You're on the Air

By

GRAHAM McNAMEE

In collaboration with

ROBERT GORDON ANDERSON

With a preface by HEYWOOD BROUN



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YOU'RE ON THE AIR

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GRAHAM MCNAMEE

FOREWORD

By Heywood Broun

The first major sporting event which I heard described over the radio was the Pittsburgh-Washington World's Series of 1925. And one of the finest performances of the series was the broadcasting of Graham McNamee of WEAF.

He did a swell job. To a great extent it was a piece of acting. Not only did you get the full detail of the actual happenings upon the field, but the emotion of the moment came over. The roar of the crowd carried an informing eloquence. It was possible to tell the difference between a long fly to an outfielder and a hit which fell safe. There would be a shout even for the drive destined to death, but it would sink with a rush as the fielder moved into position for the catch. But for a safe hit there came a

sharp, swift accentuation in the noise, and it was even possible to detect the advent of a home run by a certain note of fierce exultation which carried over the air waves.

Mr. McNamee individualized and particularized every emotion. He made me feel the temperature and the tension. The wind hit him and was deflected off to me. To listen for the final pitch when the count stood two to three in the last inning was just as exciting as to see it.

No mere ticker report could be in any way comparable, because McNamee allowed you to follow the ball on the wing. The instant it left the pitcher's hand, the radio audience knew it was speeding on its way. The sound of the bat against the ball, the cry of the crowd, the swift dash after the fly—all that came to consciousness.

And the catch that prevented a home run was made extraordinarily dramatic. McNamee did not wait until the incident was clear in his mind. He gave you his confusion, which must have been very like the tense puzzlement of the

crowd at the instant the outfielder clutched at the ball and toppled over among the spectators. Again, when a high fly was dropped, I saw the ball on its way and followed it as it descended toward the outfielder's hands only to pop out again.

McNamee generated in himself the same excitement which the game churned up in the crowd.

After listening to others, and then to Graham McNamee of our local WEAF, I felt terribly proud to be a New Yorker. And not to be provincial, McNamee justified the whole activity of radio broadcasting. A thing may be a marvelous invention and still dull as ditch water. It will be that unless it allows the play of personality. A machine amounts to nothing much unless a man can ride. Graham McNamee has been able to take a new medium of expression and through it transmit himself—to give out vividly a sense of movement and of feeling. Of such is the kingdom of art.

ILLUSTRATIONS

GRAHAM MCNAMEE FRONTISPI	ECE
Facing P	age
Announcer's Control Box at WEAF	2
SPEECH INPUT CONTROL BOARD AT WEAF	3
RUBE MARQUARD BEFORE THE "MIKE" PRECED-	
ING THE OPENING OF THE 1925 BASEBALL	
SEASON, NATIONAL LEAGUE, AT POLO	
GROUNDS, NEW YORK	18
GRAHAM McNamee Broadcasting the Open-	
ING GAME, 1925. NEW YORK GIANTS AND	
Boston Braves	18
THE GOODRICH SILVERTOWN ORCHESTRA AND	
SILVER MASK TENOR. (Inset) Mr. JOSEPH	
KNECHT, DIRECTOR	19
THE EVEREADY GROUP	19
BROADCASTING THE ARMY-NOTRE DAME FOOT-	
BALL GAME AT POLO GROUNDS	22
THE LARGE STUDIO AT WEAF	23
ARTISTIC STUDIO DOORS	23
Josef Hofmann	30
S. L. ROTHAFEL "ROXY"	31
"THE SILVER MASK TENOR"	34
THE WEEKLY BRIDGE GAME AT WEAF	35
EMILIO DE GOGORZA	50
•	

Facing F	'age
CLAUDIA MUZIO	51
ETHYL HAYDEN	66
Mabel Garrison	66
Well-Known Voices of WEAF	
PHILLIPS CARLIN AND LESLIE JOY	67
THE GOLD CUP	82
Two Announcers at WEAF	
RALPH WENTWORTH AND ARNOLD MORGAN	83
THE LOS ANGELES IN FLIGHT	98
PHOTOGRAPH OF GRAHAM MCNAMEE TRANS-	
MITTED BY WIRE FROM REPUBLICAN NATIONAL	
CONVENTION AT CLEVELAND, OHIO, TO NEW	
YORK CITY	99
Two Famous Leaders of Dance Orchestras	
VINCENT LOPEZ AND BEN BERNIE	114
Two Popular Members of the Staff	
"BETTY" LUTZ AND "JIMMY" HAUPT	115
Two of Our Studio Artists	
KATHLEEN STEWART AND WINIFRED T. BARR	130
THE HAPPINESS BOYS	131
THE GOLD DUST TWINS	131
George Barrere	146
Frances Alda	147
Ernestine Schumann-Heink	162
Albert Spalding	163
Louise Homer	163
CLICOUOT CLUB ESKIMOS OUT OF COSTUME	178
CLICOUGI CLUB ESKIMOS COI OF COSTOMIS	- 40

Illustrations

хi

Facing F	age
WHITTALL ANGLO-PERSIANS ON THE MAGIC	
CARPET	178
THE A. & P. GYPSIES	179
GRAHAM McNamee, John Powell, Eva Gau-	
THIER, A. ATWATER KENT, MARY LEWIS AND	
REINALD WERRENRATH	179
PREPARING FOR THE BROADCASTING OF THE IN-	
AUGURATION OF PRESIDENT COOLIDGE	194
Gov. Fuller of Massachusetts Presenting	
THE SEAL OF THE STATE TO MR. MCNAMEE AT	
Boston	194
THE PRESIDENT READING HIS MESSAGE TO CON-	
GRESS IN THE SENATE CHAMBER AT WASH-	
INGTON	195



You're on the Air

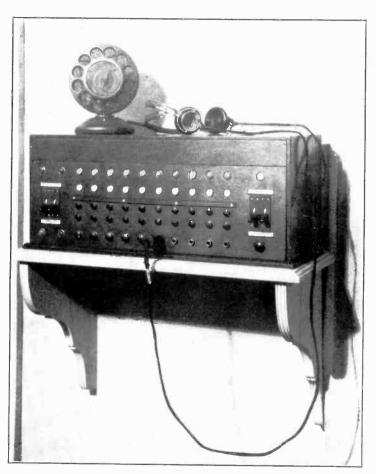
CHAPTER ONE

E Americans are a practical people; we still want our romance, will always want it, but prefer it based on fact. And romance growing out of truth is more satisfying and casts a more magic spell. Perhaps that is why everywhere we see men of all sorts rushing into print—actors, authors, statesmen, pugilists, explorers, queens, courtesans, cooks, and steeplejacks—consulting their little notebooks or ransacking their memories to tell the things they've done and seen and heard, of the great people they've met, backstairs gossip, or noble deeds performed in the fierce light that beats about a throne.

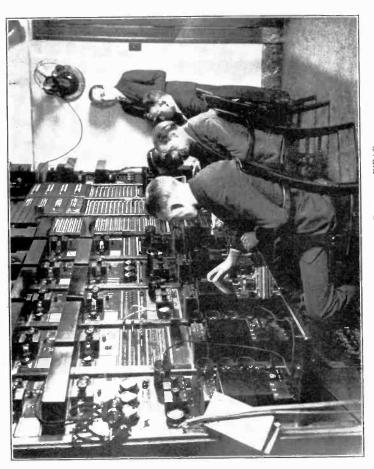
At first thought it would seem that there was little left for a broadcaster to tell. Still,

we have two things on most of the other professions—a uniqueness and a certain mystery that can never die. Besides, no other calling is such a blending of romance, mechanics, and fact. And no other offers such opportunities for mingling in great happenings, for being behind the scenes at the great true dramas of the world. Constantly we see history being made.

It is unique, too, because of its numbers and youth. There are only twelve hundred broadcasters scattered among the five hundred and forty radio stations of the land; and broadcasting was started by the first pioneers only four years ago. It seems perhaps much longer ago than that, now that so many millions are accustomed to tuning in each night; but, if you think back, you will remember that it was only in 1922 that you got your first radio set, something you put together yourself, if you were handy, or purchased somewhere under a manufacturer's label that is now forgotten. Not long after that the first radio



Announcer's Control Box at WEAF



magazine came out. The game is younger, you see, than the motion-picture industry, which is still called an infant, though both are pretty big infants at that. In those four short years fortunes have been made and lost, huge factories have sprung up all over the land, tens of thousands of radio stores have been opened, and the air is full of myriad voices spreading news and messages, music and song, to a listening world. And yet its story from the inside has never been told.

You would have a parallel for uniqueness if the drama were a new form of entertainment; if countless stages had sprung up over night and if you were for the first time to hear of what an actor's life is like, of what goes on behind the footlights and curtains; if you were allowed to stand in the wings at a performance and to wander as you liked, "back-stage." Then the gossip of theatrical folk—how they make up, learn their lines, rehearse, barnstorm, or starve in furnished rooms and tank towns, would have a fresh interest, a new flavor.

And it is in such a way that we mean to take you with us back-stage, "behind the scenes" in our game, to the microphone, with the artists of all sorts who entertain you from sunrise until midnight, to the ball game, the Capitol, and into the ring where our modern gladiators exchange blows.

As for the mystery, there is little need to speak of that. Certainly it is a mystery still to me, this standing by a tiny instrument of wires and springs, talking in ordinary tones and realizing I am heard by millions of people from three feet to three thousand miles away. know you are sitting in little farmhouses or in city apartments with head phones over your ears, standing by loud-speakers in the city streets, or massed in great concert halls, all listening to what we say in quiet syllables, just as if we were talking to our wives. Yet we never see that vast audience, your massed ranked faces, and you never see ours. We are voices out of the night, almost out of the unknown.

But in spite of the mystery, ours is a pretty practical and active life with, as far as the story itself is concerned, but one fault—it has been all too short. Our experiences are not so broad or so deep as Jim Corbett's, who recently told you his story, or as John Barrymore's. Yet a lot of water has flowed under the bridge in those four short years. They have been crowded pretty full.

Perhaps, then, the best and most vivid way to give you an insight into radio is to tell a personal story—not that our lives are in themselves important, but because if you go with us you can see how the thing is done and how the game has grown. I came to New York from the West, for a long time was without a friend, and spoke scarcely to a soul. Now I look around our apartment and see it crowded with gifts—the keys to cities, which mayors have given me, statuettes, radio sets, pipes, curious tobacco pouches, pictures, Swiss watches with chimes, a gold microphone, numberless souvenirs. Often we receive crates of oranges

from California, pecans from Georgia, apples from Northern New York—all sorts of things, and all, too, the gifts of my unseen friends.

On my desk, each day, lie batches of letters; and after big events the mail is so heavy that it takes a large force of clerks to handle it. Following the first world series broadcast, there were seventeen hundred pieces of mail; after that of 1925, fifty thousand signatures—all, again, from that invisible audience. Yes, they and radio have been very good to me.

I was born in Washington, but my father, who had been associated with Judge Lamar, Secretary of the Interior under Grover Cleveland, was called, about two years after my birth, as counsel to the Northern Pacific, so we moved from the capital to the Northwest; and, while I was still a little chap, it was decided to fit me for a musical career. But when, later on, I started to take up music seriously, it happened that there was very little money with which to realize these ambitions. Still, that didn't daunt my mother. She had been

a singer with a voice of delightful quality, and she longed to carry on her own career through me, and constantly kept that goal in mind.

She had started me very early at the piano, a course which I detested, at least the constant practicing required. Still, I can hear her fine voice ringing out over the corner lots-"Graham" ("Baby," it was then), "come take your music lesson!" It didn't help any that the gang, one and all, took up the cry-"Babéebabée—babée"; for the mocking chorus that dogged my footsteps precipitated many a fight that delayed matters considerably; but, even when they let me alone, I would leave my games unwillingly and, like Shakespeare's boy, creep to the old piano, at the rate of about a mile a week, digging my toes in the ground, kicking up dust, and shying all the stones I could find at the kingbirds on the telegraph wires.

And I really had more than the average boy's interest in games, particularly in active sports. As I grew older and broadened out I was on

most of the school teams—baseball, football, and basketball—and in my teens joined a hockey outfit which took on some of the best-known Canadian clubs; one of our old members, Eddie Fitzgerald, later captaining the team that represented this country at the Olympics. All this experience later proved of help, for not only did it build up my body, but it has enabled me to report more intelligently the big outdoor sport events.

At eighteen, however, there came a change; I turned from the piano to singing and fairly ate that up. It opened a new world to me. I had found what I loved.

Meantime, through all these years, my mother kept her eye on something bigger. St. Paul was a good-sized town; but the big city was New York. There lay the real chances. However, I must confess, that though the dream seemed pretty alluring, I was not yet responsible enough and was still, in spite of my interest in singing, too engrossed in sports to save much from the jobs I had after I left

high school. It was Mother who really did all that. She never lost sight of our great adventure, kept talking it over and over with me; meantime, laying by her small capital.

When I was nineteen, we decided to take the plunge, and, after buying our tickets out of our savings and deducting something for immediate expenses, we sent the balance on to a New York bank a friend had recommended, and started out.

On reaching Jersey City we did not cross by ferry but by the tunnel, unfortunately, and so missed the inspiration of the sky line and the tiers of lighted windows, behind one row of which I now broadcast each night; and we arrived at the Penn Station, tired, depressed, and hungry.

It was a magnificent sight, of course, but when I looked around that gigantic rotunda, I felt discouragingly small, like a real pygmy. I lost all thoughts of conquering the big city and wanted to go back home.

The feeling of despondency grew on me as

we came out of the station and saw on the old building across the way—the Pennsylvania Hotel had not then been built—a huge undertaker's sign, with a solemn inscription that seemed aimed directly at me.

We had neglected, before leaving home, to inquire about a place to stay overnight, so, when I saw a hotel sign up the street, I made for it. The lobby did not look any too promising; but we were tired and I entered and asked for rooms.

"All filled up," the clerk replied.

We were probably fortunate in being turned away, but we didn't feel so at the time. The big city about which we had dreamed seemed inhospitable and pretty cold.

Finally we accosted a policeman, and I asked him for a good hotel. He told us of the Hoffman House, and Mother remarked that that would be pretty expensive; then she added: "Oh, well, let's get two good rooms. Bother the expense; we'll be comfortable tonight!"

To show what a green kid I was then, after leaving Mother, who wanted to rest, I went out to look over the town and up at the tall buildings; then, seeing some bright posters and an electric sign, Miner's Theater, over on Eighth Avenue, I decided that this must be one of the really swell theaters of New York. On entering I found it was only a burlesque show, not what I had expected; but at least here was color and life, and, when I emerged once more and saw the brightly lighted restaurants and the great crowds hurrying by, I decided that New York was, after all, a rather wonderful place.

Both Miner's and the Hoffman House, with its beautiful paintings, are gone now—into the limbo of forgotten buildings that once made up the history of New York; but I never pass either site without thinking of that first night in the metropolis.

Next morning was equally thrilling. We found the subway and started downtown to visit that bank which, we were told, was on

Broadway near Vesey Street. The train was a local, and as Fourteenth Street, and Bleecker and Franklin, station after station, whirled by, one of us remarked: "My, it must be a small bank; we're getting way out in the country!"

When we emerged, however, from the subway kiosk at Brooklyn Bridge, and looked up at the skyscrapers, then came over to the Woolworth Building, scaling with our eyes its eight hundred feet of sheer wall, my mother, thinking of the little dinky stores we had expected to see, just stood on the curb and laughed and laughed. She was a "good sport" and a brave soul, my mother.

The next few months passed slowly, all too slowly for us. Trying to make our small capital in the bank near the Woolworth Building last as long as possible, we rented two rooms, across the river, in Weehawken. For six months I scarcely spoke to a young person, never even entered a motion picture house, ferry trips from Weehawken to Chambers Street being our principal amusement. And little did I imagine,

as I watched the sky line, that some day I'd be up in one of those towers talking not only to my friends out in St. Paul, but to countless others all over the land.

I do not regret those days for myself; they are good for a youngster; but I do regret them for my mother, for she did not live long enough to enjoy with us the full, crowded years that came afterwards.

We had never dreamed work would be so difficult to get. But New York was, is, and always will be, I suppose, overcrowded with ambitious singers; and "breaking in" was next to impossible for a newcomer. I had had some experience in offices and banks back in St. Paul, and was about to give up the search for singing engagements and take on some clerical job, when my mother protested. She hadn't saved and scrimped and come all the way to New York, she said, just to see her son a clerk. It wasn't fair to her. Shortly after that, however, she came home with good news.

In the afternoon she had been riding on a street car and was trying to open one of those stubborn trolley windows when the woman next her said:

"I see you're not a New Yorker."

"No, I'm not—from St. Paul—but how could you tell?" asked my mother.

"No New Yorker would want fresh air as badly as that," replied the lady, indicating my mother's struggle with the window.

As I said, we had become acquainted with hardly a soul since coming to New York; and, anxious at last for someone to talk to, she continued the conversation, finally, as the two became quite friendly, pouring out her soul—not for her own sake but for mine. So she explained something of the difficulties I had experienced in securing musical engagements; and it seemed that Providence must have made her try the window that day, for when she had finished, the lady remarked, as she offered her card:

"I'm connected with a number of musical

organizations in the city, and I need a good baritone. Suppose you send your son to me."

That seemingly unimportant meeting was really eventful, for I sang for some of these societies not only that year but every year since. Besides, we were enabled to move to a New York apartment, and to continue my singing lessons. It wasn't long before I was giving them, too; and had steady employment as soloist, at first in a small Jersey City church, the Westminister Presbyterian, and then at the Dutch Reformed Church of Bronxville. Later I sang in a Broadway company with Valli Valli—"The Purple Road" the production was called—and with a grand opera company in New York.

To show what part luck, after all, plays in any career, it was about this time that I had two offers to go to Europe to study at the conservatories, neither of which, as it happens, was consummated. In the first case I had been selected by a group of people, who every three or four years sent some musical student to the

conservatories abroad, as their choice for the scholarship. Everything was set when a lady member remarked—"By the way, it just occurs to me, that we're always sending men. Why not try a girl this time?"

In the other instance a lady, a well-known and wealthy patron of music, had decided to send me to Italy for the same purpose; and a meeting at which we were to settle the final details was arranged for the following morning. That night she received a cablegram saying that her brother had just died on a yacht in the Mediterranean. So naturally it was she who went abroad and not the ambitious singer. Still it was fortunate, for otherwise luck might have also kept me out of radio; and meanwhile I was receiving the best of musical instruction in New York and engagements were coming along in increasing numbers. Finally, when I sang in a concert with Madame Schumann-Heink, and, the same season, as baritone soloist at the Easter services at famous St. Bartholomew's in New York, we were glad that we had taken the plunge and come on to the big city.

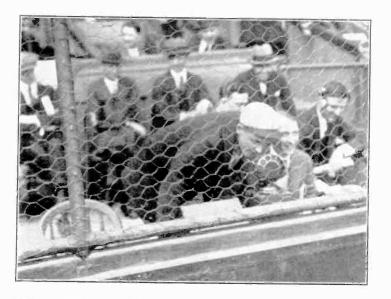
All this time I had my eye on another goal, one to which every concert artist looks forward, the "New York debut"-my own recital. is a critical step for a young singer, and for it I had been studying very hard with Madame Esperanza Garrigue, whose sincere friendship and guidance have ever been of the greatest help to me. In direct preparation for the Aeolian Hall appearance, which was scheduled for the fall, I went to Lake Placid, where I worked for the whole summer with the eminent recitalist and tenor, George Hamlin. There, too, this same season, was a little girl with large brown eyes and thick braids down her back. coaching with Madame Marcella Sembrich. It was Dusolini Giannini, who recently aroused such a furor in the musical world.

With all the work on hand, time now went rapidly enough. The great night at last came around, was over, and, to my surprise, when we read the papers at breakfast next morning, I

found that I had escaped without "panning" at the hands of the musical critics; in fact, they had been more than kind.

There was one little critic at that performance who stood out in vivid contrast with the distinguished gentlemen whose names we read at the head of the musical columns. I had finished the more formal program and, for one of the encores, used a lighter number-"Mah Curley-headed Baby." During the song, a sweet little youngster, who had been sitting with her mother in the rear of the hall, slipped from her place to the aisle and paused there for a moment, a little frightened. Then, fascinated by the words of the song, she forgot her shyness, and came down the aisle, one step at a time, until she reached the stage, where she stood, her blue eyes looking up at me in rapt and very flattering attention. I always thought she brought good luck to me; anyway, there followed a very successful concert season.

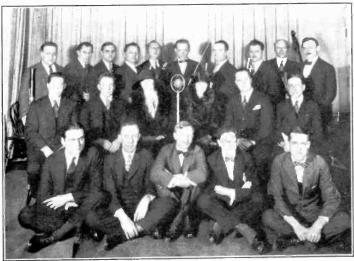
But there was another goal to which I was unconsciously being directed. That was radio,





(Above) Rube Marquard Before the "Mike" Preceding the Opening of the 1925 Baseball Season, National League, at Polo Grounds, New York (Below) Graham McNamee Broadcasting the Opening Game, 1925. New York Giants and Boston Braves





(Above) The Goodrich Silvertown Orchestra and Silver Mask Tenor (Inset) Mr. Joseph Knecht, Director

(Below) THE EVEREADY GROUP, STANDING: MEMBERS OF MAN JACOB'S CHAMBER SYMPHONY ORCHESTRA, SEATED (LEFT TO RIGHT): WESLEY HOWARD, CHARLES HARRISON, BETSY AVRES, ROSE BRYANT, JACKSON KINSEY, EDGAR WHITE BURRILL. SEATED ON FLOOR: DOUGLAS COULTER, HARRY GILBERT, PAUL STACY, MAN JACOBS, TOM GRISSELLE

in which all this vocal work was to help so much. But I had scarcely heard of radio then; in fact, had never listened to a loud-speaker or handled a head phone.

What prompted me to drift into the studio of the American Telephone and Telegraph Company (WEAF) on Broadway I do not know. But one afternoon, when we were dismissed from the jury on which I had been called, and which was sitting in the old Post Office Building in lower New York, I strolled down Dey Street. Some sign about radio, or some remark I heard, aroused my curiosity. Though I knew very little about radio, I knew singers sometimes broadcast, and I was anxious to see what a studio was like.

I asked the elevator-starter where the studio was, and if I could visit it.

"Sure," he said; and up in the elevator I went—to the fourth floor and a brand new life.

For, after I had asked a few questions of

one of the people there—it happened to be the office manager—remarked, "How'd you like to try the work? We're looking for someone like you."

The salaries offered in those early days of radio did not, of course, compare with the returns of concert work; but the hours were short—from seven to ten; it was summer, the slack season for musical engagements, and somehow from the moment I had entered the studio, radio fascinated me.

Perhaps there was another reason for my decision. Music had always played a large part in my life, and it is not surprising that through music I had met a girl, a talented young singer, who later became my wife, and whose sympathy and constructive criticism have helped so much in any success I have had. And as with any young man, after taking the momentous step, my ambitions were more than ever aroused.

In an interview with the officials, I had ar-

ranged to reserve some evenings of the week and certain afternoons for my concerts. The new duties, therefore, would not interfere with my music. So I accepted, and reported the next night at the studio, promptly at six thirty.



CHAPTER TWO

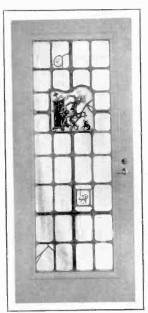
RADIO, at least as far as broadcasting went, was then pretty new. The first stations, KDKA, WJZ, and ours, WEAF, had been opened but a short time before and naturally methods were rather crude. We had then two rooms and a few people, while now we have a staff of over one hundred and cover a whole floor of the American Telephone and Telegraph Building. None of the three stations were on the air more than four hours; but now there is something going out continuously, from some one of the five hundred and forty stations, from the early setting-up exercises in the winter sunrise to the last good night in the wee small hours. Programs were simple, too, consisting of a little singing and music, a reading by an author, or an occasional uplift talk by a noted minister.

The broadcasting was done through but the



Broadcasting the Army-Notre Dame Football Game at Polo Grounds Graham McNamee at the microphone, Phillips Carlin with glasses







(Above) THE LARGE STUDIO AT WEAF (Below) ARTISTIC STUDIO DOORS

one station; there were no "hook-ups" with others; whereas this year the number of stations in one hook-up sometimes runs as high as twenty-seven, embracing the whole country from coast to coast. So our audience was limited then to tens of thousands, a big one, of course, but nothing like that of the first inaugural at Washington where we broadcast to many millions.

There were no outside jobs, either, such as that inaugural or the big sporting events; everything went out from our two small rooms.

The announcing also was quite as simple. All the man before the microphone had to do was to say, "Miss So and So will now sing such a number," and at the end, "Miss So and So has sung such a number," without any comments or explanation of the music.

And everything was experiment, with something sometimes of resulting confusion. When I entered, my first night, just before seven, the starting hour, I found them rehearsing in the studios. There were rugs, chairs, lamps, and

a piano, scattered around as in any livingroom, also a few music stands and a microphone near the piano. I saw, too, that the ceilings were padded, and the walls heavily draped with hangings on rods so as to reduce the echo to a minimum. I noticed one other peculiar thing. Singers were standing near the instrument, awaiting the announcer's instructions, and when he spoke his voice had a curiously dead sound. So had the soloist's when she replied, nothing like the resonance of people's voices just outside in the reception room. It was a little dispiriting, at first, particularly to one who was also a singer; and I have often heard others mention this same disturbing quality; which was due, of course, to the lack of resonance.

There are, you see, no noticeable reverberations. John McCormack, for instance, when two years later he entered our studio to broadcast his first radio concert, exclaimed, "My, oh my, this is dead! I can never sing here." And Madame Bori complained: "Why, I

can't even hear myself—or tell what I'm doing. Does it sound that way outside?"

That's just what it doesn't do. Though the singer's or speaker's tones are apparently without life or resonance to those in the studio, they have all the old brilliance when they go out in the air. What the singer misses is the overtone reverberations to which he is accustomed in the concert hall. But these very reverberations, if the studio were not so padded, would bounce back into the microphone, blurring everything and completely spoiling the effect.

As they rehearsed, the announcer or manager of the studio would place the artists now here, now there, perhaps within three feet of the microphone, now again eight feet away from it, according to the character of tone. A little later he had considerable trouble in grouping a band so that the instruments could all be heard effectively and with a proper balance. I noticed, too, that he walked around trailing a long wire which had a button on the end. This

he pressed as he wanted to open or shut off the microphone.

Between the two draped studios I saw a glass-enclosed box like a signal tower, with faces looking out, and wondered what this could be. Indeed, it all seemed a sort of crystal maze, and for the first two days I simply wandered about, without either direction or instruction. But soon I discovered that the microphone was not at all complex, simply a little instrument of wires and springs, merely a glorified telephone transmitter. It was more sensitive, of course, for while the ordinary transmitter has but to catch the usual speaking tones, the microphone had to catch and transmit over the wire and through the air what we call "higher and lower frequencies," that is, sounds of a high or low number of vibrations. A high violin note, for example, is of short waves and a great number of vibrations, and the ordinary telephone could not convey these with truth or reality. The range of the microphone is therefore very much greater.

The little glass-enclosed signal station, I discovered on investigation, was just a monitor's booth. It had windows looking into both studios, so that those faces I had noticed could see what the singers or musicians were doing in either room; and on the table by them was a loud-speaker. The booth was sound-proof, too, so that it caught none of the conversation or instructions in the studios nor the voices direct, only the sounds as they came through the loud-speaker and just as they went out on the air. By this means could be corrected any defect of rendition which was caused by position.

As for the wire with the little button, which the announcer carried, it was simply connected with the microphone, opening the circuit or cutting off the artists, so that they should or should not be heard by the outside world.

This microphone was connected, of course, with the control room, where operators sat, regulating the outside volume, cutting down

a too great blast of tone, or lifting up a pianissimo; and the singing or speaking voices went over the telephone wires to West Street and then up on the roof to the aerials, whence they were launched into space from the antennae.

There have since been many improvements, which will be described later, but such was the equipment and procedure during these first weeks at the studio.

After becoming fairly familiar with my surroundings, I was allowed to do a simple job of announcing and found myself very nervous, as everyone is when he first stands before the microphone. As a matter of fact, I was scared stiff, and the folks in the office said I acted as if I were going to be married, and joshed me considerably.

My wife and my mother had arranged, on this highly important occasion, to go to a little piano store which was located near our apartment and had a few radio sets in stock. Here they sat on wooden boxes and experienced not only a thrill of mystery, but one of pride, when first they heard my voice on the air. Instead of being just a tyro broadcaster, it seemed to them as if I must be some great orator. And I think that in spite of our familiarity with the telephone, that is the way most people felt when listening in to a friend in those early days of radio—as if that friend were like a prophet speaking to a vast audience from some mountain top. It's so uncanny until one gets used to it.

Like a boy, I enjoyed the thrill as much as they did; and when my wife went away that summer, she didn't have to depend entirely on letters or telegrams from me. By listening in she could tell from my voice, simply announcing that "Miss Baloolah has just sung 'Send Your Love by Radio' from 'The Buyer from Peoria,'" that I was at work and in excellent health.

And you can depend on it that the wives of announcers never fail to recognize their husband's voices, though many of the most ardent fans cannot tell us apart, frequently mistaking my radio twin, Phil Carlin, for me. And we have received many letters and phone calls, asking for information, when bets have been laid, as to which of us was announcing at a certain hour—some putting up their money on Carlin, the others on McNamee. Usually, however, though our voices are not unlike, some difference in *timbre*, some trick of expression, will, after the first five minutes, betray the speaker. But there are many who can never tell us apart, no matter how long we speak.

After a while cutting off the studio or putting it on the air becomes automatic, but at first, like all the others, I sometimes forgot to press the little button on the end of the control wire and people tuning in would hear things that were never meant to be heard. One night I made a rather impatient remark, and someone rushed in from the monitor's booth exclaiming, "That went out on the air!" Other doors from the offices opened, and others, too, politely informed me, "That went



Josef Hofmann



S. L. ROTHAFEL "ROXY"

out on the air!" I had finally composed myself and was about to begin broadcasting again when the tenth man rushed in with this warning, "Say Mac, that went out on the air," and losing my temper, I shot back, rather rudely, it must be confessed—"Get out of here, Luf, or I'll break your head."

Next morning our mail was flooded with letters asking why the announcer was going to break Llufrio's head; what had Luf done, and so on.

It was in the fall of the year 1923, that the letter-writing habit really took hold of the fans; and now we not only have case after case filled with these letters, but thousands of specially selected ones bound in russia leather and also a very amusing collection in what we call the "Coffee File."

The name was chosen because of an incident in the Harvard-Princeton game in the fall of 1925 when, rather excited over some play, my associate, Carlin, dropped our thermos bottle filled with coffee through a crack in the stand just as he was handing it to me. I must have expressed my disgust and disappointment rather forcibly, as I was cold from the frosty weather—and all this time the "mike" was on.

Many letters came in from fans amused over the accident, and a still greater number after another mishap in a World Series game when the rain suddenly came down and spoiled my new suit. Just to entertain people I jokingly mentioned this fact, never dreaming what would be the result—not only a host of sympathetic letters but many offers from clothing houses and individuals for new suits. Had I accepted one tenth of these I might have been the Beau Brummel my family say I'm not.

The letters were not so numerous in the summer of 1923, but very early in the game I began to receive instruction via Uncle Sam whenever I mispronounced a word—"program," for instance, which I was inclined to

run together, and "address," the first syllable of which I used to stress. Recently I have seen ads of a certain dictionary—no I am not allowed to broadcast its name-which tells how to accent such words as "exquisite," "inquiry," and "finance." Well, it doesn't make any difference what dictionary one gets, but the perfect broadcaster should have one handy. He does need, too, a background of culture and education and should be fairly well read. An acquaintance with literature and sports, and a musical education, which I was fortunate in having, also add to the equipment. For one has not only to broadcast "Yes, We Have No Bananas," but "Un bel di Vedremo," "Stille Nacht, Heilige Nacht," "Le Regiment de Sambre et Meuse," "KAKb KOPOb WEbHA BO Hy." no, they're not pronounced as they look. Our "Roxy" (Rothafel), the famous entertainer, raged around the studio the other night, in his humorous way, because he had to pronounce "Simple Aveu" in the French fashion.

There were seven lady harpists present, and one of them helped him out.

Then, too, a broadcaster should not only possess some of these qualifications and a pleasing voice, but a good disposition and must have control of his temper as well as of the microphone.

One in training for such a position should never, even in off hours, indulge in strong language. If he does not swear off swearing, he is apt to get mixed up some time through habit and use expressions that are all too descriptive, particularly in broadcasting a stirring baseball game or a rattling good prize fight.

In those early days, we had considerable trouble through thoughtless conversation from visitors who were occasionally allowed in the studios while we were "on the air," also with people who tried to sneak over messages. A broadcasting station such as ours, which is primarily designed for entertainment, is not allowed to send out personal communications;



"THE SILVER MASK TENOR"



The Weekly Bridge Game at WEAF Phillips Carlin playing, Graham McNamee at the microphone

and we had to be on the alert, for every once in a while we would see someone creeping up to the microphone, just after the artist was through, and before the button was pressed, and getting over a "How are you, mother?" or "Hello, Mary, out in Flatbush!" course, arrangements had been previously made with "Mother" or "Mary" to tune in at that hour. Usually they were disappointed, or else half the message got over with disastrous results; the first syllable of the "Hello" for instance, which was precisely the case one day, as I found out next morning, when the letters came in. One thought that "Hell," which came right after a rather religious number, was not particularly in keeping. If I didn't like the singer I shouldn't swear at her. And a nice old lady, thinking it was I and not, of course, knowing it was some visitor that had been guilty, wrote that, "it was a shame, when the young man had such a pleasant voice, that he hadn't been better brought up."

Once, too, a visitor got into trouble with his family over just such an attempt. He had received from someone on the staff a letter of invitation which he proudly displayed to the little wife; and she promptly conceived the idea of his sending her his love on the air. Till twelve o'clock she listened, the program was finished, "Good night all" sounded, and the air was still.

When he arrived home an hour later "little wifey" was sitting up waiting for him, and in tears. She just knew he hadn't been at that studio. He was wise, she declared, and had gone the old "business at the office" alibi one better. There was no use—he hadn't been at that broadcasting studio at all.

Now, as a matter of fact, he had attempted to send his promised message, but he didn't get over even a first syllable; we caught him eight feet from the "mike" and snap went the button! It took a letter from the announcer and an affidavit from his friend to patch up that quarrei.

There were other duties, of course, besides those just outlined—the preparing of programs, coaching and rehearsing artists, consultation with other departments, the handling of temperamental singers, disposition of instruments, the avoidance of breaks in the schedules, in short, seeing that everything synchronized and ran smoothly. Though the game had not developed to its present intensified state, it can be readily seen that we were busy enough.

Then as time went on we tried to broaden our announcing into reporting, for the game was rapidly reaching the stage when the mere announcing of a number on a program wouldn't do. Gradually, to hold our audience, the idea was developed of adding some explanation of the compositions played at the studio, something about the composers, perhaps, and, at the big outdoor events, which we were just beginning to cover, descriptions of the settings and principals.

Major Andrew White had already made

skilful use of this treatment at a boxing contest or two; but it was thought that the idea might be developed further. So just before the Greb-Wilson bout for the middleweight championship, I was dispatched to the training camps to watch and interview the two fighters. What I thought interesting I wrote down and broadcast from my notes each night; then the day of the big event came—for me all too soon. It was my first important assignment and I was horribly nervous. In fact, none of the fighters could have been more shaky than I.

Though the bouts were not to take place until evening, I went to the Polo Grounds at four o'clock and just fussed around, watching the workmen fixing the ropes and canvas of the ring, and men from our plant running the wires for our microphones. I don't think I actually saw what they were doing; I was really thinking of the sixty thousand fans that would line those stands, while I was up there by the ring talking to a million more.

And every once in a while I would look up at the sky, praying for rain.

I had no supper, just some "pop" and a hot dog or two about seven; then came the distant hum of the crowd as it began to file into the stands, at last a regular thunder as the throng marching in grew thicker.

Eight o'clock! The preliminary fighters came down the aisle with their handlers; were on deck, examining bandages, shuffling their feet in the resin, and all that—and there was a touch on my shoulder.

No, it was not any message of welcome but a signal to a very frightened young man who was to broadcast his first fight, detail by detail, to millions of people. And I realized from letters we had received from ordinary evenings how ready they were to jump on you with each slip, and I knew, too, that boxing fans could be more rabid than any mere music lovers.

But with that touch on my shoulder and the words, "You're on the air, Mac!" I started and, like the fighters, once they had shaken hands or singers after the first note, lost my nervousness, now that the job was on.

Somehow I managed to get through the "prelims," not saying anything much I guess, but they were of little importance. Then came a great roar from the crowd and the two famous fighters in their bathrobes crawled through the ropes. My real work lay ahead.

Fascinated, I watched them being introduced, bowing to this side and that—then they were in the center of the ring, receiving instructions from the referee, and I found myself talking. Gloves were touched—smack! They were under way, and once more I lost my stage fright in action. And there was action, plenty of it—dancing feet, swaying heads, flying fists, thuds of gloves on naked torsos—more, too, than in most fights, with that man Greb in the ring who works so fast that gloves seemed to fill the air like hailstones—a million a minute.

For a second there flashed through my mind the question, What was I going to tell all those listening people whom I couldn't see and who couldn't see the fight? Simply to say, "Greb hits Wilson; Wilson hits Greb; Greb hits Wilson again," would be "blah"; wouldn't interest anybody. Fortunately I had boxed myself and knew a little of the art, and so I began to pick out the blows, distinguished between left hook, straight left, roundhouse swing, and so on, and shot over quick sentences also about their feinting and ducking, of the movements of their bodies, and the expressions of the men's faces when hit or in a clinch, just the high lights, you see.

Between rounds, like the fighters, I breathed a little easier. Before the fight I had written, rather self-consciously, a good many sheets on the crowd, for I knew what it would be like. Now I tore them all up and got down to brass tacks—the real thing. And there was a lot of color in that crowd around me—the sea of faces, the towering stands, with endless rows of spectators, some in coats, others in shirt sleeves, the black varied with white, strangely

like the many tiers of keys of a gigantic organ. All these things I tried to describe; the ring, too, with its fierce lights under their inverted cones beating down on the contestants, who lay back on the stools, resting their arms on the ropes, their chests heaving, their pink and white bodies glistening with sweat or flecked with blood as the handlers sponged them off, dripped water in their mouths, or frantically fanned the air with towels; and, too, as the rounds advanced, the form of one looking very weary, while he listened to his whispering second, with just a hint of troubled appeal, as if he wished someone would stop it—that it was all over.

But now they were up again, approaching each other warily, stalking each other like panthers—then diving in, thud, crack, crack, thud—a head jerked back—jerked back so quickly you thought you could hear it snap—a look of pain, quickly covered by a smile, someone down on a knee—the count—up again—the shouts and shrieks of the crowd—then more fly-

ing fists—and in a fierce rally the pandemonium of Hell unloosed.

Through it all I tried to keep my head clear and coolly analyze a bit-for instance, in this fight, that the harder Greb was hit, the quicker came his smile—a strange recoil from blow to grin; and all this time, too, I tried to be impartial, though in the excitement it is hard to be detached. Besides, I had met in training quarters Greb's motherless little daughter Dorothy, who, though only three years old, had traveled around the country with her father ever since the mother died. We had struck up quite a friendship and, because of that, way down deep in my heart I was pulling for her daddy to win. Also I expected him to win; and when, later, Wilson landed on Greb's head with a terrific blow, and Greb's knees wobbled. with a knockout almost in sight, my jaw flew open with his, like a nut cracker, and I was so excited that for a few seconds I couldn't speak into the microphone.

Still, I think, most broadcasters are fair and

as impartial as it is possible to be. A man would have to be an iceberg not to be affected when things are going so fast. And perhaps it helps—a little excitement creeping through the microphone is contagious, and adds humanness and reality to the descriptions for all those listening in.

Altogether, it was a very pleasant experience, this first big assignment, and out of it I got quite a thrill. I had often boxed and been at fights, but never before had been so in the thick of things, where I could actually touch the resin-covered canvas, and was in a way really behind the scenes.

There were other things that weren't quite so pleasant, though—the girls, for example, at the ring side, young girls. One of an æsthetic type, quite pretty and frail; she was biting her nails to the quick and her lips. Another one, too, I noticed, opening and shutting her clenched hands—and as she opened them I saw deep gashes in the palms. And a third girl, a big blonde Amazon, kept screaming, "Kill him,

Harry—Kill him, Harry." Over and over she shrieked this, like a crazy woman, until it got on my nerves and I wanted to slap her in the face. And one little thing kept clutching at a big man's coat, giving a sort of insane little squeal at each blow. Then she would look at the ring side again, only to bury her face once more, with that little cry, under her escort's shoulder. On each one of these women the fight had a terrible reaction. Women, it seems, are not constructed for this sort of affair. They should stay away.

I do not mean to imply that the game should be stopped—with all its evils it has too many fine points for that—skill, science, development of the body, and courage, which are of benefit to all men.

What is needed most is competent refereeing. Unnecessary punishment should not be allowed to go on. And the minute a man shows signs of real weakness, the decision should be given. If the fight goes further, it is not a fight but a murder.

But to go back to my first assignment—when I was through, I was as weak, it seemed, as any of the beaten fighters. In the nervous reaction I could hardly stand. However, when the manager, to encourage me, I guess, exclaimed, "Mac, you're a hundred per cent," I felt pretty fine. And I experienced even a greater thrill than in that first announcing from the studio, for here I had been absolutely "on my own."

The few months which I had intended to devote to radio were now up, but the World's Series was coming; and all at once I decided to stick.

CHAPTER THREE

"S TAND BY!" Many times during an evening of broadcasting do you hear that command on the air—"Stand by for your local announcer!"

If you could be with us by the microphone at such a time, you would get some little idea of how important a part time plays in our work. Indeed, I know of no operation in any other business that is so perfectly run off—on schedule, on the dot, and to the split second. We never could advertise a performance as the theaters sometimes do, for eight thirty and then start at eight forty-five.

When that order "Stand by" goes out, the announcer pauses with watch in hand and eye on the signal lights of his control panel. The local announcers at the other stations, with which we are hooked up, then have a chance to put in a word to their own clienteles, something about the program that may be interesting in each vicinity. But they must start in at once, just as soon as we finish with the words "local announcer." They have half a minute—and that means precisely thirty seconds-in which to give their talks. And so perfectly has the system been worked out, so beautifully synchronized is everything, that the man at our microphone waits for no check or corroboration by telephone that the local announcers are through, though some of them are distant thousands of miles. He knows that they are through, that all the plugs controlling the circuits of the various stations have been shot home; and at the thirty-first second he takes up his broadcasting from WEAF again.

An even more startling evidence of this wonderful synchronization came with a speech by President Harding at Kansas City, shortly before his death, and not long after the events described in the last chapter. It was one of the first affairs of its kind, for not often had a President spoken on the air, though ex-President Wilson, too, just before his death, gave what proved to be his farewell message by radio, his last public utterance.

The Harding speech was carried from the hall in Kansas City where he stood at the microphone, to our plant in New York City over a telephone circuit. We also had a second circuit at our command for emergency. In the cellar of the hall sat an operator in control of our apparatus and wearing head phones. Over the emergency wires he could talk with our New York plant to see if everything was coming through satisfactorily.

As the talk progressed, the man in Kansas City thought he detected a slight "line noise." Quickly, and while the speech was going on, he spoke over his telephone to the man in New York.

"Did you hear that? Trouble on the wire."

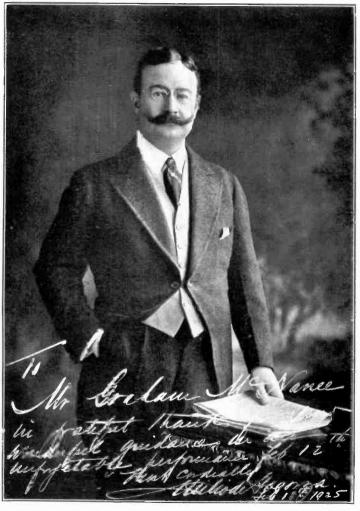
"Yes—all right—switch!" shot back New York.

Bing—a plug shot home—the speech was transferred to the emergency circuit. And,

though fifteen hundred miles separated the cities, the outside world never knew of the trouble or the transference. There was no elision—not a sentence was lost—not a syllable even.

Our next big assignment came with the World Series in October, 1923, a few weeks after the fight between Wilson and Greb, and I was anxious to tackle it, for the resourcefulness called for at those big outside jobs makes them more thrilling than the formal evenings at the studio, though these are always interesting and present, each day, new problems.

I was doomed to disappointment, however, for at a late moment, it was decided to engage a regular newspaper reporter instead of one of the staff. I had played baseball myself, but the experience of a man who for years had followed the big leagues, it was thought, would be of advantage, particularly since the baseball enthusiast is even more exacting than the fight fan. And, too, the average man is more familiar with the slang and the technical terms,



EMILIO DE GOGORZA



CLAUDIO MUZIO

the "inside stuff," and lore of the diamond than he is with the finer points of boxing.

As the stands began to fill up with the notables, motion picture actresses, politicians, and other celebrities, and the heroes in their gray and white uniforms and striped stockings marched out on the field to the music of the bands, I was longing to be at it, describing all these things. I felt that I could put that Greb-Wilson experience to good account, but was forced to sit inactive—at the microphone, it is true, but not speaking into it, just coaching the announcer so that he would not crowd the instrument, sit too far away from it, or unduly raise or lower his voice.

In the fourth inning of the third game, however, I had my chance. I was unexpectedly called on to relieve the announcer, and from then on to broadcast the balance of the series.

I was forced to start dead cold, though, and once in, found that the game required a different sort of treatment from a fight. There were times here, too, when things came thick and fast, during batting rallies or tense moments when men were on bases with a famous batter coming up. But there were not quite so many such moments—not so much raw drama, swift action, and suspense as in the ring, where often all the poor announcer can say is, "He's up, he's down; he's down, he's up"; and all between gasps.

And the broadcaster must see to it that in his announcement there are very few of these lulls, or "breaks on the air." For, with the breaks, the listener immediately imagines that something has gone wrong with his set. Besides, he did not buy it just to listen to dead silence.

So I found myself more than ever falling back on general description. And that is where the imagination comes in—not that we invent, but it takes something of the imaginative faculty to make the quieter times vivid and to avoid the old, hackneyed, and boresome expressions. You must make each of your listeners, though miles away from the spot, feel that he or she, too, is there with you in that

press stand, watching the movements of the game, the color, and flags; the pop-bottles thrown in the air; the straw hats demolished; Gloria Swanson just arriving in her new ermine coat; McGraw in his dugout, apparently motionless but giving signals all the time; the pitcher beginning to waver; and the two figures far off against the left-field fence, where another pitcher is preparing to come to the relief of his faltering comrade.

It is astonishing, too, how the little, unconsidered actions of the players give reality to the listeners—the things that on first thought would not be considered worth mentioning. To say that "Scott is knocking the mud from his cleats"; "Shawkey is tossing a few curves over the plate to loosen the kinks in his arm"; or that "the umpire is examining the ball to see if Meusel nicked it with that last single," may seem absurd here in print; but it's just these little details that add life to the game for the fellows who cannot see it.

The careful working of the "applause"

microphones also helps the illusion. So that this may be understood clearly, the disposition of our equipment should first be explained.

We had wired in from the butt of a regular telephone circuit and run wires through the stands to an improvised control room and to the microphones. There were four of these, two stationed in advantageous places to catch the applause and cheers and various noises of the crowd, a "speaking mike" through which we were to broadcast, and another for emergency. The last two were stationed in a spot behind the home plate and in the press stand, which we thought the best place for observation of the happenings on the diamond.

We also had the usual head phones for communication with the man in the control room; we could switch our own microphone on or off, but had to direct him when we thought either of the "applause" microphones around the field should be open.

And often we would leave them wide open, sending out full throated the shrieks and roars from the stands and bleachers. Again it seemed wise to let just a trickle of applause through my own "mike," sometimes even while talking, yet not enough to drown out or blur the voice. Here the listener got the effect of melody and a great accompaniment—the broadcaster explaining that "Pipp singles and Ward starts for home," and the very convincing accompaniment in the roar of the crowd as Ward did run home. It is hard for a man at a distance to feel that he is at a ball game if he hears just a voice talking and talking; but that roar makes him believe it—he can see the figure sliding in under the catcher's outstretched hand—even the cloud of dust as the runner reaches his goal.

And whatever I may have said about prize fights, there is no moment in any one of them that exceeds in drama such a moment as this. In fact, the most exciting experience I have ever had in broadcasting came through baseball. It was in the eighth inning of the series of 1923 when the Yankees were leading three games to two, but the Giants in this game were

leading by four runs to one; and it looked pretty much as though the series were to be tied.

As we sat in the press stand, we looked for just that, for there was Nehf in the box below us, and "going great guns." Already he had one game to his credit and for seven innings of this had pitched the most wonderful airtight ball. And we didn't expect him to falter as Ward, the first man up, faced him and the shadows fell over the stands. Ward sent up an easy fly—out and the Giant rooters roared.

Schang, however, the next batter, singled smartly and rested on first; then the Yankee roars started from the lowest tier of the stands up to the tiny figures on Coogan's bluff, far above us and outlined against the setting sun.

Then the third man up hit the first ball that the now worried Nehf shot across the plate, and the roars did not stop from that time on. If you ever heard Caruso, you know how many notes and phrases he could sing without taking a breath—in music we call it "sustained tone." Well, that crowd had a wonderful sustained tone; but then they had this on Caruso—ten thousand throats could take it up when another ten thousand left off. Anyway, there was no cessation at all to that roar. If they could win by rattling Nehf, those Yankee rooters were out to do it.

And now a fourth man was up, confronting the pitcher with threatening eye and lunging bat, while a relief pitcher was warming up far over by the left-field fence. It isn't always pleasant for the man in the box to see that figure, for it means that soon he himself may be yanked ingloriously. Perhaps Nehf saw him out of the corner of his eye as he glanced over at the runner prancing up and down the base line at third, or else the batter hypnotized him, for he wound up deliberately and pitched carefully—four balls off the corner of the plate. The bases were full and the roar gathered volume; I could hardly speak. Then four more wild ones—a run forced in, the score four to two! Nehf was retiring to the showers with

hanging head, and one of those figures in far left field was waved in by McGraw to take Nehf's place. It was Rosy Ryan, and I thought he didn't look any too happy, either. It was certainly a ticklish place for a new pitcher—he was decidedly in a hole in the critical game.

And he faltered, too; another pass—and the score was four to three. Two more runs and there would be no need of another game. The world series for that year would be over.

If the roar had been deafening before, it would have been drowned out, could it have been matched with the one that now followed, as a thick-set figure swinging a bat, advanced to the plate. If ever the stage was set for a hero's entrance, it was then. For here was the most advertised athlete in the game, one whose name appears in headlines more often than the President's, Babe Ruth at bat—with the bases full. Only one little crack—just a solid connection between ash and leather, and the series would be over. The chance that was the im-

mortal Casey's was now the Babe's. He had the World Series in the hollow of his hand.

Almost too engrossed to speak, I watched him as he came forward, and it seemed to me his face, naturally a healthy sort of coffee color, was all too white. However, he squared his shoulders and set himself menacingly enough—set himself and swung and missed. I never saw a more vicious swing. Still, that was only one strike—surely he'd hit it next time. But again he set himself—another vicious swing—he had missed! The roar from one side stopped now, but you couldn't notice it—there was a good substitute for it in the Giants' howls; the third ball came whizzing—it was growing darker; still, you could see it—another of those gigantic swings—and the poor Babe was out.

And there you are—the stage all set and baseball's highest-priced player making an ignominious exit. I watched him as he went back to the bench, his head hanging on his chest, his face almost green now where before it had been white.

And though Meusel succeeded, a moment later, where he had failed, part of the potential drama had vanished—when the "great Casey" had struck out.

There is so much to tell of other events that I must not linger much longer with baseball, except to say that we had noticed in this series one very important thing-that we were getting further than ever away from mere announcing and deeper into the reporter's field. To the voice qualifications, a sense of order, the ability to harmonize, synchronize, and be on time, the reportorial instinct had to be added. And this means, as I understand it, a quick eye, the instinctive ability to pick out the high lights, the significant thing, and a fertile descriptive power-together, it should be said, with an interest in everyday, common things, the sports and recreation and work followed by the average man.

There is a marked difference, however, between the newspaper and the radio reporter. Although some of the former's work must be done in haste and on the spot, he still has time to absorb, to let impressions sink in, and he isn't bothered with having to talk all the time.

Sometimes at football games we have what is called a "short pick-up." An associate sits but three or four feet away with a telephone circuit of that length between us. He talks into the transmitter, to the broadcaster, in low tones so that his voice will not get into the microphone. Well, if ever there was a short pick-up, it is that which a man uses in broadcasting a sports event-from eye or ear to the mouth; it travels that way and is gone. Consequently we do not have, after the event, such vivid memories as the newspaper reporter or the more observant spectators. Grantland Rice, a leader in the newspaper field, found this out to his annoyance, after trying his hand, or rather his voice, at broadcasting. One experience, though he did an expert job, was enough; and he swore he'd never try it again when he was also engaged to write up the event. It was all too transient, he said. He caught everything on

the fly and, when he was through, he had not enough material left for finishing the syndicate and magazine articles for which he had contracted; too few real recollections remained for report and analysis afterwards. Everything seemed to have gone in the one ear and, though not out of the other, at least out of his mouth. He discovered, he said, that he lost too much money in taking on such an assignment.

Our game is quite different therefore, and as we undoubtedly would make but indifferent reporters in print, so the newspaper man does not always make the best broadcaster. Once I sat in with an editor—a famous writer, too, with a powerful style and a keen wit. Somehow, perhaps through self-consciousness, but I don't think it was altogether that, he found it difficult to pick out the right things to tell; those that might score on the printed page were not so interesting on the air. An effect gained in one medium will not always get over in another. A musician may give the suggestion of color in the tone of a violin, but not with

paint on canvas; and a fine actor cannot always write as well as he talks. So it is with our respective callings.

If the work of reporting a baseball series is hard on the nerves, it is sometimes also pretty exhausting for the voice, though here my musical training stood me in good stead. I never quite gave out, but once I came near it-in the Series of 1925. It isn't that you have to shout, though the crowd is shouting all around you. You can close the "mike" to shut out the unwanted outside sounds; and it is much better to speak in an ordinary tone, as that will get over, if your voice has the proper carrying qualities. Still, when the crowd shouts, it is hard to keep your own voice down to a proper pitch. fore you know it, in all the excitement, it climbs up with the crowd's and often you find yourself hoarse when you haven't been conscious of any strain.

A great many letters came in after this series, not so many as the fifty thousand responses in 1925, still sufficient to show a wide public in-

interest. Most of these communications were favorable, but there were enough dissenting to give the experience spice. Some called me all kinds of an egoist and many violently protested against any injection in the reports of the personal.

"What do we care," they wrote, "whether you are cold or hot, wet or dry; or what's the state of your health? All we want to hear

about is the game."

Now the method of telling about things informally was not exactly designed. It began, I think, with the fights. Naturally it would be hard to report these as formally or with as much dignity as one would a Philharmonic concert. In the excitement one naturally lets himself go, is more honest and down to the skin at big sports events. Then, too, sometimes we would get communications saying: "We liked such and such an expression," or "the way you handled the job last night"; and we'd think that perhaps we had been a little less stiff on that occasion, and so take the tip; but the

habit grew on us more or less unconsciously. And it should never go so far as to lug in humor deliberately. If a phrase or description strikes one spontaneously as funny, why, shoot it home! But you cannot deliberately plant a joke, build it up and all, as do most vaudeville performers.

It was in this year that the newspapers first assigned men on their staff to review radio entertainment, a step that proved radio had really arrived, quite as the first critical reviewing of motion pictures showed, some years back, that people were at last taking the films seriously.

One of these radio reviewers, who ran a daily column, praised the broadcasting of the Lynch-Goldstein fight, then added:

"My how mixed up and excited the broadcaster of WEAF got last night over the fight! Fortunately he wasn't as cold and inhuman as McNamee when he broadcast the concert last Wednesday from the same station."

There was a catch in this, though, that the reviewer didn't get. For I was the man who

broadcast both the fight and the concert. The reviewer did not recognize that the voices were one and the same; and that the ways of broadcasting serious concerts and fights are necessarily different.

Another critic took me to task later for saying that a fighter had "fainted" when it was plain that he hadn't, since he continued fighting. Evidently this reviewer was ignorant of one fine point of the fistic art which is spelled with an "e" not an "a"—feinting. But, then, even fighters sometimes are equally oblivious; stylists are so few and far between in these days of the shorter bout. This reporter, by the way, in a later issue, proved his sportsmanship by acknowledging his error. The art of reviewing, like our game, was young then; and has advanced perceptibly in skill and helpful analysis since that first season.

A second very interesting thing about the letters, before referred to and following the World Series, was the very common form of address. It was my custom to open any pro-





ETHYL HAYDEN





Well-Known Voices of WEAF

LESLIE JOY

Dung Day

gram with the salutation "Good evening, Ladies and Gentlemen of the Radio Audience," and to close the evening with the phrase "Good night all." The radio fans did not know the names of the announcers as well as they do now, so I got many a letter directed simply to:

"Good evening Ladies and Gentlemen of the Radio Audience

N. Y."

One or two were addressed with the closing words, and it seemed sort of ominous to open these, inscribed:

"Good night all

N. Y."

The next big assignment after the World Series came with the broadcasting of the Coolidge message to Congress in December of the same year, 1923.

This time I was not stationed near the speaker, who stood in the famous Senate Cham-

ber of the capitol, but down in the cellar with the control man. Again we had no orders or instructions, and it looked at first as if there would be little work to do beyond the mere announcing, any comment, at the time, seeming out of place on such a formal occasion.

But as I sat there, in the cellar, on a barrel, listening to the President's voice as it came over the loud-speaker we had stationed near us, I began to take notes on the backs of old envelopes, listing the principal points of his message. I had begun just for the fun of the thing, but when the speech was half through, it occurred to me that many of the radio audience would perhaps tune in late and so miss much of the message. It would not be a bad idea, I thought, to recapitulate it for them.

So at once, when the President had finished speaking, I went to the microphone, and, after the formal announcement that the President had just finished his message delivered to the joint houses of Congress assembled in the Senate, I read my summary.

It was an innovation that seemed to please our audience, for the letters following showed a most favorable reaction; and, too, the points I had picked out as important to retell, seemed to coincide with those later given in the newspapers. However, at a conference in the home office, it was decided not to repeat the practice on other such occasions. While this time it had been done without offense, it is obvious that there could be complications, should the broadcaster be indiscreet or too partial in his summarizing, and stress certain points too much while ignoring others.

Still, it was thought that in the future we could do more in the way of color at such gatherings, brightening the rigid formality and procedure by descriptions of settings and crowds, as at baseball games, and possibly by giving some details of the building in which such affairs were held and stories of their historic associations.

One week after the delivering of this address, our microphones were again set up in

Washington, this time in the White House, for the broadcasting by the President of the Harding Memorial address. Before the start, Mrs. Coolidge watched our movements with intense interest, asking in her sweet, gracious way many questions about the apparatus and its working.

Characteristically enough, the President himself put no questions to us. I have observed him closely on many occasions and rarely indeed have I heard him ask any. He seems to take everything in with his eyes. This very day I watched him as he stood with Butler and other prominent people, having innumerable queries shot at him, but seldom did he speak himself, just stood there, listening, thinking, absorbing. I could not help but wonder at his poise and calm, and the wise shrewdness of those eyes which, you can depend upon it, were all the time taking in something.

CHAPTER FOUR

In the spring of 1924, the whole office grew excited over the National Conventions, the first of which was to be held by the Republicans in June. There never had been any broadcasting of such proceedings and it was not yet possible to tell whether the leaders would sanction such publicity. Finally, however, permission was given and WEAF was selected as the official station. As a rule, the big outside jobs are exclusive, since it is more practical for one station to handle matters, tying up, of course, with other outfits, though sometimes a local station is also allowed to broadcast for the section immediately adjacent to the city where the event takes place.

And again no orders were given us by the office; indeed, there were no precedents or rules to guide us. It was another "first-time" job, and all we really knew was that people met

and somehow got together on a candidate. How it came about we didn't know nor just what were the proceedings we had to cover.

So two weeks before the opening, one of our plant men went with me to Cleveland to look the big hall over and find out as much as we could about the procedure. After this little reconnaissance we returned to the office, and went back to Cleveland again with a staff of thirteen men, two days before the first gun was fired.

However, there wasn't much of firing or fire works at this convention; it was too placid and smoothly run for that. Our part of it, though, was very interesting and presented a number of problems. To give you an idea of how our equipment was placed, we had first better draw a swift picture of the great hall, which seats somewhere in the neighborhood of sixteen thousand.

There was the usual great gallery allotted to the spectators, and on the auditorium floor sections were set aside for the various delegations, each being marked by a standard bearing the name of some state.

To right and left were the pipe organ and the band; and on the stage various notables who took little part in the proceedings, but who were; invited to give dignity to the occasion. In the front of the stage proper was a platform where the actual officers of the convention sat; and from this there ran out into the audience a narrow tongue, about four feet wide, where the chairman or speaker stood when there were speeches or any special announcements.

An enclosed booth is not needed at outdoor games or celebrations, but it is quite necessary in a hall where our broadcasting and directions might disturb the deliberations; so one of glass, like the monitor's booth in our studio, was erected on the stage near the base of the proscenium arch. It was equipped with a table, chair, paper, a telephone receiver, head phones, and a little board with signal lights; also two

microphones, one for regular announcing, the other for use in case the first got out of order.

Microphones were also placed near the band and the organ and out on that narrow tongue for the broadcasting of the speeches.

I could cut off my microphone in the booth, but, as at the baseball game, when I wanted to open or cut off any of the others, I had to telephone to the control room. If an important speech was to be made from the tongue, I would call through the transmitter, "Stage," or, if I thought music would prove a pleasant variation, "Organ" or "Band."

To make everything more sure, we had placed in the booth that little signal board, the lights showing red when my microphone was on, white for the stage, and so on. There was always assurance, if one kept one's wits about him, that the air wasn't dead. We had come quite a way, you see, from the first studio days when I would press the button and shut off a singer, then press it again when somebody was saying things the outside world was not supposed to

hear. It is really remarkable, when one considers how many things are going on at a convention—roll-calls, resolutions, speeches, band selections, parades, and so on, with an audience of sixteen thousand people, the microphones and telephones working and wires relaying everything to New York and out again to twenty-seven stations all over the land—that so few mistakes are made. And it is a fact that at these big broadcastings no serious break has ever occurred, except through storms, or one of those catastrophes called in insurance policies "acts of God."

Although I could look out of the glass walls of my little house and see everything that was going on, I could not analyze all the proceedings or tell what was coming next, in a several-days gathering which had no absolutely fixed program. So one of our staff stayed on that tongue with head phones on, and could talk not only to the control room and bandmaster, but to the booth. From here, too, he could gather from officials the procedure, changes in

the program, if there were any, word about the next speaker, and so on; and in turn he would relay this information over the short telephone circuit to me or to my associate in the booth.

That tongue extending out into the auditorium was practical for speaking purposes, but sometimes it had an amusing effect. Every once in a while during a lull in the program two politicians would disentangle themselves from the crowds on the platform and walk out on the tongue for a little private deliberation of their own, away from the rest. Here they thought they could confer in ordinary tones without being heard, since the platform was built high and they stood considerably above the audience. But they forgot all about the silent "mike" and, instead of speaking in their expected privacy, they were actually telling their confidential arrangements to the whole world. To save them embarrassment later, sometimes we had to be pretty quick in ordering the control room to cut off the "mike."

This convention was a rather cut-and-dried

affair, with the only color the beautiful effects of the lighting system, the tones of the magnificent organ, the tremendous chorus of "Onward Christian Soldiers," from fifteen thousand throats, and the only excitement occurring when they kept wiring to Governor Lowden, offering him the vice-presidency, and he kept wiring back that he meant what he meant when he said "No." There were perhaps two other little incidents that stand out in retrospect—a friendly chat between Bryan and Will Rogers, and having our pictures taken. Ordinarily the latter wouldn't seem much of an event, but the way this was handled was out of the ordinary, in 1924, and a decided innovation.

At five o'clock one afternoon orders were received from New York to get in touch with our office in Cleveland and have several photographs made and transmitted to New York by wire. Four and one-half minutes after the photographer had finished his work, the wire transmission was complete and the pictures were in New York. They were printed that

night in the New York papers; and next morning at breakfast I saw in the *Times*, copies of which had been sent to Cleveland by aeroplane, pictures of Secretary of the Navy Wilbur, Representative Burton, who made the keynote speech, Henry W. Taft, the ex-President's brother, one of myself, and another of all the delegations in convention assembled. Four great modern inventions—the camera, telegraph, printing press, and aeroplane—had done their work with incredible swiftness. And a fifth, radio, was somewhat linked up with it all.

As for Bryan and Rogers, who were both acting as correspondents for newspapers, I heard W. J. offer Will, and in all sincerity, to tell him of anything funny that he saw occurring in the convention. Rogers was equally gracious, for quick as a shot he came back, promising to inform Bryan of anything serious he observed.

When it was over, we were not the least fagged and thought convention broadcasting was a cinch; but the Democratic convention was something else again. At this, too, we had hook-ups all over the country, twenty-seven stations in all, enabling 'most everyone to listen to the proceedings.

Much of a convention program, the committee appointments, reading of rules, and so on, is of little interest to anyone not a politician; and for such dead spots in the program I had to be forearmed with something of a more entertaining nature. So I visited the scene, Madison Square Garden, New York, beforehand.

This was not the new structure on Eighth Avenue which "Tex" Rickard recently erected, but the old one at the northeast corner of Madison Square; and much material lay waiting in its history. For it had been built by one of America's leading architects, Stanford White, in 1890, and had held more varieties of people and entertainment than any hall in the land. Housed under one roof were a vast arena, innumerable dressing-rooms for elephants and men, a once fashionable café, a

theater, a gym, and a concert hall. Up in the tower under St. Gauden's statue of Diana, which once looked down on the buildings all around it, were the studios of the architect, Stanford White, and, on the main roof, the garden where Harry Thaw shot White, in this building of which he was so proud and which was to prove his undoing. In the main arena had been circuses, prize fights, six-day bicycle and walking races, fashionable balls and horse shows, biblical extravaganzas, and exhibits of poultry and cattle; and here, too, Wilson had spoken, and Roosevelt; Corbett had boxed, and John L. had fallen before Charlie Mitchell's fist. And sometimes the whole place had been turned into a lake where battleships steamed and later mermaidens from the Bronx and Amsterdam Avenue and Baxter Street sported in one-piece bathing suits.

All this history, with other entertaining incidents out of the past, I gathered, taking a stenographer along on our tours through the building. We almost struck a snag here,

though, for the man in charge of the publicity of the convention came upon me one day while I was at work dictating.

"Remember young man," he said with a scowl, "I want to see every word you send out."

So I took extra precautions in preparing this filler-in stuff for his inspection, and somehow it got by. After examining the sheets he said: "All right—use your own judgment. Shoot what you like." It was a great relief, for how we were going to have him censor not only the descriptive matter, but every word we shot out on the air, I did not know.

So we started in, to be at it for sixteen hours a day for fifteen days, to lose many pounds in weight, have our digestions go completely "blooey," and grow so weary we had to be punched to be kept awake. Yet the letters that came in afterwards said, "You didn't seem tired at all!"

But that was afterwards, and meantime, the convention was on—routine, seating, speeches,

resolutions, nominating, speeches again—a lot of red tape at first, but gradually it gathered steam and tension, then snapped wide open with the nomination of Governor Al Smith. I never heard anything like it before or since—horns, whistles, claxons (a giant siren just back of my booth); people standing up, stamping, shrieking, throwing tons of paper and food; bands competing; others outside; crazy-heads banging and breaking chairs; and a thousand young men in the gallery singing "East Side, West Side, All Around the Town"; you could hear that even above the uproar.

Then came the parade of standards—bitter arguments between delegates where the state sentiment was split—even exchanges of blows between the more hot tempered, and Senator Walsh, the permanent chairman, standing above it all, looking weary and a little disgusted. Then a fresh uproar as a new state and standard decided to get on the bandwagon and fell into Al Smith's parade. It was all worse than any outdoor fight or baseball game,









for there the cries go up to Heaven, while here the bedlam bounced back from the iron girders of the roof.

Through it all—this hour and a half of that wild demonstration—I had to talk, with that siren directly back of me. I could hardly think—and it was hard to cut the "mike" down low enough to shut out the outside noises that threatened each moment to come through and drown me out completely.

That filler-in stuff which I had used during the first days I did not call on now—I had enough else to send out—more than enough.

Then came the balloting, and in this there was much of tedium, relieved now and then, as my stage friends would say, by a "giggle."

No one who heard it will ever forget that vote of Alabama—hour after hour, day after day, for one hundred and three ballots—it never varied, sounding like some train-dispatcher's cry:

"Allabamma casts twenty-fough votes for Unnderrwoooddd?"

That old war horse, ex-Governor Jim Brandon of the same state, acted as the train dispatcher, and he had an unforgettable delivery—a mixture of Southern drawl and sing-song, long drawn out, with a humorous accent on the "Un" of the "Underwood." And how it did roll and echo among the iron rafters; indeed so impressive was it, that, after the fifteenth ballot, all of the thirteen thousand people in the hall joined in, as soon as Alabama's name was called, sing-songing it and trailing it out with Governor Brandon.

There is a street somewhere out Brooklyn way—I never could lead you to it but I know it is there—that some loyal Southerner named for his state; and for months after the convention, each time the conductor called out "Alabama" the passengers would take up that cry:

"Casts twenty-fourrr votes for Underwooodd!"

During the second week I nearly had the pleasure of a complimentary vote myself, and

you can be sure I was much pleased, not only on this particular broadcaster's account but because of the tribute implied to the effectiveness of radio.

The suggestion came from four or five delegates from Massachusetts who, during a lull in the proceedings, came over to my booth and said that they had received letters from their wives telling how much they had enjoyed the radio reports. They felt as though they were actually in the hall with their husbands, it was all so real; and having heard about the complimentary vote given to Will Rogers, they thought the man who had entertained them should also be honored. The husbands in question readily fell in with the suggestion and told me that it would be fixed.

Later they came over and said the situation was too acute. This may seem strange but their delegation stood something like thirty-three for Smith, two-and-a-half for McAdoo, with half a vote wandering. Things were very intense in the McAdoo-Smith deadlock, and to

give that half vote to me, though it meant nothing more than a compliment, would have been bad psychologically. Conditions were hourly getting worse; it was dangerous even to ask after a man's health or slap him on the back; everybody was suspiciously watching for signs; and the defection of that lone half vote might have been considered significant; the slightest sign just then would have started something.

So on the voting went, resolution following resolution, ballot succeeding ballot, with the resulting snarls and wrangles, until everyone thought the end would never come. Many of the delegates were broke and longed to get home. Fifteen days of convention, mixed with a lot of sightseeing, might have been pleasant; but fifteen days spent in one hall, with no relaxation or relief in sight, with hotel bills mounting up, and most of the delegates moving out of good quarters into cheaper, from good restaurants to sandwiches, get on the nerves. Not being able to leave my booth

often, I had to rely on sandwiches myself, and, though several years have since passed, I am not yet able to look at two pieces of bread placed face to face.

Even the amiable Will Rogers was dissatisfied in spite of that complimentary vote. He had contracted to cover this convention, too, but remembering the other which lasted only a few short days, had arranged to do it for a a flat price. Never again, he said; next time he would ask for daily wages.

One laugh that grew out of this situation came when Delaware wanted to break the unit rule, by which it had held through all the long voting, and the spokesman declared his delegation was no longer bound by it. Senator Walsh, the chairman, declared otherwise, and, in support of his decision, quoted from a ruling by the United States Supreme Court: "When an act is repeated over and over, through the years, it must be considered an act of policy."

How his voice dryly sang out that "over and over through the years!" It stampeded the

convention, furnishing a very necessary comic relief.

And no more than I can lose that clarion call of Brandon, of Alabama, can I forget Walsh's sardonic query when some disputatious delegate tried to speak: "For what purpose does the gentleman arise?"

He was a big figure in all the events I was trying so hard to broadcast, but to me Bryan loomed up as even bigger, at least more dramatic. And yet he had started almost without a friend.

For two days and nights without sleep or rest he fought in the room where the committee on resolutions sat, wrangling over the mentioning of the Ku Klux Klan. When, after twenty-four hours, Homer S. Cummings, the Chairman of the committee, finally emerged, his tall figure was bowed with fatigue and he could hardly make his way to the platform. Wearily he waved his hand to stop the applause—he couldn't bear even that. They had, he said, come to no agreement; then, in the

pause that followed, his voice almost broke as he added: "And we have resorted even to prayer."

I found out afterwards that two of the men had become so worked up over that three-K plank that they had taken off their coats, preparing for hostilities, there in the committee room; but Bryan had begged them to stop, then dropping to his knees between them he recited the Lord's Prayer.

The fight over this plank was a long one, and after fifty hours the committee decided to bring it before the convention. But there was a harder fight ahead, for Bryan had to sell the idea of excluding the plank to the delegates. And again it was apparent that he had hardly a friend. The tension, too, was awful. Looking out from my glass windows I scanned each face, as he began. The men on the floor were silent at first, but all seemed to be uneasy, fidgeting in their seats, fingering their collars, each looking suspiciously at his neighbor.

Bryan himself looked very weary. There

were heavy lines on his countenance, and he looked for the first time like an old, old man. There was no applause for him; in fact, with his first words nobody would listen, and he was rudely interrupted again and again by boos and jeers and catcalls from the gallery.

Then, as he got under way, gradually, somehow, he gained control of that huge hall. His glorious voice, once the greatest in the land, was at first a little sharp, not full and round as it had been of old; but sentence by sentence it increased in power.

I kept watching him intently and it struck me that he felt he was actually wrestling, single handed, with that great crowd; his eyes burned; the weary lines in his face were tautened to steel; and the terrible sincerity of will and purpose was very evident. Then one by one I could see that they were yielding to his spell.

The climax came with his last words—I think he must have deliberately built up to these as in the climax of a great play, sentence by sentence, period by period.

"Gentlemen," his voice rang out at the end, "you have raised the Fiery Cross of the Ku Klux Klan higher than the King Kleagle himself ever expected to see it."

I felt, as he pronounced those words, that although he had started with almost nothing, now he had won.

But at last the end came to this convention which broke all records, many purses, and some hearts—also my health for the time being. The delegates were too tired even to mumble a vote for vice-president. Perfunctorily, like men after a long siege, each leader cast a total ballot. Then all packed up to go home.

Now, as I look back at it, it is not the candidates, John W. Davis and Charley Bryan, or Al Smith, that loom up most significantly. It is W. J. Bryan himself, and, however any of us may differ with his policies, we cannot deny him either courage or power. It was a splendid personal victory that he won in this convention—the last he was to enjoy on earth, for the great Commoner will broadcast no more.

CHAPTER FIVE

HILE we are plunged, coats and collars off, deep in this story, having just put down that numeral at the head of the chapter, the telephone rings. A frightened girl is at the end of the wire.

"Have you heard anything of the Olympic?" the distracted voice calls: "The extra says she's sinking—and Will's on board."

We assure her that nothing can be wrong, that the Olympic's too big to get into trouble, though all the time we remember the Lusitania, which was even larger; then we promise to get what inside information we can, and promptly communicate with the studio, this man and that, until finally we reach one of the officers and track the story down. Later messages indicate that the steamer is in no real danger and we telephone the news to our distracted friend.

After all, there is no tragedy to paint large in seven days' head lines; yet the story is eloquent of the part radio has come to play in our lives, when within a few minutes you can find out whether or not a steamer with all you love on board is foundering a thousand leagues away on the ocean.

No sooner have we conveyed the message to the girl who feared she was going to be a widow than the postman brings to the door a card from a friend, the cartoonist, Thornton Fisher, saying: "I've just heard you broadcasting—off the Irish Coast."

And, if anything further were needed to prove the power of radio, a letter in the same mail says: "Your singer last night was too strong. Her last top note broke a vase on my mantel!" It was true, too, as we found on later inquiry—the vibration had actually shattered a family heirloom.

Sometimes you find in the most unlikely quarters evidence of this widespread interest in radio.

Doctor Cadman, probably the best-known broadcaster of "the cloth," was wandering not long ago in an unfamiliar part of Brooklyn, and finally becoming hopelessly lost, inquired his way of a coal heaver who was shoveling his precious cargo down a chute. The man gave the requested directions, then asked with a smile of eagerness that brightened his begrimed face:

"Aren't you Doctor Cadman?"

"Yes, but how did you know? Do you attend my church?"

"No," said the coal driver, "but I listen to you every Sunday afternoon on the radio."

Shaking hands, the distinguished preacher left the man, standing there on the curb, looking after him. Apparently he had been thrilled not only by this meeting with a celebrity, but by the delight of finding the face that went with the voice he had heard so often. To him it was the best game ever invented.

I have had similar experiences and two on the same day in Chicago. While I was standing on the curb, on my arrival at the hotel, fishing in my pockets for change to pay for the taxi, the driver was taking the card out of the meter. I made some jocular remark, when, like a shot, he turned round and looked inquiringly into my face.

"I know you now. Your name's McNamee and you're the man that broadcast the World's Series. You boys gave me a big kick—and you ride free!"

That afternoon I called at the home of General Dawes in Evanston to consult with him about the broadcasting of the notification ceremonies. I found him sitting on the porch, smoking his famous briar. He jumped up in his hair-trigger fashion, and, before I had announced my name, and while he was still shaking hands exclaimed: "I don't know your face—but I remember your voice." Then, pausing as if trying to place me: "Oh yes, you're the man that told us about the conventions. My wife got a lot of fun out of that. She wants to meet you. Come right in."

It is strange how the individual qualities of a voice may be distinguished, or at least stir recollection, when there is no memory of the face that goes with the voice to aid in the identification.

After the political conventions, I was more often at our studio on Broadway, and perhaps some description of our business operations may not be amiss before we go further afield.

Gradually the work had increased so that our two small rooms took over other offices; and at this present writing we cover a whole floor of this giant skyscraper, with a staff of a hundred, divided between the program, commercial, plant, financial, and publicity departments, including twenty-four stenographers much of whose time is taken up with the mail received from the fans.

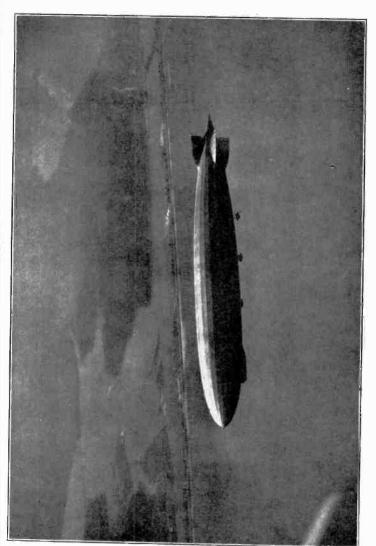
And, as in all other houses that have something to sell, we have a staff of salesmen under the direction of a sales manager. The commodity they have to offer is not tangible and does not come in cans or packages; by the

quarter, half-hour, or full hour they sell it—nothing less than time, "time on the air." Here again distinction must be drawn between the stations which like ours, WEAF, broadcast entertainment, and those which send messages from person to person, usually, these days, out to sea. Most entertainment stations have their "time" divided between entertainment they themselves arrange, and that broadcast for their clients for publicity purposes. I should say they run roughly about fifty-fifty, that is, that half of the programs are "sustaining," as we call our own, and half "commercial," as we term those programs which are paid for by outsiders.

It is easy to distinguish between them, of course, for, when a commercial program is rendered, we always announce that it is given by such and such a firm and also tell the name and brand of its product, working in perhaps the publicity slogan, both at the beginning and end of the hour, and occasionally between the numbers. Further than this we do not go.

We do not, for instance, broadcast sales or price reductions. What the client secures when he buys this "time on the air" is good-will. He gains a fine general publicity through having his name and that of his commodity broadcast to millions of listening people; and if his name is linked up with a superior program, entertainment that universally pleases, the publicity is of the most profitable sort, though it cannot be immediately reckoned in the concrete terms of sales.

There is an art, of course, in the selection of the entertainment. A fisheries association, for example, broadcasts weekly talks on fish, and has engaged a woman to tell how to cook and serve them. She also gives new recipes—and all in an interesting way. A life insurance concern conducts setting-up exercises in the early morning. This campaign not only emphasizes the name of the client and so keeps it before the public, but it has a valuable byproduct, since it improves the average health of the hosts who each morning go through these



THE LOS ANGELES IN FLIGHT



PHOTOGRAPH OF GRAHAM MCNAMEE TRANSMITTED BY WIRE FROM REPUBLICAN NATIONAL CONVENTION AT CLEVELAND, OHIO, TO NEW YORK CITY Time of transmission, four and a half minutes

genufications and roll so energetically on the floor, and thus conserves the treasury of the life insurance company. So a program may be double and triple shotted and much care must be taken in devising it. It would be unprofitable, obviously, for an undertaker's association to get up a program of health-giving exercises.

Another legitimate trick for impressing the listening and prospective customers is in selecting the right titles for the artist or organization of artists that gives the entertainment. If you invented a typewriter and dubbed it "The Saxon," you might reasonably hire six musicians to play at your weekly hour and christen them "The Saxon Sextette." were making a corset called "The Perfect Thirty-six," you might secure that number of women singers and call them "The Perfect Thirty-sixes." And it would not take away from the publicity value if the "listeners in" wondered what those beautifully formed young, ladies might look like. To further mystery and pique curiosity, we have even gone so far

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as to mask a singer, though the disguise may seem quite unnecessary, since the audience at the sets can see neither singer nor mask. However, it worked out profitably.

Our sales force is constantly thinking up new prospects, such as fit in well with our daily programs, and ideas for these prospects. They are duly approached, the material carefully discussed, and, finally, client and program department come to an agreement, and before long you hear a new hour announced and a new feature on the air.

But always the material used in these hours must attain to a certain standard, for whether it be shoes, ships, or sealing-wax, cough-drops, garters, or pajamas that we broadcast from our studio, no feature will be accepted unless it be of superior excellence for its type. If something is offered that is low in tone, no first-class station will accept it.

Occasionally I have heard from some stations risqué remarks that must be offensive to old and young. Now it is all right and often

quite effective to be reasonably intimate and human; but that sort of thing is deplorable and calls for some censoring.

The rates paid for "time on the air" depend on the number of stations which take the program of the client. One station alone costs from \$150 to \$600 an hour, varying with the estimated density of population of the region to which the station broadcasts, the more thinly settled areas costing \$150, and the metropolitan district \$600. In setting this last rate, WEAF is very conservative, reckoning on a radius of only one hundred miles, when actually our programs have been picked up from every state in the union, from as far south as the Argentine, and from such far-off places as Cape Town, South Africa, and the northern part of Scandinavia.

Each additional station the advertiser buys, of course, adds to the expense. In broadcasting political events, we have as many as twenty-seven stations; but fourteen is at pres-

ent the largest number used for the commercial programs.

Our own features, called "sustaining," as opposed to the "commercial" just described, and usually interspersed with the latter, are arranged by our program department, which has enrolled on its staff a large number of trained specialists in music and entertainment. The artists, themselves, as a rule receive no compensation for their services except that of publicity; but often a singer or a musician who has been heard on our sustaining program and who has been well received is recommended for a place on the commercial programs.

An obscure tenor I remember once drifted into our studio when radio was new and asked for and received a hearing. This, of course, did not go out on the air; as at rehearsals he simply sang before the microphone, and some of the management listened in another room as his voice came over the loud-speaker. He made good; we gave him a date; and these engagements increased in frequency. Finally

we hit on a picturesque name involving a play on words which caught the fancy of the fans and also appealed to the sense of mystery. Now he is one of the best-known singers not only on the radio program but in large halls in the greatest cities.

Out of the west came another singer and composer, with little reputation—only his voice and ukelele. We usually give an audition to anyone who asks for it, if the candidate shows any symptoms of talent, and we listened to him, later placing him on the program. The fame here gained soon brought him to the attention of one of our clients, and before long he was appearing each week in a commercial hour for which he was very well paid, then sent by this same firm on a tour abroad, to appear not only in concerts but before the microphones in the capitals of Europe, New Zealand, and Australia.

So it can readily be seen that there are chances for the unknown, particularly since in our programs we aim for variety and are ever on the lookout for something new and original.

But to succeed, one must not only possess some artistic skill but also that indispensable quality called personality. Energy, a proper self-confidence, joy in living, all have something to do with it. But what it is exactly, no one can define. Some have it, and some haven't—and that about ends it.

I was never more struck with its indefinable quality than I was one day when driving uptown with those two genial fun-makers, Billy Jones and Ernest Hare, known as "The Happiness Boys." Billy, who was at the wheel, observed the traffic signal a little too late and stopped in the middle of a crosstown street, forcing the driver of an eastbound taxi to throw on his brakes too suddenly and kill his motor. Immediately he opened up on the boys with a commentary on their driving skill, habits, and ancestry that was truly marvelous.

Billy and Ernie listened to the tirade for a while without saying a word, but with the most courteous attention, smiling and nodding at one another, and going through an amusing pantomime that showed that he had earned their heartiest approbation.

Maddened by their silence and good humor, he became even more proficient, and promptly the boys became even more enthusiastic with their pantomime and applause.

Finally they opened up and began to "kid" him, complimenting him on his skill, until he yielded to their good humor, his face loosened up in a wide grin, and he cranked his car and drove off, roaring with laughter.

Perhaps good humor and joy in living have something to do with personality. Anyway, they have it, these two Happiness Boys, as do all who succeed.

CHAPTER SIX

IN those days at the studio I met quite as many famous people as I had in the big jobs outside. And one and all I found badly smitten, on their first appearance, with that nervousness which we of the staff call "mike fever." Sometimes it is almost pathetic, the way well-known figures—men of great power, too, who have held spellbound vast audiences—follow us around the studios, like little children seeking moral support when they are to visit the dentist.

At the joint radio debut of John McCormack and Lucrezia Bori, those two famous singers were almost dead with fright, though each showed it in a different manner.

McCormack, after the rehearsal, and while waiting to begin, simply could not sit still; he paced the floor; then sat down, then stood up, sat down again, then took to his caged-animal

pacing up and down once more, while all the time the perspiration ran off his face in streams.

Bori, on the other hand, was still, and apparently composed, but ice-cold. I knew it, for recognizing this strange symptom, too, she asked me to touch her arms.

"Just feel them," she said, "they're like ice—it's almost as if I were going to die."

Althouse and Middleton, two Metropolitan stars who have taken longer jumps in their concert tours than most singers, covering Europe, Australia, and the Orient in their long musical marathons, were similarly affected or afflicted if you will—though they had faced all sorts of audiences.

After he had finished his last note, someone asked Althouse if he had been nervous, and he turned on the inquirer and sarcastically replied:

"'Nervous'? No, I wasn't nervous; I was sick. It's bad enough to sing to a big audience but—ye Gods! to a piece of tin!" And he threw up his hands in utter despair.

The American baritone, Reinald Werrenrath, on his first broadcasting, paced wildly up and down the floor, the coat tails of his dress suit flying—though he didn't need to wear that, he had overlooked the fact that his audience couldn't see him—and kept exclaiming humorously yet seriously enough: "I may be the worst baritone in the world; but for a concert hall this is a darn sight worse than I am!"

Louise Homer's sweet, gracious personality did not allow her to show her fear in any excitable way. Instead she seemed to be thinking of all the people to whom that night she might bring happiness. Indeed, after the experience, she confessed with tears in her eyes: "I was overwhelmed; the thought of all those dear people all over the country listening to me, in little farmhouses and, maybe, tenements, was overpowering!"

What seemed to puzzle Schumann-Heink most was that we didn't find fault. "You don't scold enough," she said to me.

"But Madame," I replied, "how could we?

You follow suggestions so easily. What is there to say?"

Again she shook her head. "Maybe; but I'm afraid it isn't right. You don't scold enough. And when a teacher doesn't scold enough his pupils do very badly."

It was so with Emilio de Gogorza, too. "What would you have me do?" All the really great were like that, admitting in their well-proportioned modesty that they knew their own business, but also that others knew theirs.

Quite different, however, were a few artists whose temperament exceeded their ability—that 'cellist, for instance, who refused to play on carpet and sent us hustling through the studios for an empty cigar box on which to rest the 'cello point. A certain vice-president doesn't yet know how his choice cigars came to be dumped all over his desk.

It was even longer that a pianist held us up, waiting, with one of those ghastly empty moments on the air. She was seated, ready to play, when suddenly she looked up, jumped

from the stool, and ran to the dressing-room, whence she returned with a bottle of her own alcohol and began swabbing the keys—very deliberately—not so much as a prevention against disease, as to keep the keys from sticking when she played. In a well-regulated studio, like WEAF, these things are always attended to; but such assurance wouldn't do this artist. Deliberately, though very sweetly, she went on swabbing the keys, with her number past due. I couldn't explain to the listeners, "Please pardon the delay. Miss So and So is washing the piano." So I had to fill in with some hastily improvised notes about the composer she was to interpret.

There was an artist, too, who was troublesome, though not in the studio. After the rehearsals he went out, as he said, to get something to eat. Then later he telephoned that he was sick and couldn't appear; yet someone connected with the staff saw him that evening enjoying himself in a café on upper Broadway. The truth was that he was almost paralyzed with stage fright; no illness that you can find in a medical dictionary had hit him—just "mike fever"—the fear of that little instrument of wires and springs.

It wasn't 'nervousness that afflicted Will Rogers so much as the lack of an audience, at least of one that could be seen. It seemed to worry him, facing that dead wall near which the microphone stood. As he went on, I noticed him turning around again and again to look inquiringly at me. And suddenly it struck me what was the matter-the typical actor's need of audible applause, at least of response he could sense and feel. Leaving my seat in the monitor's booth, from which I had been observing him, I came out and sat on the edge of the table not far from the "mike," and smiled or grinned at each thing he said. From that time on he did not turn around; he had that response which the actor always needs.

A Russian pianist evidenced considerable artistic temperament by insisting on playing without lights. So only, he said, could he get

in the mood. It was fortunate that he had no orchestra with him, as they could not have seen the notes; and it was troublesome enough even so, since the announcer often wants to look at his watch, also his apparatus, so as to know that everything is proceeding as scheduled and on time.

Of all those we assisted, Lloyd George, perhaps, caused us the greatest worry, though innocently enough. Engrossed in his speech and gathering fire and speed as he went, he just wouldn't stand, as, say, President Coolidge does, within reasonable reach of the microphone. He stamped up and down the platform, now speaking to the boxes, then to this side of the audience, then to that, and sometimes to those on the stage behind him. One such experience taught us a lesson, and for his second speech, at the Metropolitan Opera House, we came forearmed, stationing a microphone at almost every three feet of the platform to allow for his marathon.

One of the very few that seemed utterly

unafraid was, strangely enough, a pugilist. Others of his trade, Berlenbach, Dundee, almost refused to face the "mike," but Benny Leonard, the champion lightweight, had all that well-known confidence he displays in the ring.

There are many things, however, that make up for all the worries and troubles with our artists. It is a privilege to become acquainted with them; and, it must be remembered, that, once in action, all these great personalities we have just been chatting about lost all their nervousness. Their power and the reasons for their success were then abundantly evident to any observer.

And many of them expressed themselves as deeply appreciative of the opportunity and the experience. One prima donna wrote across her autographed photograph, "Thanking you for the thrill of my life." Some of the staff happened to see that inscription, and this particular announcer came in for considerable joshing.

Several times in the preceding paragraphs I

have spoken of examples of perfect timing and The wellsynchronization in radio work. known actor, James K. Hackett, suffered one night from one of those rare mistakes when something went wrong. He had been invited to give one or two scenes from Macbeth, which he was playing in New York, and rehearsed the scene perfectly. And when he started, that Sunday night, the reports came in from the monitor's booth, where some of the staff were listening, that it was coming over beautifully. The first scene over, he asked for a moment in which to compose himself before proceeding. We announced the delay, meantime filling in with some word about the play, then the actor started in again. If we in the studio had liked the first scene we were doubly impressed by his delivery of the second, his clarity of enunciation, his dramatic fire and power.

It was indeed a pleasing evening; Mr. Hackett was pleased, Mrs. Hackett was pleased, the whole studio was pleased, in fact, all but the audience listening in to WEAF,

WJAR, WEEI, WCAP, WOC, WCCO, WCAE, WSAI, WGN, KSD, and all the outfits that make a cross-word puzzle of the alphabet. When I returned from seeing Mr. and Mrs. Hackett to their car, I was told that some one of those rare switching errors had prevented this host of listeners from benefiting by Mr. Hackett's wonderful impersonation.

It was a body blow, and I left the studio in disgust—a perfect evening spoiled! As I walked along in low spirits, my foot struck something that glittered on the rainy pavement. I picked it up. It was a beautiful piece of jewelry set with many large diamonds. As one of my associates said: "Some people have all the luck. If I had made a bull like that I'd have all hands jumping on me in the studio, and everybody from Skeneateles to Keokuk writing in, damning me up and down. And you—well, you go out and pick up diamonds!"

I still have those diamonds. Much advertising and diligent inquiry have never located

the owner. If they happen to be yours, drop in at WEAF some night and get them.

From Mr. Hackett's experience it can be seen that, in spite of the high degree of efficiency to which the best radio stations have attained, now and then there comes an evening when things seemingly will not go right. Perhaps the opening is a few minutes behind schedule; or one or two artists phone at the last moment that they are unable to keep the engagement; and sometimes, for unaccountable reasons, the program simply rolls up and plays dead, and it takes Herculean efforts to bring it to life again.

Now and again, in spite of everything we can do, things will get out of kilter a bit and then we have "one of those nights."

Thornton Fisher, the famous cartoonist, who often broadcasts for us, is due to go on the air at seven thirty. It is now seven twenty-five and the announcer comes into the reception room, a little worried.

"Winnie," he asks Winifred T. Barr, "have you seen Thornton?"

"No Mac, I don't think he is here yet. What will we do?"

(Notices announcer eyeing her speculatively.)

"Gee, Mac," she pleads with plaintive voice, "I played solos and accompaniments all the afternoon"; then more hopefully, "Maybe Jimmy will sing."

She refers to the versatile James Haupt, who plays, sings, and announces, in addition to directing many of our light operas, but he is engaged elsewhere, and Winnie knows it. She is ready to play until her hands drop, but in feminine fashion she wants to prolong the argument, and so continues to protest until it is seven twenty-nine and no Thornton is in sight.

"What will you play, Winnie?"

"Oh, gosh—I don't want to play—can't you make Jimmy sing?"

"We are on the air in twenty seconds, Winnie."

"Well, then, a Chopin waltz."
"Good, let's go."

A dash for the studio, we announce "Our Winnie" and her waltz to the audience and she is off, playing one of the classics in the manner that has endeared her to thousands of radio listeners. She is half through when a tall, ulstered figure comes like a cyclone through the door. It is Thornton; he has arrived, also secretly arrived at his alibi, while coming up in the elevator.

"Am I late?" he asks with a disarming smile, knowing very well that he is, then explains all too blithely, "Came down in a car and had a blow-out. Was sure I'd make it, though, or I'd have phoned."

We listen to him, wondering why he hadn't thought of something more original, for we know Thornton as we know Winnie. However, we answer patiently:

"All right, Thornton, ready to go?"

He nods and is rushed into studio "B." A whisper to Winnie: "Thornton is here; cut as

soon as you can." Then briefly Mr. Fisher is introduced and his daily sport talk is launched into space at the rate of one hundred and eighty-six thousand miles per second.

But we now have a problem to solve as the program is already five minutes late and we must give all the artists their allotted time and yet sign off from the studio at eleven o'clock sharp, since we are then to take up a program from a hotel dance floor uptown.

Perhaps the artist who follows Thornton will help us. So we slip out of the studio. A glance around the reception room, no one there, except Betty, our hostess.

And Betty, little imp, is delighted. Nothing pleases her so much as a bit of excitement.

"What are you going to do, Mac? You know you've got to keep that program going," she adds, as though we didn't know it; and we fall back on Jimmy.

"Ask him to get a couple of songs and send him into 'A,'" we tell her; and so Jimmy is announced from the larger studio. Meantime, Thornton hasn't calculated correctly, has run two minutes over the allotted fifteen, and we are seven minutes behind the schedule.

And now Betty rushes around excitedly trying to locate us. Jimmy is pinch-hitting bravely, the eight o'clock speaker is here, but he has misplaced his manuscript. Frantically we look through our papers, find a duplicate, and manage to get him on at eight-eleven. He is new to the game, gets the habit from those going before, runs three minutes overtime, and we are fourteen minutes out of step.

Something seems to possess the artists this evening, for at two minutes before the hour we go into the larger studio to greet a soprano, who is to sing when the speaker is through. Standing before the microphone, she announces very positively, "I won't sing!" She is fair and comely, but the only thing we like about her is that she doesn't have us guessing. We are quite sure when she says she won't sing that she won't. Still, she is pressed for the reason.

"How can you expect me to sing standing on heavy carpet?" she asks scornfully. "I can't sing unless I feel the vocal vibrations in my feet; and I can't feel the vocal vibrations in my feet standing on carpet. Can't you get me something hard to stand on?"

Luckily we remember a piece of iron, about four feet square, in the plant room. Luckily, too, it suits. Pleased, the soprano mounts this like a circus horse, throws out her chest, tilts her head, makes some funny little noises, then says with a satisfied smile—"Now, Mr. Announcer, you may begin! I can feel the vocal vibrations in my feet perfectly."

By this time the announcer feels certain vibrations in his feet, though they aren't exactly vocal. Through good fortune she has lost only four minutes, but that makes eighteen all told; and somehow we must catch up, or we will be in serious trouble.

That violinist now, the next artist; perhaps we can fix it with him. But no, his accompanist has been "unavoidably detained." Quickly Kathleen Stewart is rushed into the breach and plays for the violinist without rehearsal.

We hope with her aid to make up a little time, for the first two numbers are rather short. But the last is unusually long and adds another two minutes, making a lost twenty.

Something must be done. As diplomatically as possible we talk to the leader of the Russian Chamber Music Quartette, due to go on the air at nine thirty. Can't we break up his program into two groups, playing a quarter hour now and another later? Splendid, he assents. But his musicians, while obliging, are temperamental. After each number they start a discussion of the piece they have played, the one they are to play, and all the while the radio listeners are wondering why there are so many dead spots on the program.

However, we gain a few minutes by cutting out the last number, though it takes more of that diplomacy to placate the aggrieved musicians; and so by hook or crook, a little more judicious cutting and shifting here and there, we make up five minutes, the hands of the clock point at ten fifty-five, and the last artist of the evening waits his fifteen-minute period.

Will he, too, resent the shortening of his program? We approach him cautiously. No, wonder of wonders, he has an apology:

"I have a bad sore throat. I don't want to disappoint you, but would you mind if tonight I only sang one or two songs?"

Of course, by all means! He mustn't risk injury to his voice. We are extremely sympathetic and forgiving, when all the time we want to fall on his neck. And so, at last, at ten fifty-nine we get under the wire, by eleven the decks are clear for the uptown orchestra, and the announcer breathes freely once more, devoutly thankful that after all it was just "one of those nights," and that they are exceptions and not the rule.

Before closing this little chapter of reminiscences of the microphone artists, there is one I must not forget, George Barrere, justly considered the greatest flutist in the world. It is not as he played before the microphone that I remember him most vividly, but in an hour after we had signed off and were gathered to celebrate the twenty-fifth anniversary of his first appearance in America. The rendezvous chosen was a little East Side restaurant with crude tables, a sawdust floor, and a group of working men by the bar, a setting not conventionally but truly Bohemian. We were all very happy, eating and drinking, talking and reminiscing, when someone exclaimed: "It's a great evening; but one thing is lacking—Barrere should play!"

Smiling, the celebrated artist responded, got out his flute, stood up, and went over by the bar. Then he began to play, going from one classic to another and concluding with the famous Gluck air for flute. Later, several members of his orchestra said that Barrere had never played with greater inspiration.

At first the rough element in the crowded place sneered at the performer, whose evening

dress and refined features stood out in such contrast with his surroundings. But gradually, one by one, they yielded to his spell, and gathered around in a semicircle, enthralled by a master's artistry.

When he had at last finished, an old man got up from a neighboring table and hobbled up with a frayed wallet in his hand. From it he took a dollar bill and handed it to Barrere.

The latter tactfully refused it, but thanked him courteously, then placing his arm around the old man's shoulder led him back to his table, where he played an encore for his special benefit.

It was a picture that is unforgettable—the famous artist and his flute, the rough picturesque crowd, and the low-ceilinged resort in New York's lower East Side, far from the usual haunts of a George Barrere.

CHAPTER SEVEN

I T was about this time that our microphones were first set up in Carnegie Hall; and I think the broadcastings of Walter Damrosch's talks on music and concerts given by the Philharmonic Orchestra were two of the best steps radio ever made—steps, be it said, distinctly forward. The better jazz is often entertaining, but man cannot live by jazz alone; and we had had so many soloists of the first rank that such features, while delightful, were no longer altogether novel.

Mr. Damrosch's talks were novel and appreciated, as we found from the mail response. Incidentally, it should be said that he has one of the best radio voices in captivity.

Right here, too, it should be noted that voice cultivation is one of the most important things to be considered by anyone who wants to reach the public of the future. At best, but a few thousand come within the compass of the most noted orator's voice without an amplifier; and but the same few thousand can see him.

This seeing audience may be influenced by other assets of the orator-his looks, if they be impressive, his poses, gestures, and facial expressions; but those parts of his equipment can never score over the radio, with the millions of that wider audience. With them only two things count—the message and the vocal delivery. And by this we mean not only the timbre or quality or tone with which nature has endowed a man and which, too, may be cultivated, but the diction, pronunciation, clear enunciation, the smooth, even delivery, and the proper tempo or timing. It is not generally known, perhaps, but will at once be recognized as true by all who have "listened in" often, that the tempo must be a little slower than when the speaker is seen, as then the hearer has two senses at work-those of sight and hearing. Unaided, the one sense works more slowly.

Since the last two national conventions I have had considerable evidence that political speakers recognize these facts; that many are devoting more time to the cultivation of tone, modulation, and diction. And they are wise in thus bringing to the finest temper the one weapon left to conquer the audiences of the future. As the years go on and the power of the microphone is even more widely appreciated, the old, plastic, spellbinding orator will be a thing of the past, a type almost forgotten. Affectation is the first thing that will be spotted over a radio; the last thing its audience will stand.

These are the important things, then, to be noted by anyone thinking of broadcasting. The other directions will be found simple enough, for the announcer in the studio or at any outdoor gathering can coach you in a few minutes so that you will know where to stand and when to advance or step backward, as your voice increases or diminishes in volume.

But to return to Carnegie Hall-if you ever

have a chance to listen in to Mr. Damrosch, try it; his delivery is a model to be followed; and, unconsciously, while listening in, you will absorb many tips that are invaluable.

The content of his talks too, was well worth while, notably so that of the series on the Beethoven cycle. Between short selections on the piano, which served as illustrations, he chatted on in a friendly way about the composer, his life and work, and the meaning of his compositions. It was all easily understood by his non-musical listeners, delightfully intimate and, too, delightfully to the point. His treatment, therefore, that is, the method of handling his subject, may well serve as a model to other speakers. No matter what their subjects, they will undoubtedly get at least a few practical suggestions.

At the Philharmonic concerts, the pick-up is somewhat as in the events before described—two or possibly three microphones on the stage apron, and one hung high in the proscenium

arch above the fifth or sixth row in the orchestra.

The speaking or announcer's microphone is set on a table inside the wings and out of the sight of the audience. Occasionally another microphone will be added to the orchestra; and all may be gradually "faded" in and out at the will of the operator.

Often at concerts, or in the larger motion picture houses where good music is served, I have noticed the audience so engrossed in the actions of the conductor that they almost forget to listen to the music. It is too bad that you, who are actually in the hall, view only his back and coat tails, and the radio audience sees him not at all, while I from my station in the wings can note every expression of his face—and you may rest assured that these are interesting.

Take Willem Mengelberg, the famous musician from Rotterdam, for example. He is a study—each step in the score, each mood of the music being illustrated by his body, regis-







TWO OF OUR STUDIO ARTISTS

WINIFRED T. BARR

KATHLEEN STEWART





THE GOLD DUST TWINS HARVEY HINDERMYER AND EARL TUCKERMAN

THE HAPPINESS BOYS BILLY JONES (right) and ERNEST HARE

tered and mirrored in every play of the features.

He comes on, a little man with a powerful head covered with thin, reddish hair, quite absorbed in his dreams; but as soon as he reaches his station and raps with his baton on the music stand for attention, he is all alertness.

Glancing over his men, he seems to be calling a silent roll. In turn each eye is focused on him; and he signals for the start. In perfect order, they are off, bearing us with them on the long symphonic march or over some rhythmic and melodious ocean.

Now all is calm, and his face, too, is gentle. He smiles benignly on his men; with magic baton and fingers he fairly coaxes out and woos the soft music from the assembled instruments.

But now watch him—in the oncoming storm or as they begin to climb to some far dramatic height, building up, step by step or wave by wave, note by note and bar by bar to the climax. He is a changed man—even his stature seeming to vary with the music. Now indeed he is a

veritable giant. His whole frame, too, grows tense. The gentle face turns to steel; the mouth tautens and is drained of blood, while the eyes are narrowed to mere slits, yet they glitter with hypnotic power.

So by superb leadership he lifts his men up to those heights and to that fortissimo climax; they reach it, and for a moment his head is thrown back, his eyes fixed on some far off Heaven that lesser souls cannot envisage. For the moment he carries them along at the very crest of their power, on the full high tide of that melodic flood. Then all too soon, but with beautiful smoothness, begins the descent, the decrescendo. His eyes seek his men again, signaling this one and that who may not be sufficiently diminishing the fortissimo. The features relax and soften to accord with the piano passage they are now approaching, but still he guides them-with a gentle "sssh" of his pursed lips; and, while his right hand unerringly indicates the beat, his left illustrates that passage for them, with opened thumb and third finger held a few inches apart and gradually closing.

So Mengelberg carries his men from movement to movement, from mood to mood, through the most intricate passages, with a sense of some overpowering dynamic force but none at all of strain. And when all is over, he is himself again, just a little man with that enormous head topped with reddish hair.

"Thank you; you like?" he says in his unassuming way, as we congratulate him, then hurries to a small retiring room from which it is hard to get him out.

The ten minutes are up, and someone taps at the door, announcing that the intermission is over.

Deeply engrossed in poring over the score of the next number he replies, as he boyishly munches his red apples and favorite animal crackers:

"I am busy—I must study." He has forgotten his audience entirely.

We remonstrate—the audience is waiting;

is growing restless. "Surely, Herr Mengelberg, you must know every note of that score!"

"Maybe yes—maybe no," he says. "It is difficult. I do not play it for long time."

At last, however, he yields to entreaty, comes out, again wrapped in his dreams, takes up his baton, and soon is lost in the work of conducting—and, before long, once more you have lost the little man in the giant.

After the second of these concerts I suggested to Herr Mengelberg that he speak over the microphone.

"The radio audience," I told him, "would appreciate just a word from you."

His face brightened.

"Yes, you think?"

"I am sure of it."

"But what will I say?" This with a frightened glance at the "mike" whose wires and springs seemed to suggest a steel trap.

"Anything you like, Herr Mengelberg—tell them you like to play for them."

Somehow he managed it, feverishly gripping

the table and glaring at the instrument—"My dear friendts of the air, if you enjoy what I play as much as I enjoy it to play for you, I am glad."

Then he jumped up from the "mike" as if he had heard an explosion. But from that time on, at succeeding concerts, you couldn't keep him away from his new friend, if you had wanted to. And the letters he gets from the radio fans are the only things that can distract him from his study.

That naïve little message to the radio audience, gets over all right; but it was amusing to hear a famous violinist, when called to undergo the same torture, fall back on what he had just heard Mengelberg say. Though American born, he used the exact words of the little formula, even to the "friendts," with the Dutch accent.

During the months between July, 1924, and the spring of 1925, I had three more political assignments—the notification of John W. Davis, Democratic candidate for president, at Clarksburg, West Virginia; the notification of General Dawes the Republican candidate for vice-president, at Chicago; and the inauguration of President Coolidge at Washington, March 4, 1925.

Clarksburg furnished a rather lively picture when we arrived; a little town of thirty thousand grown to one-hundred and twenty-five thousand overnight; men all over town sleeping eight in a room, and the hotel walls almost bursting. And next evening we found, gathered on the open plaza where the ceremonies were to take place, over one hundred thousand; the town was now empty; burglars had a field day; and to make things more interesting the rain came down in torrents; yet one-half of the crowd stayed until the end.

We were pleased ourselves, for in spite of conditions we found that the amplifiers enabled everyone to hear the lowest syllable, even before the crowd was depleted.

I don't know whether that rain was an omen or not, starting to fall as it did with the candidate's first word; but I do know that when I talked with him afterwards Mr. Davis was a very wet man—the wettest, in fact, I ever saw. During the talk, too, he used up over a dozen copies of the speech. These had been made for distribution to the press; and as the one he was using became so soggy and water logged that he could not read it, another of the reserve was called on. And he could neither hurry nor condense his speech to please either himself or the crowd. That vast, unseen, radio audience kept him at it.

General Dawes had better luck, just the reverse of Mr. Davis' weather. It had been storming all day, but as soon as the General began to speak, the stars came out.

He is a most interesting man to meet and study. I think I've told how quickly he recognized my voice though he had not seen me before or heard my name announced. Well, that is Dawes; always a good memory, alert and keen witted, but hair trigger—everything shotout-of-a-gun, yet, too, very friendly and human.

This impression was deepened when our crew started back for New York and we met him in the station. He noticed us, and coming up, said; "Hello, fellows, are you going back to New York on the same train with me? Fine. Come back and see me after a while."

The election returns that November were not handled outside, but from our studio. The United Press placed here a staff of telegraphers who brought the returns to us as they came over the wires. We shot these out without any additional information; still, taking it altogether, it was a very busy night, and we stayed at the microphone from 8:00 p.m. until two in the morning.

While few new problems were presented in the handling, the broadcasting itself was an innovation, for it sounded the death knell of the old-time election celebration. Even that first night, the crowds in the streets were noticeably thinner, most people preferring to remain at home and get the bulletins direct from the air; and before many years the bally-hoo and wild election carnival will, like the old torchlight parades, be nothing but memories.

The inauguration proved a meaner job than most, as it was so hard to get information. Washington was full of officials, each apparently knowing all about what was to take place but unwilling to impart much of their knowledge. Everything was confusion, likewise everybody was passing the buck; and it was almost impossible to make our arrangements.

For one thing we didn't know when to go on the air. The vice-presidential swearing-in took place in the Senate Chamber; that might take twenty minutes or an hour; no wires were allowed in the building for any telephone messages that could keep us informed; yet once on the air we had to stay on.

So again I wrote reams of stuff, historical stories, and so on, as filler-in-material. Meantime I had stationed messengers in the capitol to hot-foot it to me as soon as the President and the Vice-president left the Senate Chamber to

come to the capitol steps, where the President himself was to take the oath of office.

Then I got lost and the radio sets were almost left flat without an announcer. My booth was on the pedestal of one of the statues by the steps of the capitol; and all the messengers being busy, I left the booth for a minute, while the officials were still in the Senate Chamber, to get word to one of our staff. To reach him I had to hurdle a temporary fence built to keep the President's pathway clear of intruders; and, once on the other side, I found I couldn't get back.

A patrolman yanked me by the shoulder just as I was climbing over on the return journey, and refused to let me go further. In vain I pleaded: "Against orders," he said. I told him of the microphone lying silent and pictured all the people from coast to coast that would be disappointed. But he was evidently a man of a single-track mind, one of those burly and not very imaginative policemen that will stick

like a bulldog to an order, once they get it, and who are inflexible when given a little authority.

For ten minutes I argued until at last I saw light—another way of approach through the crowd, which I had not noticed before. I asked him about it; that was all right—it was out of his jurisdiction, but never would he have let me over that fence in spite of the waiting twenty-five million. And that was the total estimated by the newspapers, the audience on this occasion being vastly increased by the children. Almost every school in the land had a loud-speaker installed in its auditorium or its one little room, in the case of the country hamlets.

And at that I was caught, for after I reached the booth, and went on the air, with a little description, then a story, I was halfway through that story when a messenger came racing to me, saying that the procession had started from the Senate Chamber. We were having difficulty enough in timing things, anyway, and General Dawes upset even our tentative cal-

culations. Instead of swearing-in the senators one by one, he had done it in batches.

That story was pretty well jumbled, I am afraid, for the President was on its heels. I had to cut off my microphone quickly and signal the control room to put on the President's microphone, just in time to catch the administration of the oath of office by Chief-Justice Taft.

The President stood there very quietly, looking subdued and careworn, I thought; this was so soon after his boy's death; and his reply to the oath was so low that none of the people there present, excepting the few immediately around him, and none of the radio audience, heard it. We answered many inquiries by mail, afterwards, telling them that the response was a simple "I do."

CHAPTER EIGHT

As each new assignment in broadcasting requires a new sort of treatment, so football, as it came along, had to be handled quite differently from the other sports. Anyone who has ever attended a gridiron game and tried to pick out football, play, and player from an entangled mass of twenty-two young men, who are trying to mask their maneuvers, can realize something of the problem presented. That we have been able to broadcast each step of the big games has seemed to some of our correspondents almost miraculous. At the risk of losing something of a reputation for magic we will explain how it is done.

The "applause" microphones are stationed around the field as at other sports events, and the "speaking" microphones somewhere high up in the stands. Here we work in pairs, one of us, either Phillips Carlin, my radio twin, or I

before the "mike," and the other a few feet away with a telephone circuit of that length between us. The one announcing has a telephone receiver at his ear, the other has the transmitter; and over the short pick-up he can talk to the announcer without disturbing the broadcasting.

Before the game, we have decided on the duties to which each will attend; and after the usual introductory description of setting and crowd has been given and the game is under way, the man at the "mike" watches each play as it gets in motion and tells the audience the type of the play, the direction in which it starts, and where it winds up—in short, what it succeeds or fails in doing.

The other, meanwhile, looks with his field glasses for the number on the back of the player starting the run or making the "forward" or kick, also the numbers of any other players directly concerned in the maneuver—the tacklers, receivers of forwards, the catcher of the punt, or perhaps someone who has knocked the forward down or figured effectively in the inter-

ference. He then refers to a little card which lists all these numbers, with the names of the wearers, and over the telephone circuit gives the names to the announcer in whispers so as not to jumble up the announcing. All the announcer has to do is to mix this information in with his talk, casually, as if he had just thought of it. But the observation must be quick, of course, and relayed with great speed.

Sometimes we alternate, reversing our duties, but usually where the announcers work in pairs, it will be found that one is quicker at analysis. Carlin, for instance, is much more skilful in the work of identifying the players than I, while I prefer the actual description and announcing. After the game is over, one or the other sums up, giving the high lights and turning points of each period.

As the season progresses and more games are broadcast, gradually we grow more familiar with the numbers of the men on the big teams, and so do not need to refer so often to that little card. That 77 of Red Grange, and 7 of Jake

Slagel, for example, stood out pretty clearly after a while, and recurred so often in the reports that we began to wonder if 7 wasn't, after all, a rather lucky number. But they were sweet players, those boys, and there was another great player, Dignan, who wore 11—a great combination the three would make for shooting craps.

Some teams were, of course, harder to follow than others, not merely because of their way of masking plays but because of the very numerals chosen. Princeton was kind to us and the spectators, using, as a rule, low figures—3, 5, 7, and so on; but her ancient rival, Yale, for the sake of confusing her opponents, ran higher up the scale; and it was sometimes difficult to pick out her 35's, 49's, and 27's. On the gridiron, however, it didn't seem to work out quite that way in the fall of 1925. It wasn't so easy for Yale to get hold of Princeton's easy numbers as it was for Princeton to get hold of Yale's harder ones.

There are always side lights on the game that



GEORGE BARRERE



FRANCES ALDA

might easily be overlooked, but which the experienced broadcaster should note in his descriptions to his audience. One that I found not only interesting but significant was in this same Princeton-Yale football game. I refer to the practice before the kick-off.

As soon as the men came out on the field and the coaches and assistant coaches tossed them footballs, we observed that Roper, the Princeton coach, did not start his men (as do most coaches), falling on the ball, but instead gave them practice in catching it on the bound. This was wise, I thought, and was largely responsible for Princeton's noted skill in handling loose balls. Once the body starts to fall on the ball, it cannot swerve or readily change its course, and that leather oval can bounce in almost any direction. But the hands, moving faster than the body, can change their direction swiftly and more often retrieve the elusive leather. such details prove of absorbing interest in any radio broadcasting.

At most of these games the "speaking" micro-

phones were placed at the top of the stand; but in the Army-Navy game, played at the Polo Grounds, New York, we chose a unique spotin the room back of the baseball score board. Behind this is a run board a few feet wide and about forty feet long. Here we stood, placing the microphone in one of the little windows through which the score boys hand out the runs and ciphers in summer, and were much more fortunate, sheltered as we were, than the spectators freezing in the high-priced seats. Some of our friends got wind of it, however-indeed, I never realized we had so many friends-and in half an hour the place was so crowded with these acquaintances who were suffering with cold feet that we could hardly work.

The presence there of one spectator was any other evidence of the growth of radio. He is a prominent manufacturer of radio sets and came as our guest. Not many years back he was quite poor, and, I know of a little diary he kept at that time, which shows a record of shoes and pencils purchased, two-cent stamps, the very smallest expenditures. Now he manufactures four thousand radio sets a day; and can, at a pinch, turn out six thousand.

A broadcaster, of course, cannot be present at more than a few big games, and, in recalling his memories, must necessarily overlook many very fine plays. But of those I saw in the 1925 season, two stand out most prominently in my mind—Harry Wilson's run for eighty yards to a touchdown, in the Army-Yale game, and Jake Slagel's run of eighty-four yards in the game between Yale and Princeton, both runs being accomplished on the same field, the Yale Bowl. The latter was the more spectacular, for it was made through the entire team. And it all happened so quickly that it was hard to broadcast.

I saw them line up, Slagel take the ball, then disappear somewhere in the line, or rather mob, of players. Then, no one knows how, he eluded them one by one, straight-arming some and dodging others, when there was every reason to expect that they would tackle him, and none

that he would get free; then, reversing his field, he finally got clear of all but one Yale tackler.

It was a pretty sight, that and the rest of it, viewed from where we stood, and very thrilling—for, with a lead of but a few feet over his pursuer, he raced down the field past the white chalk lines toward the goal, and all we could do was to shout, "he's at the fifty-yard line, forty, thirty-five," and so on, and here was the most exciting thing about it—he looked back over his shoulder at his pursuer several times. It was a dangerous thing to do, but that worried movement added a wonderful thrill of suspense for the watching spectators. Then finally he tumbled over the goal line in a heap! It was a marvelous run.

In other games I had not been quite fair to Slagel, feeling and telling our listeners in our analyses of the game that he was a great man against weak teams, but only fair against strong ones. After seeing that run and a score of other admirable plays he made during this contest, I had to reverse my opinion. Fortunately, I had the opportunity not only of acknowledging this to the fans but to Slagel himself, when we dined together one evening later in the fall. After I made my apology to the little fellow—I call him that for his 160 pounds is, after all, pretty light against big teams—he just smiled bashfully, and got very red; he could scarcely stammer out a reply. There are many things a broadcaster learns, but one not the least important is that those who achieve greatness in any line, whether singing, statesmanship, or football, almost invariably are modest. It's the little, or at best the near-great, in whom the quality is lacking.

Which, as the old after-dinner speakers used to say, reminds me: There was one side light at the game which showed this opposite tendency in rather an amusing fashion. She was a motion picture actress of considerable fame and fortune, clad in a very new and gorgeous sable coat worth many thousands of dollars. And she chose a particularly exciting moment

of the game to leave her seat in the lowest tier of the stand and start up the steps madly, as if in search of something. When she reached the top near us, she didn't look for anything at all, just turned, and like some model from an expensive furrier's, leisurely, and with the utmost disdain, sauntered back to her seat. But she had achieved her object, stealing the limefrom those twenty-two young mén struggling on the gridiron below. Instead of following the ball, every eye within range followed that sable coat and the mascaraed eyes above it. It was a well-timed, though questionable bit of showmanship; and I know we. at the "mike," had hard work in following Dignan's good run and Sturhahn's great tackle and reporting them properly.

That year also brought a rather unusual assignment, in which I was "on the air" with a vengeance. It was the "first-time" broadcasting from the dirigible Los Angeles.

I received my commission from the office rather late in the day, caught a train after mid-

night, and reached the starting point, Lakehurst, New Jersey, about three o'clock in the morning. I should have turned in immediately so as to be fresh for my duties, but was too excited and curious to go to bed, for there stood the hangar, a huge contraption in which could have been tucked the Woolworth Building, if you laid it on end; and its skeleton of iron girders and scantlings, covered with glass, and brilliantly illuminated, furnished an extraordinary spectacle in the darkness.

The Los Angeles was not inside; the hangar housed the ill-fated Shenandoah, and at once I looked around for our craft. She was moored to her mast, about half a mile away, floating about two hundred feet in the air, and resembled the cigar in bright tin foil to which she has often been compared, but not so big a smoke as I had expected.

However, I had lost my sense of perspective, and, with it, my judgment of distance; and as I ploughed over the plain, often stumbling over stubble, since I kept my eye fixed on that bright object in mid-air, I discovered that she was much farther away than I had reckoned. When I came near her, and she loomed up far above me, I found that she, too, was big enough, almost, in fact, as huge as the hangar. And if that had furnished a magnificent spectacle, the ship herself now surpassed it. Her crew was already aboard; and, brilliantly illuminated by her own lights and by others playing on her from below, she looked no longer the cigar in a bright tinfoil wrapper, but rather some longnosed dolphin of perfect shape and gleaming scales, or a vast shallop sent down from Heaven, all gold and silver against the black background of night.

Finally, about five in the morning I think it was, I decided to turn in, and wandered back to the hangar where, after having a half-dozen bayonets thrust against my stomach, my credentials were at last recognized, and an officer very courteously yielded up his bunk and I had a nap of about two hours.

Early in the morning, the distinguished

guests arrived—Dwight F. Davis, now Secretary of War, the DuPonts from Delaware, college presidents and business men of note, and rear-admirals Moffet and Jones of the Navy. We did not ascend the mooring mast to board the airship, but waited while the crew aloft worked her down with her engines from the height of about two hundred feet, where she had been floating, to about a hundred feet above the ground. From here the crew let down several huge ropes, and a gang of about three hundred hands stationed below fastened spiders to these and dragged her down to within a few inches of the ground.

Then the ropes were coiled up, and stowed somewhere forward in the hull, and we were ordered aboard.

Until we were given directions, we could not, of course, guess where we were to be stationed. There was the great hull six hundred and fifty-eight feet long and ninety-two feet in width or beam, and under it, well forward, was the car or gondola built to house the navigating officers.

It was into this car that we were guided by them.

The nose of this car was well glassed in for observation, and equipped with steering apparatus, sextants, maps, levers, compasses, instruments for determining the drift of the wind and other devices needed in navigating the ship. Here our guides took their places, while we sat behind them in comfortable pullman-like seats, well lighted by windows. Back of us, as we later discovered, was a third compartment, a galley, from which a meal was brought us at noon, exquisitely served, and, of course, cooked by electricity.

But long before noon we were under way, and so steady was the rise of the ship that we were many hundred feet in air when some of the passengers, who had been engrossed in conversation, exclaimed—"Why, we're up!"

As we rose to a height of several thousand feet, I kept poking my head out of the window, with some kind friend hanging on to my coat tail so I wouldn't disappear all of a sudden.

Below us lay a wonderful prospect. Everything on the surface was almost as well defined as on a map, the outlines of fields, roads, and rivers seeming beautifully clear cut. The varying hues, too, were magnificent-the light tan of the winding roads, the chocolate-brown of the newly ploughed fields, the pale green of springing rye, the gold of the early maturing crops, and the deep emerald of the copses and bits of woodland. Cities and villages were quaintly dwarfed, and as for the animate objects, they looked both tiny and humorously flat. People and horses were without legs, wagons and cars minus wheels; and all looked like potato bugs or little flatbacked beetles, not walking or whirling but crawling along.

Shortly after embarking, we were allowed, one by one, to make a tour of inspection of the ship. Now, before the voyage, I had thought that the hull itself was filled with the helium gas, and would never have dreamed of entering it for fear of asphyxiation. But when we climbed into it through a little connecting door

cut in the shell, we saw men swarming all over this vast interior, and found that the gas was contained in fourteen exceedingly light bags, all hanging above the medial line, and leaving plenty of head room. I was also informed that if nine of these bags should for any reason burst, the remaining five would be sufficient to keep the ship afloat until they had made a safe landing.

The great bag or hull itself seemed very light, almost fragile in fact, being constructed of ribs of duralumin, a composition of copper manganese and aluminum, and covered over all with delicate silk fabric. Yet there was no swaying of the various parts and everything seemed taut, shipshape, and rigid.

Under the suspended bags of helium and on each side of the beam, or keelson, were a number of hundred-and-fifty-gallon tanks of fuel for the engines, also bunks for the men, and a well-equipped officer's cabin. Many telephones connected this with other parts of the ship; near the stern were subsidiary control



rooms that would enable navigation to continue, even if the navigator's cabin were lost; and the whole route was brilliantly lighted with electricity.

We also found out the use of those little cars or cabins back of ours and which hung from the under side of the ship. There were five of these, the first pair, one on each side, being set a little forward of amidships, another pair behind these, a fifth hanging down not far from the rudders; and all were equipped with powerful engines, attended by mechanics. From these little cars, doors cut in the shell also led into the interior.

After we had examined everything to our satisfaction, one of the ship's officers asked me if I would like to try "the cat's walk."

I gave him Steve Brodie's old answer; "I'll try anything once."

And "once" I found was exactly enough, for the "cat's walk" was this keelson, a narrow beam, no more than eight inches wide and extending from bow to stern for the full six hun-

dred feet of the ship. On each side of it. and between the ribs, were large spaces covered with nothing but that delicate silk fabric. A misstep simply meant that the next stopping place would be the none too soft breast of mother earth, several thousand feet below. As I crawled along, clutching the loose guy ropes, which for novices like me railed "the cat's walk," the possibilities were clearly brought home by the apertures in the fabric, through which one could look down on the far-distant world; and there were many of these dizzying apertures. I was glad when I got back, and amazed to see the crew taking the same journey without touching the guy ropes or even looking where they were going. They hurried along as carelessly as any young fellow racing over a dance floor.

For half-hour periods we broadcast during the seven-hour flight, but the results were less successful than at other jobs. It wasn't that the motion of the craft interfered; true, when we struck hot strata of air the helium would expand and the nose of the airship went up a trifle; when we struck cold she would point down. But even then, the officers would soon have her on an even keel. At all other times we were practically undisturbed, having so little sense of motion—though we were going fifty-two knots, or about sixty miles, an hour—that we could and did write many letters on the desk in the cabin. Even a full glass of water, rode perfectly during the entire trip.

But we were equipped with only a small outfit, just a fifty-watt broadcasting transmitter such as those used in the army or on small vessels of the navy, with a wave length of four hundred and twenty-five meters; and only the towns over which we were passing heard anything of our reports.

In our New York apartment we have on hand several receiving sets, all usually in pretty good order. Still, my wife, who always listens in to these assignments, could get absolutely nothing, though the telephone near her kept ringing and messages came in from various towns on our route, from both friends and strangers saying—"I have just seen the Los Angeles and heard your husband."

These places, by the way, gave us a magnificent reception as we floated above them, the sirens and whistles of all the factories sending up blasts to greet us which we could catch though afar off, while the fields were dotted with tiny specks far below us, indicating each town's assembled population.

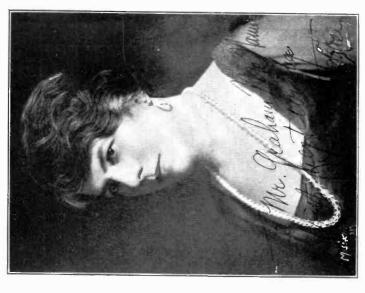
On another such voyage, should we ever be fortunate enough to make one, we will take a more elaborate equipment and widen our range so that an audience besides that immediately below can hear.

Speaking of small outfits, it is believed by many that amateur broadcasters occasion the regular broadcasting stations much trouble. Sometimes, during our hours, sparks come in—click, click—buzz, buzz—it is ruinous to the formal program. But the equipment of the amateurs has improved in average very much of late, and such interference usually comes, at



ERNESTINE SCHUMANN-HEINK

ALBERT SPALDING





least here in the east, from the spark, Morse code outfits of the innumerable ships off the coast or out at sea. Then, too, because of the many entertainment stations on the air in the evening, amateurs are forbidden to broadcast from eight until ten thirty; and these restrictions are usually observed. Whenever they are violated, detection by the government inspectors is comparatively easy. Reports by mail or telephone come in from stations or owners of receiving sets who have experienced the most inconvenience; the arrows of the radio compass indicate the locality of the interference; and since in any neighborhood there is usually but one amateur with a license, gradually the culprit is tracked down, warned, and if the offense is continued, his license is revoked.

The issuing of these licenses is just now a source of considerable worry to the Department of Commerce. This bureau supervises radio for the government, and all broadcasters, whether amateur or professional, should secure

from it licenses with legalized wave lengths. If two stations, or a station and an amateur, use the same wave length or two that are nearly alike, they will be sure to conflict. And since the number of stations these past few years has increased rapidly, and the government reserves a great many wave lengths for use at its own stations and for the Merchant and Naval service, the demand is beginning to exceed the supply. Even as I write, a certain station has appropriated another's wave length, with much resulting confusion. This particular trouble will, of course, be ironed out; but there are bound to be further entanglements as other stations and amateurs come into the field. And these will increase, until the time when radio will be better organized, and it is subjected to the process of consolidation which has in turn affected all other lines. Then the number of stations will be materially reduced and many now working independently will be combined; conditions will be better for operator and audience and for everybody concerned.

How great these numbers are may be judged from the fact that recently, one New York daily listed on its radio page the programs of no less than ninety broadcasting stations for its metropolitan readers; and this was an ordinary evening when nothing of national importance was featured. As for the numbers that listen in, tables compiled after careful research in January, 1926, revealed that five million, two hundred thousand receiving sets were then in use in the United States—an impressive figure that does not stand still but is each day increased. Multiply it by the integer that one may very conservatively consider as an average audience of a loud-speaker, and you can see that the newspapers are not so far wrong when they guess at from twenty to twenty-five million as the sum total of those listening in at the big national events.

There is a curious thing about this figure; that is, that this announcer was not among the first five million. It rather puts one in the class of the cobblers' families or the baldheaded barbers, who so cheerfully recommend hair tonic, but during the first two years of my broadcasting experience we had at home not a single receiving set. But there was a reason for the delay or seeming disloyalty to my profession. My wife, who has been of the utmost help in everything I have undertaken, made it a practice from my very first assignment to listen in at all sorts of gatherings. By this means, she could observe the reactions of the crowd to the way I handled events, and report these to me with constructive criticism. If we had had a set in the house, she would have been tempted to sit at home and not go out on these scouting expeditions. And well I can remember the first accounts she gave: of the small boy on the fourth floor of a Harlem flat who put his little horn on the window for the benefit of the crowd below, and in addition, with charcoal and paper, improvised a score board on the window-pane; and the remarks of the crowd outside a little store at Seventh Avenue and Thirty-fifth Street when I started my first game—"Aw! He's rotten!" and the more comforting "Listen to that, bo; that guy knows baseball!"

After those first early games when the fans learned to know by name the announcers who talk to them each night, they treated us much the same as the followers of baseball do their pitchers, often cheering us by mail or telephone, and occasionally "panning" us. Sometimes the intensity of their enthusiasm was both amusing and embarrassing. After the Los Angeles assignment, I was riding back in the smoker when I heard two radio fans discuss six- and seventube sets, and then fall back on the announcers.

"Who broadcast for WEAF last night?" asked one who seemed to defer to the other's vast store of information.

"McNamee," responded this mine of information: "He's good" (mentally I thanked him for that, then cocked my ears), "an old pal of mine."

"You know him?" said the first. "Where didja meet him?"

"Oh, a lotta times and a lotta places. Had dinner with him last night."

"What does he look like?"

"Sort of light-haired, 'n a big guy like Babe Ruth—and some swell dresser."

Now it happens I am dark and of medium height and my wife tells me I'm anything but a Beau Brummel; besides, on the evening in question, I had been so rushed that I had dined alone. So I thought of introducing myself, for the fun of the thing, but decided not to. I'd hate to embarrass a man like that; besides it was just another little tribute to the almost universal interest in radio.

In an earlier chapter I spoke of radio interference in domestic troubles. Recently I was told a story of a fan who almost lost a baseball championship.

It was in the Three-I League or one of the Western outfits—exactly when, I can't at the moment remember—but the leading club at the time had an infield, all of whom were very good singers, with a taste for close harmony.

"The Barber-shop Chord Infield," it was called, and their particular favorite was "Sweet Adeline." How they did love to sing it—anywhere, in the hotels, on the sleepers, on the street corners; the minute one struck the opening note the others would take it up!

One afternoon, towards the close of the season, they were playing the runner up, the team representing a town in the same state; and between the two towns there was the hottest rivalry.

In the eighth inning, the team with the famous Barber-shop Chord Infield was leading, three to one. The other team was at bat; two were out; and one man was on second.

Whether he deliberately planned it or not I do not know, but one enthusiastic supporter of the home team had rigged up a receiving set with a loud-speaker in a box back of the right fielder. Just as the pitcher was winding up, the fan switched the set on; and, as luck would have it, a quartette in the studio was singing old-fashioned songs, among them "Sweet Ade-

line." As soon as the first baseman, who was the first tenor of the prize quartette, caught the familiar notes, he tuned up; the second baseman followed suit, the short stop and third baseman likewise.

It was very impressive, that singing, out there on the green diamond, in the setting sun and all, but meantime the batter happened to connect with the ball. Now ordinarily the second baseman could have retrieved the liner rather easily, but his ear was cocked towards the loud-speaker, as he struck the top note in a tenor's most approved manner, and the ball whizzed past him. The right fielder stopped the ball; but when he threw it over toward third, though that member of the quartette had, of course, stopped his yodeling, he was considerably off key and the ball continued on its way into the stands; two runs came in; the pitcher blew up; and away went the ball game.

The Barber-shop Chord Infield sang no more that season. Not only did they fall out of harmony, but the manager vowed that any time he heard anyone striking up a song—jazz, hymn, funeral dirge, or any music whatsoever—the singer would be fined twenty-five bucks. Furthermore, at the end of the season he "busted up" the famous Barber-shop Chord Infield, selling one sweet singer to a neighboring team, the remainder to other rivals. He wasn't going to take any more chances.



CHAPTER NINE

"I COULD write you in ink, but you ain't worth it."

So wrote a fan in pencil on bright pink paper with a pinker border.

Ordinarily, one would think, little attention would be paid to such a missive, but the fact that it, and others of the same type, are in our files and carefully classified indicates the close inspection we give, and the importance we attach, to the daily mail from the "fans."

The average letter of 1923 was usually some informal note scribbled on any old paper, and, too, frequently revealed the sender as ignorant not only of grammar and rhetoric but even of the simplest spelling. The few that came in from persons of education were just hasty notes written on the spur of the moment at the close of a program.

Gradually, however, the mail increased in

quality and constructive criticism, showing a real, and, in many instances, an intelligent desire to help in program building. Many of the daily letters now are carefully typewritten, are dictated to stenographers, and not infrequently display at the top a very well-known letter head.

We cannot, of course, adopt all the suggestions; practical considerations of which the senders cannot be aware often prevent. But frequently we do follow them, and the result has had a noticeable effect on both the type and the handling of our entertainment. And as has already been indicated, it isn't only the letters from people of note that we examine; for often the letter sent in by some laborer or ignorant foreigner, painfully spelled out, is more significant than those more perfectly expressed. Even the children's scrawls we read with care.

And while this mail improved in tone, so, also, it increased in bulk; until now we have a whole room devoted to the files, all carefully

sorted and arranged. Many of the more important we have bound up in leather; and even the abusive ones are carefully kept, like the one quoted at the head of this chapter and the card which came last Christmas morning:

"Holiday greetings to the smallest, meanestprincipled man in New York, is the wish of one who holds for you nothing but contempt!"

After reading that one over several times I came to the conclusion that the sender didn't think so very much of me. Still, out of it I really got a big kick. Radio, I thought, must be pretty powerful to arouse such feeling.

Not only is the intensity of feeling on the part of the radio fans astonishing, but frequently also their accuracy of information. They follow artists and programs as closely as sport fans follow their heroes, form sheets, and score cards; and the announcer has to be on the alert to keep from slipping.

One evening I announced that John Powell, the famous pianist, was making his debut before the microphone. Before the finish of the program we received not only one but several telephone calls, and the next day many letters, telling us that I had been wrong, that this had not been Mr. Powell's debut. And an even more astonishing thing about it was that they not only corrected us on this point, but one and all gave time, date, and place of the previous appearance (at Carnegie Hall), and some even added that he had played the Mac Dowell "Concerto" for piano and orchestra, with von Hoogstraten conducting.

Not only are the abusive letters startling, but also the requests we receive by mail and often by telephone to broadcast the deaths of loved ones, or to advertise on the air for relatives that have disappeared. Frequently the voices pleading with us for such services are a catually incoherent from grief.

Some have a more humorous note, even though they are sincere enough, when they ask our help in locating missing dogs and cats, pet ponies and goats; or garnet pins, engagement rings, sets of false teeth, and stolen tin lizzies. Such requests, needless to say, we cannot heed.

One distracted person asked us to find someone who could tell of an effective remedy for hiccoughs from which her husband was suffering. One could easily imagine the result, for everyone has a pet remedy for this affliction —and our mail would have been swamped, our phone system absolutely stalled, with recommendations for standing on one's head, kicking one's heels in the air, and so on.

But it must not be supposed that these letters are as a rule frivolous; the great majority are written in deadly earnest, as witness those referred to above and the hosts that come in trying to use our services as a matrimonial bureau. Here's one chap that asks for "a single maiden never wed." It, that is the letter (we couldn't supply the other), follows:

"Dear Mr. McNamee:

"Knowing that your great station and its very pleasing official voice reaches into many homes and

distant places, it occurred to me that, in view of the fact that I have given the early years of my life to educational advancement by studying nights and working by day, I am now in the thirties, in the best of health, with several degrees and now completing a course in Radio Engineering.

"I own a farm on the highway to—, built my own home and garage, but am waiting for a suitable bird to put in the nest. I have partitioned off nothing so far, but want a Protestant girl of settled habits, strong moral fiber, of German, Scotch, or American parentage of the old school, who can cook the old-fashion way, loves children, nature, flowers, who will be a real mother and home-maker.

"Probably among your many listeners there is a single maiden, never wed, who is looking for such an opportunity, for I am a bachelor self-made in every sense.

Yours,

"P. S. You may read my letter to your listeners."

Not so many pages back, we were speaking of the part radio plays in all our lives—sometimes it seems to play hob with domestic arrangements, as complained the correspondent who wrote us that our program of the night before had been all too delightful. Her husband had called all the family to the set, leaving the evening meal smoking on the table. When they returned, their two pet cats were licking up the last scrap; and these radio fans had to go practically dinnerless. Our customer, however, was reasonable and didn't claim damages.

Two dogs caused the catastrophe described in another letter. Ernest Thompson Seton, the famous naturalist, in the course of his radio lecture, had occasion to imitate the bellow of a wild bull calling to its mate. Evidently it was a real call of the wild, for our correspondent's two great police dogs, which had been blinking by the fireplace, suddenly dove for the horn and before he could pry them off, they had completely demolished it.

This fan, too, was fair enough, and didn't ask us for damages or to supply a new set. "I am not a poor man," he wrote, "and am able to buy one. But just the same I don't think it's quite fair for you to have wild animals in





 $(Abore) \ \, {\sf CLicquot} \ \, {\sf CLib} \ \, {\sf Eskimos} \ \, {\sf Qui} \ \, {\sf of} \ \, {\sf Costume} \\ (Below) \ \, {\sf Whittall} \ \, {\sf Anglo} \ \, {\sf Persians} \ \, {\sf on} \ \, {\sf the} \ \, {\sf Magic} \ \, {\sf Carpet} \\$





(Above) The A. & P. Gypsies
(Below) Graham McNamee, John Powell, Eva Gauthier, A. Atwater Kent,
Mary Lewis and Reinald Werrenraty

your studio without announcing it to your customers. And I'd greatly appreciate it, if next time you'd let me know when you're going to have a menagerie at WEAF, and so save me some money."

It was our rule to announce at the beginning of the evening's program that our wave length was 492 meters; later we changed it to 610 kilocycles, but this change was only in terms, for the two measurements are synonymous. It served, however, to prove the power of the imagination, for one fan wrote in requesting us to please go back to meters, for ever since we had been using kilocycles his reception had been poor.

But the World Series letters are, perhaps, the most human of all. Here are some cue lines from a few we have selected at random, showing as motley and picturesque an assemblage as one could hope to picture:

- 1. A farmer in Vermont: "Listening through a regular blizzard."
 - 2. A veteran of the civil war: "I ran the bases in

fourteen and a half seconds. Tim Murmane held the watch."

- 3. An Ohio Judge: "We adjourned court for fear we would get your report and mine mixed in a damage case."
- 4. A sailor at anchor off Pennock Light: "On an ocean-going barge in a howling Nor-Easter."
 - 5. "Fifty pairs of head phones at Fort Monmouth."
 - 6. "A veterans' hospital." (263 signatures).
- 7. A boy: "From the sound of your voice I was satisfied that you were coo-coo, too."
- 8. From George: "I bet you had a good soar throat when you were done talking."
- 9. "A bunch of T.B.'s who depend entirely on radio for contact with outside world"—signers all girls. A postscript, alluding to an incident in the World's Series is added: "How many quarts of water went down your neck?"
- 10. A Virginia Farmer: "Your allusion to rain was so real that my wife hurried out and brought in the cushions from the porch."
- 11. An old guide in a remote hunting lodge of the Adirondacks.
 - 12. A man in bed with a broken neck.
 - 13. "A hundred stranded hulks, all dry docked."
- 14. A good Samaritan who saw "three hundred men, all laborers, with dinner buckets in their hands, assembled in a street where a merchant had set up a loud-speaker."

- 15. A Massachusetts boy with infantile paralysis, for whom someone sent a wire.
- 16. From Corsopolis: "I don't know just what it means, but it's all about the 'World's Serious Games.'"
- 17. A cigar store in Rutland, Vermont: A word of thanks with many signatures written on wrapping paper.
- 18. A Past Commander of the G. A. R.: "I am eighty-two, but I never miss a ball game and I never miss a circus. Nigger-like I'll follow a brass band half around town and don't associate with Old Men. I keep young!"
- 19. A high school Junior Master: "I wonder if you know you used the expression 'who will he send out' instead of 'whom'?"
- 20. My grandfather-in-law in Missouri whom I had never met.
- 21. A Widow of Providence: "I felt like flying with red flannel for your poor sore throat. We love you.

"This is not a flapper, but a very comely widow who stands without hitching."

- 22. "I am sick, and a shut-in, and I like you."
- 23. A deaf man "whose life has been an eternal silence for twenty-five years, and who now, over the radio, hears every word."

In giving a rounded report one must not overlook the dissenting letters, many threatening physical violence.

A Pittsburgh fan wrote me: "We would appreciate it if you would not constantly remind us that the score was Washington 4; Pittsburgh o."

Another appealed to the office: "For the love of mike" (an unconscious witticism), "take McNamee out. My batteries are valuable and I can get jokes from the newspapers."

The Washington fans took the series quite as much to heart. Wrote one:

"You utterly and miserably failed in your rôle. You announced, yes, but spent more time telling about your personal discomforts (as if we cared a damn) than you did about who was at bat and what he was doing.

"You failed in 1924, but, My God! you get worse as you get older! Stick to music and weather reports, but let the Chicago man handle the large athletic events for the good of us all."

An associate judge in the capital seemed to feel the same way, though he expressed his feelings in a little different fashion.

"It would have been excellent," he wrote, "had you been mindful of your audience and its divergent sympathies, and divested yourself of your very evident prejudice in favor of Pittsburgh.

"No doubt any complimentary letter will be exhibited to your employers. Will you be man enough to show them this too?"

Well, Judge, there it is.

Now these letters came in on all sorts and hues of paper, even on birch bark. They contained prose, poetry, and vers libre, and were done in script, pen, plain pencil, blue pencil, type; and not a few were printed by hand with marginal decorations.

But the one, after all, that I value most, is quite simple in character. It is from a hospital and significant enough of the pleasure radio gives so many afflicted millions to print in full:

"Mr. Graham McNamee, Station WEAF,

195 Broadway, N. Y.

"Please accept our sincere thanks for your wonderful broadcasting of the first game of the 1924 season between the Giants and the Brooklyn Dodges. Your knowledge of the game and your colorful description made a hit here; and it was no ordinary bunt but a powerful wallop that has had us talking ever since.

"The Hospital is really a home for some eight hundred patients, a majority of whom are playing their last game and waiting for the exit gates to open. Their little Main Street is quite narrow, and the radio is bringing the world to their feet, as it were.

"I wish you could see all these helpless men listening to your voice; some are blind and many bedridden, but the smile on their faces as the game progressed certainly would repay you, had you any doubts as to the success of your reception.

"One old fellow remembers McGraw when he played on the Olean, N. Y., team, and another was the chum of Willie Keeler. Everyone, in fact, has a

baseball remembrance, and whenever we want to start a fight we get Johnny and Jimmy, who are here twenty years, to talk about Merkle and the time he failed to touch second. Both claim the Cubs stole that game and none dare to dispute them.

"As Roxy would say, 'God Bless You.'"

We often hear of the reunions of friends brought about by radio after long separations. This letter which comes close home, unfortunately arrived too late:

"My dear Mr. McNamee:

"Many years ago, I knew a baby of your name, whose mother's name was Annie and whose father's name was John. They were, at the time, very pleasant neighbors of mine. But in the natural migration of families from one place to another, we drifted to different neighborhoods and to different cities.

"A few years ago, however, Mrs. McNamee came to Washington and proved that she had not forgotten the one-time friendship by the fact that she looked me up, and came to see me.

"During this visit, I asked after the baby boy. She happily told me that he had developed a splendid voice, which, at the time, was being trained. Since then, our lives have again fallen into different channels, but my interest in her was revived by the pleasure I expe-

rienced listening to your voice over the radio during the National Democratic Convention. We were very ardent and constant 'listeners in,' and will remember for some time your cheery 'Good morning, Ladies and Gentlemen of the Radio Audience.'

"I would like very much to know if you are that boy whom I knew so long ago, and, if so, to know something of your mother.

"Thanking you for the great pleasure you gave us during the Convention, I am,

"Most sincerely,"

Within the past two years there were, however, several reunions that were happily consummated by radio. One I particularly recall was that of a man of sixty with a girl he had known in his youth. They had been engaged, but through some misunderstanding had separated, and for years did not see each other.

Meantime, both had married, their respective helpmates had died, and his one-time fiancée became an elocutionist, often speaking over the radio. After his wife's death he bought a set and, happening to tune in one night, was amazed to hear his boyhood sweet-

heart. From time to time he listened to the familiar voice, as it spoke from various cities, then he summoned up courage enough to write to her in care of one of the stations from which she broadcast. She answered—several times; they met—several times; and now—well, if she ever broadcasts again, it will be under a name quite different from the old one.

But I must not linger over these old records and files which bring back such pleasant memories, though I'd like to quote from the poems sent in—there are many very clever ones—and particularly the letters from people all over the country commenting on the political broadcastings. One came from a dear old lady—I have never seen her but I'm sure she was that—who wrote in that she could neither walk nor see to read or write, but she was going to try and write me just the same "about those conventions." As radio widened her horizon, so she and the women in turn will widen the political horizon of this country, if hers and the countless other intelligent queries are any indication.

There is one other, in fact, a whole series of letters between Mrs. Ballington Booth and a burglar, that must not be overlooked, since they are stranger and more compelling than the most fascinating fiction.

The burglar had been planning another little assignment—so he wrote in his first letter of confession—when, on passing down the street, he stopped to listen to a loud-speaker, while Mrs. Booth was broadcasting. She was telling of her work in the prisons for the convicted men; and somehow her talk seemed aimed directly at him. It sank in a little; yet still he went on maturing his plans.

The night for the job came; he jimmied his way through the window of the house and, flashing his pocket battery this way and that, made his way to the safe. Suddenly he heard a voice—and paused, startled. The place was deserted, the family having gone, as he knew, to the country. Then he smiled—of course—it was the loud-speaker! They had forgotten to turn it off. So he got down on his knees

and to work once more. But there was something about that voice—yes it was Mrs. Booth's again! He listened—his fingers seemed to have lost their cunning—and as the voice went sweetly and persuasively on, somehow he could not continue. This time the message sank in; and quietly collecting his tools and packing them in his kit, he climbed over the window sill and "turned to the right."

CHAPTER TEN

E have been pretty well around the country in this little story; but before we close, I'd like to take you for one more hour into our studio, which after all is home, showing you as best we can how each member of the staff and the various devices do their work, under the present improved conditions.

It is all like a stage—a stage, though, with many "sets;" and this is the picture, after the hour is on and the program under way:

The offices where the various departments do their work during the daylight hours are now dark and silent, and the great city below us, too, is still; but the reception room, studios, and control rooms, which form now the main scene of action, are aglow with light and very much alive. Cheerful hostesses greet the arriving guests in the reception chamber furnished with soft-shaded lamps, flowers in vases, and

the most comfortable of upholstered chairs and couches. Here you can sink back at your ease and watch the groups of artists of all sorts and kinds and races, as they come in with their music, violin cases, and what not, all hustling and chattering together. They seem to take possession of the entire room. A 'cellist puffs feverishly away at a cigarette, as he paces up and down; a little taffy-haired Austrian ballet dancer, who is one of a troupe, and tonight must do a talking single when she is fairly itching to dance, talks with her manager over last night's "house;" and three little black-eyed maids, a singing trio from the same company, are peeling oranges and joshing "The Harmony Boys." It's all as good as, or better than, being back-stage.

Now the phone rings: "Won't Mr. Werrenrath sing 'Mandalay' as an encore?" asks someone from Bay Ridge; it rings again, "Danny Deever" requests Nutley, New Jersey; and a third telephone call comes in from a couple who cannot afford to hire an orchestra and want us to play the wedding march. Of course, all these wishes cannot be granted, but we do what we can. Whether "Werry" will be able to sing "Danny Deever," with his program all arranged, we do not know, but we will convey the request to him; and as for the wedding march, we have no orchestra that could oblige this evening, but if the happy pair will put off their nuptials until Friday, we are sure it can be arranged.

Meantime, doors are continually opening from other rooms, admitting busy officials connected with the program department, all hurrying hither and thither; also, as each room has its loud-speaker amplifying concerts from hotels or theaters of the city, from everywhere come sweet sounds above the hustle and chatter. It all gives one the impression somehow, not of being on the outside looking in, but of being actually within a great aviary.

But from the two central studios no sounds are heard. Looking in from the reception room through the doors, built of beautiful Tiffany glass, we can see them broadcasting: a stringed quartette in one; in the other, seven lady harpists clad in white. The bows scrape back and forth, the white fingers of the ladies' hands move gracefully over the golden strings; but you hear no accompanying music from those soundproof chambers. The reception room loud-speaker is temporarily cut off; and the figures you are watching through the glass doors seem almost uncanny, as do dancers in a room when you close your ears to shut out the music and watch the couples go through their motions, apparently unaccompanied.

But before we pass through those glass doors to the microphones, let us first visit the control rooms. All the beauty and poetry is not in the studios; for the great control board, with its accompanying apparatus, must itself be considered a poem, when one tries to visualize its intricacy, mysterious powers, and its unseen arms which reach almost to the ends of the earth.

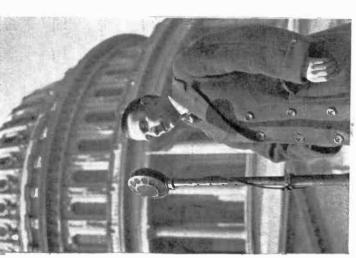
It is a great blackboard of the size used by

brokers for stock quotations, punched with innumerable little holes like an operator's outfit at a telephone station, and equipped with plugs, amplifying boxes, and a legion of little buttons and name plates, also dials with arrow indicators measuring the volume of outgoing sound. To the layman it is all bewildering enough.

And if one steps behind this control panel and sees the maze of tightly wrapped little insulated wires—there are millions of them, you would swear—it would seem impossible that each little wire could carry without conflict its burden of sound to its appointed destination.

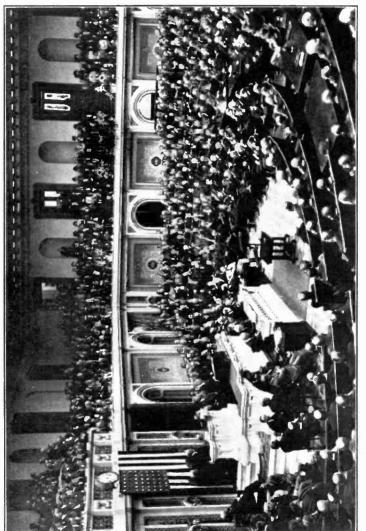
Returning again to the front of the control panel, you examine the rows of "jacks," or little holes for the plugs, and see above each a tiny card bearing the name of a broadcasting station. When the plug is fitted in the "jack," it connects the station named on the card immediately above, by telephone circuits, with one of the programs going on. And this pro-





Preparing for the Broadcasting of the Inauguration of President Coolings
March 4, 1925

GOV. FULLER OF MASSACHUSETTS PRESENTING THE SEAL OF THE STATE TO MR. MCNAMEE AT BOSTON



THE PRESIDENT READING HIS MESSAGE TO CONGRESS IN THE SEXATE CHAMBER AT WASHINGTON

gram may either be conducted in one of the two central studios or at some theater, hotel, clubroom or concert hall. In the latter case, the program is transmitted from the outside auditorium through the microphone, by wires through the building, cables under the city streets, and up again to our fourth floor. Then it journeys through amplifying boxes controlled by operators sitting at the control panel, and goes out again through plug and jack, cables underground, and trunk lines to some building in a distant state, is there amplified again, goes up to the antennae, and is so launched out into the night. And this process is being repeated over and over again, for the uptown program and our two studio programs are going out simultaneously, one to this group of stations, another to a second group, and the third program to still another combination.

Meantime, not only are all these myriad wires and cables busy, perfectly synchronized, and under control, but many others are connected with the microphones and smaller con-

trol panels inside and the loud-speakers; there are also telephones at work, and in this same room telegraph operators are sending out and receiving messages over other wires. One can visualize a little of the intricacy, perhaps, by standing at the control panel and looking through the glass door into the studio. A singer faces you, singing into the microphone. The sound goes through the microphone or transmitter, through the control panel and amplifiers, plugs, and all, and by cable up to our plant on West Street. It is then sent back by cable to that loud-speaker to the right of the control panel and above our heads.

Listen to the loud-speaker and watch the lips of the singer in the next room. The motion of his lips and the tones from the loud-speaker seem to synchronize perfectly, yet they have traveled several miles and gone through many channels. It seems almost uncanny and ghostly again, watching him there. And this is only one of an infinite number of processes

going on in the one room under the nose of the operator watching the arrow of the dial and now softening the loud crashing of some cymbal in a jazz orchestra, again bringing up that high and sweet, but thin, violin tone. Can any one wonder, then, that we call it a poem? The perfect teamwork of operators, plantmen, program makers, the mastery of that vast tangle and network of wires, the accuracy and synchronization, the timing of programs to the split second, are as much of a poem as any ever written in print—and it gives one a new respect for the achievements of man.

But meantime, the programs are going on within the two studios; and we enter the magic doors. The walls are still draped with heavy hangings as they were on my first visit; but now we do not drape them solidly, for we have found that leaving spaces here and there between the curtains improves the result. The microphone, too, is no longer in a cage as it used to be, but hangs uncovered in an aluminum

ring; the transmission, that way, we have discovered, being much clearer.

Everywhere scattered around you will see an abundance of "props," not only chairs, lamps, band stands, and the piano, but a curious assortment of tympanums, xylophones, drums, harp cases, wind and thunder machines, and all sorts of percussion instruments owned by the band now performing and others who have rehearsed that day and who are to appear later in the evening.

It is now two minutes to eight. There is a program going on in the other studio, as you can see if you look through the windows of the monitor's booth, which is set like a little enclosed cabin between the studios. In our studio, the seven lady harpists have been rehearsing, with the microphone, of course, cut off, and are now busy chattering or taking a last dab with the powder-puff, for women will be women even before unseen audiences. The announcer cuts short an argument between Roxy, the leader, and the soloist, who insists

on playing Drigo's "Serenade," when Roxy wants something else. "Applesauce," he exclaims, and the announcer calls—"Two minutes to go—quiet ladies, please!" There is a final whisper, then a hush, as he stands, his eyes alternately on his watch and the control panel, a little miniature of the great board outside in the control room, the red, green, and white lights of which show that a program is going on in the other studio.

"One minute to go!" he calls, and there is absolute silence while he listens through his head set to the other studio. "Now he's signing off!" he says, as he hears the announcer in the other room rattling off "This is station WEAF, PDQ," and so on. "He has signed off"—the minute hand hits eight, the second hand sixty—"Quiet! We're on the air"; and he pulls the switch throwing his own microphone on and plunges into a description of the seven harpists, who look properly thrilled. Then off goes his "mike," and he turns to the leader of the harpists. "Hit 'em," he exclaims, and pulls the

little switch on the studio microphone before which they sit; the fourteen white arms sweep the strings; and out the melodious sounds travel, over the myriad wires and from the ends of all the antennae to your homes.

The number is ended. Switch and switch again—off goes the studio microphone, on the announcer's; the fourteen arms rest, and he tells about the next number, then—"Stand by for your local announcer!" and once more his eyes are on his watch while a dozen announcers in distant cities broadcast to their local audiences their own particular messages. Thirty seconds, they are through—they have to be through—and switch again; "Let's go, ladies," and again the fourteen white arms sweep the golden strings.

Now enter the monitor's booth. It, too, is soundproof; in it you are snug as in a cabin at sea. Through the loud-speaker comes the program from the next studio, to which the monitors listen to see if all is going well. And now the other announcer in the second studio

is at work cutting on or off his switches, with his eyes on his watch and the signal lights, also on the eight young men, who are called by a mysterious name, but who are really just eight nice young American boys diligently puffing away on their saxophones.

He is through calling off the alphabetical stations which he enumerates several times through the hour. It is ten minutes to nine. Another feature is about to go on and silently another group of musicians steal in, lay their coats on chairs in the rear of the room, and take out their instruments. The announcer sees a cigar in the mouth of the new leader; swiftly it is seized and confiscated, for no one must smoke in the studios. However, it is a dry smoke, and the leader cannot conduct without it; when the announcer's back is turned he retrieves it and quietly distributes the sheets of music, smiling in triumph.

And now the octette is through; switch again—the new band is announced, and each performer gives a little grin, as he hears his amaz-

ing talents described over the microphone. There is a little skirl, and they are off; the pianist rags on; the leader's pencil which he uses for a baton, his fingers, eyebrows, everything, twitch in amusing unison with the brass and strings.

Meantime, the control man has not been idle, for not only is he watching the dials, and working the amplifiers, but he is listening to the loud-speaker above his head, and also through his head phones, to a plant man uptown making his reports. At the end of the hour he must slip many new plugs in the jacks, taking out others, for certain of the stations do not want this new feature, some wish to continue, and other new ones now take up the program.

So on through the evening the studios and the reception rooms outside are filled with the arriving and departing groups. And what a wonderfully varied and picturesque procession they would make, those who have come and gone over this threshold! Here Alda, McCormack,

Bori, Garrison, Powell, and a glorious host have sung or played; famous orators, preachers, statesmen, have spoken; novelists, explorers, big-game hunters told their tales. Here, too, those fun-makers, the Happiness Boys, the Gold Dust Twins, the Clicquot Club Eskimos have cracked their jokes and played their "ukes;" the Red-headed Music-maker has been married: the Silver-masked Tenor donned his disguise; and Roxy has said his weekly "God Bless You" with Gambarelli of the Twinkling Toes smiling up into his face. And there's another memorable picture I can never forget, of a Cardinal—Cardinal Haves, of the Cathedral uptown-giving his blessing to a motley assemblage of all faiths and callings, reverently bent on their knees. If only that little instrument of wires and springs could record as well as transmit, what history it could give to the world!

And now, tonight, as on the stage of the world, when the half-gods go the gods arrive, the featured singer of the evening comes on—

a famous diva from the Metropolitan, a dear lady whose name you would instantly recognize, and who has been making the world happier for fifty singing years.

Like all the truly great, she is unaffected and modestly clad in a brown street dress, the graying hair showing above the simple lace collar. As the announcer, it is my duty and privilege to greet her; and she remembers me, for once I had the honor to sing in a great hall on the same program with her.

That afternoon, we had rehearsed, showing her where to stand, and how to get the best tone effects; and she had been very jolly. What was it she had said? Oh yes—"You don't scold enough." She meant it, too; she wanted so much to do the right thing.

The big studio now is empty and, going within, she warms up a little, with the microphone silent. And she is in beautiful voice this evening, but very nervous.

She shows it, when at last she stands waiting before the microphone, and is announced to the world. For she clenches her fist a little, and roguishly shakes her head when she thinks our praise of her to the radio audience is a bit superlative.

And now she, too, is off, losing for the time a little of her nervousness in action. And she is a picture, standing, not as the majestic Erda on the stage of the Metropolitan, but with her arms akimbo; again she passes a hand swiftly over her forehead or touches her hair as if she thought it might be disarranged—all little signs of the strain she is undergoing. The number over, she looks to us for approval. She has sung all over the world, but this is an ordeal for her, greater than any appearance at Covent Garden or the Metropolitan.

A face looks through the glass of the monitor's booth. It is undemonstrative, and she says, like a little girl—"That man does not like me!"

I appreciate what the feeling is, that longing for applause or some responsive substitute, for not long ago on one of the concert tours, which I take sometimes between broadcasting evenings, I sang in a hall where there was not a sound when our first numbers were over, only vague whispers.

In the intermission the manager came around. "Going great," he said; but we couldn't believe him. Later, he explained it, "These people are all of a certain religion," he told us, "and the rules of the sect forbid hand clapping."

We accepted the explanation, which, curiously enough, was true; but none the less, it was difficult to do our best before that silent audience.

So turning from the "mike"—"I'll kill him if he doesn't," we said, referring to the undemonstrative monitor, and to set her at ease, "for you sang beautifully, Madame; it came through wonderfully."

But the "mike" is on again, and she is swinging into the wild strains of the "Erl-King," now bending forward eagerly to the microphone in the more tender passages or retreating as she swells into a fortissimo, again signaling, with frantic hand behind her, to the pianist to accelerate the tempo. And magnificently does the noble voice ring out; she is no longer the kindly faced little mother, but the great diva compelling the admiration of the world.

The last note ends; and the diva is lost in the little mother once more; with kindly creases in the face and innumerable little twinkling wrinkles.

But there are five minutes left of the hour; she smiles—no nervousness now—and chooses for the encore the old, old "Silent Night, Holy Night," loveliest of the melodies that have come down the ages. To a million homes and millions more of listeners the sweet tones are floating through the night. Who of her audience can fail this evening at least to sink peacefully into slumber?

She is through. The last note dies away. The switches are off; the little signal lights go out. It is time to sign off—"Good night all!"

