, bones or elsewhere. Wildbolz evaporates morning urine to 1:10, passes it once or twice through a paper filter impregnated with 2 per cent. phenol, and then makes three sets of two injections on the arm, the two upper with 1:1,000 tuberculin; 3 or 4 cm. below this, two with 1:10,000 tuberculin, and the same distance below, two with a minute amount of the 1:10 evaporated urine. The response with an active, tuberculous process is the same with the urine as with the diluted tuberculin, but the tuberculin response persists unmodified after the process has healed, while the urine response fades out completely. A similar response was never obtained in the nontuberculous, not even in syphilis, influenza, etc., with the single exception that urine containing large amounts of staphylococci induced a reaction, so that the findings are not pathognomonic in certain cases of nephritis. With this exception, it is said that this biologic reaction may be depended on to reveal the tuberculous or nontuberculous nature of lesions, and it will also disclose when they are healed. If the urine reaction persists after the clinical healing of the known process, there is some other active process elsewhere. The specific nature of the urine reaction is demonstrated still more conclusively by the fact that, after subsidence of the urine reaction, if an injection of 1:1,000 tuberculin is made nearby, the apparently extinct urine reaction flares up anew, the infiltration and redness becoming distinct again.

OWNERSHIP OF ROENTGEN-RAY PLATES

To the Editor:—Will you kindly forward me court rulings concerning ownership of roentgen-ray plates, i. e., do the negatives belong to the patient or to the roentgen-ray operator? As rulings may be different in different states, I am particularly interested in the state of Colorado, and will be pleased to have court decisions.

J. J. MAHONEY, M.D., Colorado Springs.

To the Editor:—Can you enlighten me as to the just ownership of roengen-ray films; whether or not they remain the property of the laboratory that takes the picture, or whether the patient is the owner? We have a case in which a patient submitted himself to a physician here for physical examination and a diagnosis of an ailment. The physician referred him to the roentgen-ray department for roentgenograms of his chest, and we found, on examination, a cardiospasm present. The patient was given a written diagnosis and the copy of the roentgen-ray findings was sent to the physician and a print was also made from the negative and given to the patient. He now claims that the films belong to him and has instigated legal proceedings to recover them. We have maintained that these films are the property of the roentgen-ray department and part of our records, and we have therefore refused to give him these negatives on the ground of having set this rule that no films are to leave the department, but that prints will be made and given to the patient.

I will be obliged if you can refer some of the past actions and your rules on this technicality. There are no statutes in our state dealing with this form of action. H. H. PRATT, M.D., Colorado Springs.

ANSWER.—This question has never been passed on by a court of last resort, but it may be answered by analogy. The

patient goes to the physician, primarily, for a diagnosis of his condition, and for such treatment as may be indicated. The physician makes an examination, of which the taking of the roentgenograms is a part. If the photographs are taken by the physician himself, then the plates are a part of his record of the case. If they are taken by a roentgenologist, then the report to the physician, perhaps accompanied by prints of the negatives, is a part of the clinical record. The diagnosis is based on the examination and the clinical record. The patient pays for the opinion and the treatment, not for the means by which they were determined. He does not pay for the plates any more than he does for the apparatus. In the absence of any special agreement, the plates belong to the person who made them. This conclusion is borne out by analogy. The courts have consistently held that a prescription does not belong to the patient. He does not pay for it, but for an opinion as to his disorder and for treatment. The prescription is an order on the druggist to supply the patient with certain drugs. The patient delivers this order to the druggist and receives his medicine. The druggist holds the order as his voucher or authority for supplying the drugs. The situation is similar to that of a depositor writing a check on a bank. The check is not money. It is simply an order on the bank, as custodian of the depositor's money, to pay a certain amount to the holder of the check. Unless some specific agreement to the contrary is made, photographic plates belong to the person who makes them. An additional analogy is found in the question of the ownership of ordinary photographic plates. A person goes to a studio for photographs. The negative is a part of the apparatus by which photographs are produced. The patron does not pay for the plates any more than he does for the camera. The courts have repeatedly decided that the plates belong to the photographer, who is, however, required to restrict their use to proper purposes. The following references are to previous discussions of this question and to court decisions bearing on it:

American Mutoscope Biograph Company. v. *Edison Manufacturing Company,* 137 F 262.
Itzrovitch v. *Whitaker,* 39 So. 499; 115 La. 479; 1 L. R. A. 1147.
Schulman v. *Idem,* 39 So. 707; 115 La. 628.
In re Whitaker, idem.
Burrow-Giles Lithograph Company v. *Sarony,* 111 U. S. 53.
Thornton v. Schreiber, 124 U. S. 612.
Nottager v. *Jackson,* 11 Q. B. Div. 627.
The Property in a Prescription, THE JOURNAL, Nov. 25, 1916, p. 1612.
Ownership of Roentgenograms, THE JOURNAL, May 20, 1916, p. 1650.
Medical Ethics in Relation to Roentgenology, THE JOURNAL, Oct. 18, 1913, p. 1485.
Ownership of Prescription, THE JOURNAL, Dec. 7, 1907, p. 1936.

"VETERINARY CHIROPRACTIC"

To the Editor:—The comment on "Veterinary Chiropractic" (THE JOURNAL, September 17, p. 944) reminds me of an incident of two or three years ago. A chilropractor was making regular calls at the home of a prosperous farmer to "adjust" the farmer's wife. The farmer had a full blood Holstein heifer fresh for the first time and unfortunately the heifer gave milk from but two teats. To attend the heifer the farmer called a graduate veterinary surgeon, who had made two or three trips to the farm but who had not succeeded in obtaining milk from the other two teats. The heifer was mentioned in presence of the chiropractor, who said, "Let me see the heifer, I can fix her for you." So after adjusting the farmer's wife the chiropractor went to the barn, ran his fingers along the heifer's spine, and said "Here is the trouble, right here." He secured a croquet ball and mallet, returned to the barn, placed the ball on the heifer's back and hit it with the mallet, assuring the farmer that the heifer would be all right now. The heifer never gave milk from the other two teats. The farmer tells the story and thinks it a great joke that the chiropractor should attempt to adjust the heifer, but it has not yet dawned on the farmer that there is any joke in the chiropractor adjusting his wife.

ROLLA CAIRNS, M.D., River Falls, Wis.

GRAM STAIN MADE WITH FORMALDEHYD SOLUTION

To the Editor:—Kindly publish the formula for a modified Gram stain made with formaldehyd solution which appeared in THE JOURNAL several years ago and had the advantage that it was permanent. Please omit my name. "FRESNO."

ANSWER.—The formula for this stain was published in THE JOURNAL, Oct. 9, 1920, p. 1017. It is as follows: gentian violet, 4.8; alcohol, 100; formaldehyd solution, 15; water to 400. The iodin solution used with this stain is the usual 1, 2 and 300 combination of iodin, potassium iodid and water.

Medical Education, Registration and Hospital Service

COMING EXAMINATIONS

ARIZONA: Phoenix, Oct. 4-5. Sec., Dr. Ancil Martin, 207 Goodrich Bldg., Phoenix.
ARKANSAS: Little Rock, Nov. 8-9. Sec., Reg. Bd., Dr. J. W. Walker, Fayetteville; Sec., Homeo. Bd., Dr. Geo. M. Love, Rogers; Sec., Eclectic Bd., Dr. Claude E. Laws, 803½ Garrison Ave., Fort Smith.
CALIFORNIA: Sacramento, Oct. 17-20. Sec., Dr. Charles B. Pinkham, 135 Stockton St., San Francisco.
COLORADO: Denver, Oct. 4. Sec. Dr. David A. Strickler, 612 Empire Bldg., Denver.
CONNECTICUT: Hartford, Nov. 8-9. Sec., Reg. Bd., Dr. Robert L. Rowley, 79 Elm St., Hartford.
CONNECTICUT: New Haven, Nov. 8. Sec., Homeo. Bd., Dr. Edwin C. M. Hall, 82 Grand Ave., New Haven.
DISTRICT OF COLUMBIA: Washington, Oct. 11. Sec., Dr. Edgar P. Copeland, 1315 Rhode Island Ave., Washington.
FLORIDA: Tallahassee, Oct. 11. Sec., Dr. William M. Rowlett, Citizens Bank Bldg., Tampa.
GEORGIA: Atlanta, Oct. 11-13. Sec., Dr. C. T. Nolan, Marietta.
HAWAII: Honolulu, Oct. 11. Sec., Dr. G. C. Milnor, 401 S. Beretania St., Honolulu.
IDAHO: Boise, Oct. 4. Director, Mr. Paul Davis, Boise.
ILLINOIS: Chicago, Oct. 19-22. Director, Mr. W. H. H. Miller, Springfield.
IOWA: Des Moines, Nov. 1-3. Sec., Dr. Guilford H. Sumner, Capitol Bldg., Des Moines.
KANSAS: Topeka, Oct. 11. Sec., Dr. Albert S. Ross, Sabetha.
MAINE: Portland, Nov. 8-9. Sec., Dr. Frank W. Searle, 775 Congress St., Portland.
MICHIGAN: Lansing, Oct. 11. Sec., Dr. Beverly D. Harison, 504 Washington Arcade, Detroit.
MINNESOTA: Minneapolis, Oct. 4-6. Sec., Dr. Thomas McDavitt, 539 Lowry Bldg., St. Paul.
MISSOURI: Kansas City, Oct. 10-12. Sec., Dr. Cortez F. Enloe, State House, Jefferson City.
MONTANA: Helena, Oct. 4. Sec., Dr. S. A. Cooney, Power Bldg., Helena.
NEVADA: Carson City, Nov. 7. Sec., Dr. Simeon L. Lee, Carson City.
NEW JERSEY: Trenton, Oct. 18-19. Sec., Dr. Alexander MacAlister, State House, Trenton.
NEW MEXICO: Santa Fe, Oct. 10-11. Sec., Dr. R. E. McBride, Las Cruces.
OKLAHOMA: Oklahoma City, Oct. 11-12. Sec., Dr. J. M. Byrum, Shawnee.
PHILIPPINE ISLANDS: Manila, Oct. 11. Sec., Dr. Fortunato Pineda, 612 Rizal Ave., Manila.
PORTO RICO: San Juan, Oct. 4. Sec., Dr. M. Quevedo Baez, Box 804, San Juan.
RHODE ISLAND: Providence, Oct. 6-7. Sec., Dr. B. U. Richards, State House, Providence.
SOUTH CAROLINA: Columbia, Nov. 8. Sec., Dr. A. Earle Boozer, 1806 Hampton St., Columbia.
TEXAS: Dallas, Nov. 15-17. Sec., Dr. T. J. Crowe, 918-19 Dallas County Bank Bldg., Dallas.
UTAH: Salt Lake City, Oct. 4. Sec., Dr. J. T. Hammond, Capitol Bldg., Salt Lake City.
WEST VIRGINIA: Clarksburg, Oct. 11. Sec., Dr. W. T. Henshaw, Charleston.
WYOMING: Cheyenne, Oct. 3-5. Sec., Dr. J. D. Shingle, Cheyenne.

ADDITIONAL HOSPITALS APPROVED FOR INTERN TRAINING

A completely revised list of hospitals approved for internships was published in the 1921 edition of the American Medical Directory. In the list published in the Hospital Number of THE JOURNAL (April 16, 1921) general hospitals approved for intern training are indicated by an asterisk (*). The following hospitals have been approved since March 15, 1921:

SECTION I: General Hospitals.
St. Mary's Hospital, San Francisco.
SECTION II: Special hospitals (neuropsychiatric), approved only for affiliated internships and graduate medical teaching.
Livermore Sanitarium, Livermore, Calif.
Manhattan State Hospital, Ward's Island, New York City.
SECTION III: Special hospitals, approved only for affiliated internships and graduate medical teaching.
North Chicago Hospital, 2551 North Clark Street, Chicago. (Eye, ear, nose and throat hospital.)

District of Columbia July Examination

Dr. Edgar P. Copeland, secretary, Board of Medical Supervisors of the District of Columbia, reports the oral and written examination held at Washington, July 12-14, 1921. The examination covered 16 subjects and included 80 questions. An average of 75 per cent. was required to pass. Of the 28 candidates examined, 25 passed and 3 failed. Five candi-