SCHOOL STUDY SPORTS

THE JUNIOR BRITISH WHIG

BIGGEST LITTLE PAPER IN THE WORLD

HUMOR PLAY WORK

ONE REEL YARNS

COWARD'S CAMP

There was no use talking. Billy Robinson wasn't brave. He didn't like to run errands after dark; he didn't like to be in the house by himself, and he would cross the street rather than pass a strange dog.

Mr. Robinson worried about it. "I'm sure the boy has the right stuff in him," he said. "I think it's only nervousness. I don't believe he's really a coward at heart."

So when Billy asked if he could go camping with a bunch of Scouts up the river, his father was glad. He thought it would give Billy a chance to prove himself. "You might get in practice," he teased, "by sleeping out in the yard."

"That's not a bad idea," said Billy, "if—if I had some one to camp with me. I could put up that lawn tent of ours."

"I know the very thing," put in Mrs. Robinson. "Why don't you and that boy that's visiting the Feddersens camp out one night? I think it would be fun. You like him, don't you?"

"Sure," said Billy. "I'll go over and talk about it to him now." Away he went, to come back with the boy, Roger, a little later. They set up the tent and then carried their dinner out there to eat it.

But before they went, Mrs. Feddersen came over to talk to Billy. "I'm afraid," she said, "that Roger is nervous. The least little thing frightens him. You kind of look after him, won't you, and don't let him get scared."

Billy promised. He had cause to remember his promise that evening. They had just dropped off to sleep when he was awakened by a strange noise. Something was moving in the doorway of their tent. He lay there shivering, biting his tongue to keep from crying out in terror, but he was determined not to waken Roger. Under other conditions, he would have screamed and run somewhere frantically. He felt cold all over, and it seemed hours before the thing inside moved out, and, in the door of the tent; with the moon shining on it, he made it out to be a dog. But Billy didn't sleep any more, though he felt strangely happy at knowing he could control himself when he had to. Now he wouldn't be afraid to go camping.

"Gee!" said Roger next morning, "I don't mind sleeping out a bit, though I was mighty scared first part of the night. Something got in the tent. But your mother said something about you being kinda scary, so I kept till. But I sure had to hold my breath to keep from hollering."

A GAME FULL OF PEP

Wall ball is a game that can be played wherever there is a smooth brick or wooden wall, an open space large enough for a court, and where the owner of the space and wall has no objection.

A tennis ball is the only paraphernalia needed.

Mark off a court fifteen feet wide and eighteen feet long. Parallel with the wall the court measures fifteen feet, that is, and the side lines extend eighteen feet from the wall. These are the foul lines and should the ball go outside of them, the player who allowed it to go out loses a point to the other player. Eleven points win a game.

The lines of the court may be scratched in the earth with a stick. Mark a line on the wall four feet from the ground, extending it the entire width of the court. A ball must always hit the wall above this line or it is a foul and counts a point for the other player.

With the court laid out you are ready to play. Two can play at a time, or there may be four players—two pairs of partners. The players choose the sides of the court from which they will play. The "server" takes his position in the outer corner of the court on his side. He hits the ball with the plam of his hand, sending it against the brick wall. The ball must strike the wall above the foul line or it is a point for the other player.

As the ball rebounds the opposing player must rush in and try to hit it with his hand and knock it back against the wall. He may hit it before it touches the ground or after it has bounced once. If he allows the ball to bounce more than once he loses a point to his opponent.

The ball should not be hit so hard against the wall that it will rebound out of the court without first touching the ground inside. If a player does this he loses a point to his opponent. If you see that the ball served by your opponent will go outside, it is fair for you not to attempt to stop it.

It is well to have a third person act as referee, for the ball moves so swiftly it is hard for the players to watch so closely that every foul is detected.

TO-DAY'S PUZZLE

Form a word diamond out of: (1) a letter found in September; (2) to strike; (3) an animal of the jungles; (4) a number; (5) another letter found in September. Solution to-morrow.

SAVING POSTAGE

Patrick sent an overcoat to his sister's little boy. "Dear Nora," he wrote, "I am sending that coat by parcel post. In order to save some on postage I took the buttons off. You will find them in the inside pocket."

MAIN STREET

The Story of Carol Kennicott

By SINCLAIR LEWIS

"You're my teacher!"

There was a dangerous edge of personality to his voice. She was offended and agitated. She turned her shoulder on him, stared through the back window, studying this typical centre of a typical Main Street block, a vista hidden from casual strollers.

The backs of the chief establishments in town surrounded a quadrangle neglected, dirty and incomparably dismal. From the front, Howland & Gould's grocery was smug enough, but attached to the rear was was a lean-to of storm-streaked pine lumber with a sanded tar roof—a staggering doubtful shed behind which was a heap of ashes, splintered packing-boxes, shreds of excelsior, crumpled straw-board, broken olive-bottles, rotten fruit, and utterly disintegrated vegetables: orange carrots turning black, and potatoes with ulcers. The rear of the Bon Ton Store was grim with blistered black-painted iron shutters, under them a pile of once glossy red shirt-boxes, now a pulp from recent rain.

As seen from Main Street, Oleson McGuire's Meat Market had a sanitary and virtuous expression with its new tile counter, fresh sawdust on the floor, and a hanging veal cut in rosettes. But she now viewed a back room with a home-made refrigerator of yellow smeared with black grease. A man in an apron spotted with dry blood was hoisting out a hard slab of meat.

Behind Billie's Lunch, the cook, in an apron which must long ago have been white, smoked a pipe and spat at the pest of sticky flies. In the centre of the block, by itself, was the stable for the three horses of the drayman, and beside it a pile of manure.

The rear of Ezra Stowbody's bank was whitewashed, and back of it was a concrete walk and a three-foot square of grass, but the window was barred, and behind the bars she saw Willis Woodford cramped over figures in pompous books. He raised his head, jerkly rubbed his eyes, and went back to the eternity of figures.

The backs of the other shops were an impressionistic picture of dirty grays, drained browns, writhing heaps of refuse.

"Mine is a back-yard romance — with a journeyman tailor!"

She was saved from self-pity as she began to think through Erik's mind. She turned to him with an indignant, "It's disgusting that this is all you have to look at."

He considered it. "Outside there? I don't notice much. I'm learning to look inside. Not awful easy!"

"Yes. . . . I must be hurrying."

As she walked home—without hurrying—she remembered her father saying to a serious ten-year-old Carol, "Lady, only a fool thinks he's superior to beautiful bindings, but only a double-distilled fool reads nothing but bindings."

She was startled by the return of her father, startled by a sudden conviction that in this flaxen boy she had found the gray reticent judge who was divine love, perfect understanding. She debated it, furiously denied it, reaffirmed it, ridiculed it. Of one thing she was unhappily certain: there was nothing of the beloved father image in Will Kennicott.

V.

She wondered why she sang so often, and why she found so many pleasant things — lamplight seen through trees on a cool evening, sunshine on brown wood, morning sparrows, black sloping roofs turned to plates of silver by moonlight. Pleasant things, small friendly things, and pleasant places—a field of goldenrod, a pasture by the creek—and suddenly a wealth of pleasant people. Vida was lenient to Carol at the surgical-dressing class; Mrs. Dave Dyer flattered her with questions about her health, baby, cook, and opinions on the war.

Mrs. Dyer seemed not to share the town's prejudice against Erik. "He's a nice-looking fellow; we must have him go on one of our picnics some time." Unexpectedly, Dave Dyer also liked him. The tight-fisted little farceur had a confused reverence for anything that seemed to him refined or clever. He answered Harry Haydock's sneers, "That's all right now! Elizabeth may doll himself up too much, but he's smart, and don't you forget it! 'I was asking round trying to find out where this Ukraine is, and darn if he didn't tell me. What's the matter with his talking so polite? Hell's bells, Harry, no harm in being polite. There's some regular hemen that the just as polite as women, prett' near."

Carol found herself going about rejoicing, "How neighborly the town is!" She drew up with a dismayed "Am I falling in love with this boy? That's ridiculous! I'm merely interested in him. I like to think of helping him to succeed."

But as she dusted the living-room, mended a collar-band, bathed Hugh, she was picturing herself and a young artist—an Apollo namely and evasive— building a house in the Berkshires or in Virginia; exuberantly buying a chair with his first check; reading poetry together, and frequently being earnest over valuable statistics about labor; tumbling out of bed early for a Sunday walk, and chattering (where Kennicott would have yawned) over bread and butter by a lake. Hugh was in her pictures, and he adored the young artist, who made castles of chairs and rugs for him. Beyond these playtimes she saw the "things I could do for Erik"—and she admitted that Erik did partly make up the image of her altogether perfect artist.

In panic she insisted on being attentive to Kennicott, when he wanted to be left alone to read the newspaper.

VI.

She needed new clothes. Kennicott had promised, "We'll have a good trip down to the Cities in the fall, and take plenty of time for it, and you can get your new glad-rags then." But as she examined her wardrobe she flung her ancient black velvet frock on the floor and raged, "They're disgraceful. Everything I have is falling to pieces."

There was a new dressmaker and milliner, a Mrs. Swiftwaite. It was said that she was not altogether an elevating influence in the way she glanced at men; that she would as soon take away a legally appropriated husband as not; that if there was any Mr. Swiftwaite, "it certainly was strange that nobody seemed to know anything about him!" But she made for Rita Gould an organdy frock and hat to match universally admitted to be "too cunning for words," and the matrons went cautiously, with darting eyes and excessive politeness, to the rooms which Mrs. Swiftwaite had taken in the old Luke Dawson house, on Floral Avenue.

With none of the spiritual preparation which normally precedes the buying of new clothes in Gopher Prairie, Carol marched into Mrs. Swiftwaite's and demanded, "I want to see a hat, and possibly a blouse."

In the dingy old front parlor which she had tried to make smart with a pier glass, covers from fashion magazines, anemic French prints, Mrs. Swiftwaite moved smoothly among the dress-dummies and hat-rests, spoke smoothly as she took up a small black and red turban. "I am sure the lady with find this extremely attractive."

"It's dreadfully tabby and small-towny," thought Carol, while she soothed, "I don't believe it quite goes with me."

"It's the choicest thing I have, and I'm sure you'll find it suits you beautifully. It has a great deal of chic. Please try it on," said Mrs. Swiftwaite, more smoothly than ever.

Carol studied the woman. She was as imitative as a glass diamond. She was the more rustic in her effort to appear urban. She wore a severe high-collared blouse with a row of small black buttons, which was becoming to her low-breasted neatness, but her skirt was hysterically checkered, her cheeks were too highly rouged, her lips too sharply pencilled. She was magnificently a specimen of the illiterate divorcee of forty made to look thirty, clever, and alluring.

While she was trying on the hat Carol felt very condescending. She took it off, shook her head, explained with the kind smile for inferiors, "I'm afraid it won't do, though it's unusually nice for so small a town as this."

"But it's really absolutely New Yorkish."

"Well, it—"

"You see, I know my New York styles. I lived in New York for years, besides almost a year in Akron!"

(To be Continued.)

RADIO EXPLAINED

By E. H. LEWIS

INSTRUCTOR NEW YORK Y.M.C.A. RADIO SCHOOL

MUTUAL INDUCTANCE.

If a current of electricity flows through a circuit there is a magnetic field about the circuit at right angles to the wire. If the current flows through a coil of wire in the circuit the field surrounds the coil also. In the case of the coil the field will be greater the more turns of wire there are in a given space. The relation between the field strength and the strength of the electric current flowing in the coil is the inductance or "self-inductance," as distinguished from another kind of inductance.

If a second circuit, either with or without a coil, is in close proximity to the first, the magnetic field of the first circuit will surround the second circuit, or at least a portion of it. The part of the magnetic field of the first circuit, which also surrounds the second circuit, is called the "mutual inductance" of the first or "primary" circuit upon the second or "secondary circuit." The amount of this mutual inductance depends upon the distance of the secondary from the primary and the shapes of the two circuits. If both circuits have coils which are close together the mutual inductance will be greater than if there were only a single wire of each circuit parallel with each other and the same distance apart as the coils.

It is seen from the above that if two circuits come close enough to each other there will be mutual inductance of the first upon the second, providing there is a current of electricity in the first. Mutual inductance and self-inductance are important properties of electrical circuits and are made use of to very great extents in radio as well as general electrical work. For example, a spark coil operates very largely because there is mutual inductance of the primary upon the secondary. If an electric current flows in the secondary, as well as in the primary of the spark coil, there will also, of course, be mutual inductance of the secondary upon the primary. This gives rise to some rather complicated actions, as might be expected.

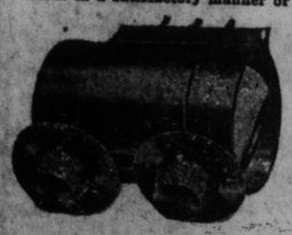
NEW APPARATUS AND DEVICES

By RALPH BROWN

RADIO ENGINEER, CUTTING AND WASHINGTON RADIO CORP.

THE SORSINC TUNIT.

Not all the many thousands of good citizens who have been bitten by the radio bug can afford to buy the more expensive cabinet receivers offered. And yet these same people want something which will bring in the radio concerts in a satisfactory manner or



will do without until they can afford the cabinet down at "Smith's." It is certainly not necessary to do without it since the "Tunit" was provided for them by two wideawake inventors, one from the army and the other from the navy. In at least this one instance the army and navy have gotten together to good advantage. The gentlemen in question are Mr. Herbert B. Pearson, ex-Radio Sergeant, and ex-Ensign Walter J. Roche.

The "Tunit" is a device which can be easily and quickly plugged into the three-coil bracket customarily used for holding "honeycomb" coils. There are two windings, each on a ball similar to those used for variometers. Each ball is mounted upon a metal shaft and can be rotated by means of a knob, to which is attached a metal dial. The metal dials serve to shield the coils from body capacity effects. A third winding, which is stationary, is used for a "secondary" coil, and is so arranged that one-half of it is within the field of each rotating coil or "rotor." A composition tube is used to cover this third winding for protection to the wire. Double silk covered wire is used on all three windings, and all metal parts are heavily nickel plated.

Wave lengths from 150 to 600 meters can be quickly tuned to, and the efficiency is high over the whole range. Compactness is another interesting feature, and it is quite safe to say that no other arrangement will give quite as good results in such small space.

Will readers interested in these radio articles kindly communicate with the editor by mail?