tion about the same. Patient went to Muskoka for change Aug. 5th.

Aug. 25th.—Scarcely any noticeable change since Aug. 5th; cervical glands more enlarged; thorax about same condition.

Sept. 1st.—Resumed X-ray treatment; exposing each side of neck, thorax and axillæ. Thorax examined: Area of dulness much greater than a month ago. Heart: Apex displaced 3-4 inch to right. The whole left side is larger than right side, seemingly due to fat deposit; pulse, 98; respiration, 22; cough

present at night.

Sept. 30th.—Result of the month's treatment not encouraging; gradual extension of disease; cough very troublesome; dyspnea at times distressing; heart's action increased; pulse 110; some difficulty in swallowing. Thorax, dulness over entire left side; respiratory sounds very faint; heart displaced 11-2 inches to right (at apex); X-ray burn on left side above the nipple.

Oct. 3rd.—X-ray discontinued for a few days to allow the

burn to granulate.

Oct. 12.—Dr. Dickson examined patient, advising persistence with X-ray, as it appears to hold the growth in check.

Nov. 11th.—Visited Dr. Morton in New York regarding

the use of X-ray with quinine fluorescence.

Nov. 19th.—Commenced treatment advised by Dr. Morton, giving fifteen grains of bisulphate of quinine an hour before X-ray exposure; exposure lasting forty-five minutes; patient three feet from tube, using a very high vacuum tube. Patient's condition at this stage could scarcely be any worse; dyspnea very distressing; coughs at every attempt at conversation; heart's action very weak and rapid; pulse, 130-135; thorax, complete dulness over whole left side; mucous rales in right bronchi; heart displaced at apex about three inches to right (this is what the apex beat would indicate); patient unable to lie down; general condition getting markedly worse; cervical and axillary glands much enlarged; pain in left arm very acute at times; spleen greatly enlarged, can be readily felt three inches below the last rib; mesenteric glands apparently not affected, nor are the inguinal glands; patient's weight, 124 pounds.

Dec. 1st.—No marked change.

Dec. 9th.—Patient says that last night was the first night for many weeks that he has had a good rest. No cough. Examined thorax: Undoubted improvement; axillary glands nearly normal; cervical glands much smaller; area of dulness about same.

Dec. 16th.—Improvement during the last week has been