

self-preservation aroused by fear of one's neighbors. More children mean merely more soldiers, greater security. There should be an easier way of insuring this security. The world is overpopulated rather than underpopulated. We are not sure but that if the population of the entire world were cut in half the remaining half would be the better off for it. The encouragement to breed prolifically comes from the upper classes, who do not breed at all, and is meant to affect the lower classes, who breed too much. It is no wonder that these lower classes suspect the propaganda is meant merely to provide the owning classes with more workers, so that competition will make labor cheap. The intelligent middle class is wise in remaining deaf to these influences. What the world needs now is quality rather than quantity. Better babies rather than more babies is the crying need of the time. If a couple reproduce themselves and reproduce with the advance a generation requires, they have done their duty amply by the state, and they have done their duty amply by themselves, which is just as important. The sooner fallacy of numbers is abandoned, the better for the universe."

HOW TO FIND LOST RADIUM

SIX THOUSAND DOLLARS' worth of radium, lost in the ashes of a furnace, was located and recovered by the use of an electroscope. If a lost object continually emitted a sound the searcher's ears would enable him to place it and lay his hands on it at once. The electroscope is a device for detecting electrification, and radium, tho it makes no sound, emits constantly particles that aid the air to discharge electrified bodies. By instantly signaling this loss of electricity, the electroscope indicates the presence of radium in its vicinity, and it was thus that the radium was found in the ashes just as easily and surely as if it had been calling out continually, "Here I am! Come and get me!" In *The Popular Science Monthly* (New York), Raymond Francis Yates tells how the radium in question was lost, and how it was found again. He writes:

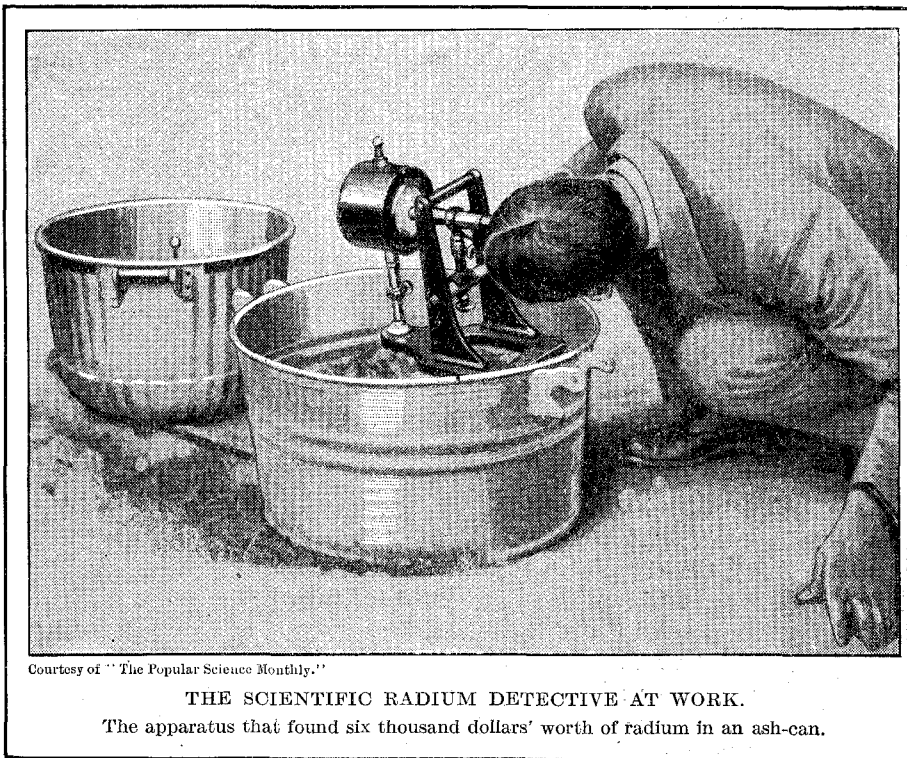
"A nurse was removing ten tubes of radium from a patient. She lost one in doing so. Six thousand dollars' worth of radium in a tube the size of your little finger! A diligent search of the room failed to reveal the presence of the little tube, and as a final effort the radium detective was called for. In this case he was Professor Lawrence, of the University of Rochester.

"The radium detective did not arrive on the scene armed to the teeth or prepared for an encounter with some bold robber. He came in with a very simple-looking instrument under his arm—an electroscope. The electroscope can detect the presence of radium in much the same fashion we would detect Limburger cheese if it were hidden away. The electroscope is sort of a 'nose' for smelling radium, and in this respect it is tremendously sensitive.

"The electroscope is really an instrument for detecting electrical charges. We learned at school that like charges of electricity repel one another. For instance, if two tiny pieces of gold-leaf both had a negative charge, they would insist on staying away from each other; they would repel each other. If one had a negative and one a positive charge, they would insist on remaining together, or, if they had no charges at all on their surfaces, they would be indifferent.

"The electroscope works on just this principle. Two tiny pieces of gold-leaf are suspended at the end of a metal rod enclosed in a glass vessel and carefully insulated, which means that it is prevented from coming in contact with anything that is a conductor of electricity.

"If a glass rod is rubbed briskly with a piece of dry silk it will become charged with positive electricity. Part of this positive charge from the glass rod can be made to flow to the surface of the gold-leaf in the electroscope by merely bringing the glass rod in contact with the projecting metal rod. At this instant the gold-leaf will fly apart and remain in this position until a conducting substance is brought in contact with the metal rod. If this is done, the charges on the gold-leaf will leak off and it will come back to its normal position. If an electroscope is allowed to stand in a charged condition the charges will gradually escape into the atmosphere. The rapidity of this leaking



Courtesy of "The Popular Science Monthly."

THE SCIENTIFIC RADIUM DETECTIVE AT WORK.

The apparatus that found six thousand dollars' worth of radium in an ash-can.

process will depend upon the condition of the air; whether it is dry or damp.

"We will now set out to find the missing radium. Radium is continually shooting off tiny particles; atoms, really. Scientists call these emanations from radium *alpha*, *beta*, and *gamma* rays. Ordinarily air is a fair insulator, but when these radium rays get mixed up with it, its insulating or non-conducting properties rapidly vanish and it becomes a fairly good conductor. We can understand then that the air about a small quantity of radium—smaller than one can hope to imagine—is a poor insulator and if any charged bodies are present, their charges are sure to leak off into the atmosphere.

"If an electroscope is brought near a small amount of radium, the gold-leaf will instantly detect its presence by coming together. If the radium is some distance from the electroscope, the gold-leaf may move just a very small distance, but the radium detective has a magnifier trained on it, and if it moves he is sure to see it do it.

"When Professor Lawrence set out to find radium, he set the electroscope up in the room where it was used on the patient. The instrument failed to register. The radium had not been lost in the room. It was somewhere else. Probably the nurse got it mixed up with the bandages from the patient and it was thrown in the furnace. The ashes from the furnace were examined by the radium detective, and, sure enough, the electroscope responded instantly. Further examination revealed the fused tube which contained the radium.

"The radium was not lost. The search was continued until every possible milligram of the valuable metal was recovered. Radium will not burn.

"After Professor Lawrence found the radium in the ashes, a hurry-up call was sent out for a physicist from a large radium company. After he arrived on the scene, the valuable ashes were placed in several quart fruit-jars and taken to the laboratory and all but \$210 worth of the \$6,000 worth of radium was recovered."

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LETTERS - AND - ART

LITERATURE DRAMA MUSIC FINE-ARTS EDUCATION CULTURE

A PEACE PLAY ACCUSED OF WAR

TO SEE WAR in a play where it is never mentioned requires an acumen possessed seemingly only by our native critics. The struggle of an upstart manufacturer to win social recognition from an aristocratic British squire in John Galsworthy's latest piece, "The Skin Game," is discerned here to be nothing less than Germany's effort to share Britain's "place in the sun." When the piece was produced in London in May the critics there overlooked all this, which gives our observers a chance to show superior perspicacity. Mr. Broun and Mr. Woolcott, of the *New York Tribune* and *Times*, treat it from the war point of view, tho Mr. Broun gives his compeer credit for the original discovery. Galsworthy's other play, "The Mob," now showing at another theater in this city, is confessedly a war-play, but it was written before the world-struggle. "The Skin Game" is "a play which has come after the great struggle," says Mr. Broun, "and this time Mr. Galsworthy's indictment of warfare in general is more sweeping and better than in 'The Mob.'" The latter play deals with wars of conquest; but "The Skin Game" takes "the position that, however just the cause, even the combatant who starts with clean hands must take on something of evil and degradation." It may be recalled that Galsworthy's other plays, notably "Strife," dealt with the general thesis that contentions between men or groups or nations usually exhaust if not ruin the combatants and leave the question in dispute where it started. Since Mr. Broun expresses some surprize that British critics failed to catch the point, we give the account of the play appearing in the *Manchester Guardian*:

"'The Skin Game' means war for the skin of your adversary, but every one who knows Mr. John Galsworthy's work will know that it is really played with pity and reserves and compunctions. At the St. Martin's we are back in the world of his 'Country House,' but the squire is only middle-aged. His wife is a creature of steel and enigma. She is the one unrealized person in the play, and as the night went on she seemed more and more a visitor in her own house, hardly on speaking terms with her human invertebrate husband and her human and wilful daughter.

"The advisory of the household is *Hornblower*, a new-rich manufacturer, who, dreading that terrible Victorian doom, 'cut by the county,' seeks to smoke out his chief enemy by buying land in front of his park and setting up factories there. The squire's wife carries the fray into the manufacturer's quarters by using her knowledge of the guilty secret of his daughter-in-law. It is not cricket, but it is the skin game. And so the manufacturer is beaten, parts with the land, and drops £6,000.

"Thus is the country-house preserved. But what is the cost? The guilty lady tries to commit suicide and recovers, but her unborn child is dead. The home life of the manufacturer is broken, his dynastic ambitions are in ruins, and moreover he sees that the class that he fought, and fought because he thought that they had something fine that he hadn't, are hypocrites.

"An estrangement would fall like a curtain between the squire's wife and her husband and child if Mr. Galsworthy had not convinced us that such a curtain existed at the beginning. The squire ponders in the end with the word 'hypocrite' ringing in his ears. 'We began the game with clean hands—have we clean hands now?' His other reflection is, 'What is our gentility worth if it can not stand fire?' 'We did it all,' he said, 'to keep our old home.' 'I am not enjoying home to-night,' said the daughter."

The treatment of this situation, as the Englishman sees it, flows from character and not historical happenings:

"Mr. Galsworthy, as ever, holds the balance straight. The *parvenu* states his case, and states it massively, against the established people who are not obnoxious because they don't want anything more. They have got all the advantages and have nothing to do but live. The squire puts his case with effective understatement and is altogether an ideal squire. The first quarrel is over *Hornblower's* eviction of two cottagers after promising at the sale that he would not disturb them. He points out that little things can't stand in the way of great operations by which thousands of workmen can live and help to refurbish the earth. His sons are presentable, and the younger flirts with the squire's daughter. The daughter-in-law is one of these dark flowers from the underworld, replanted in love and security, in which Mr. Galsworthy believes and of which he has the secret.

"Over the whole play there is that sense of fate, or something more modern, smaller than fate, which impels human beings by the momentum of the wrong they have done to go on deeper and deeper till they are up to the tips of their souls. There is less beauty in the play than in any other of his. It is as tho the author were determined to show the public that he could be as fierce and sudden as the best of them, and he had sought to strike the note with his brutal title. But it was to no purpose, for his virtues and weaknesses are here as usual. This is one of the most interesting plays he has given us, but it has not the rhythm that ran through those plays where he concentrated more on one character which dictated the whole movement."

The ingenious Mr. Broun is not abetted by his fellow critics of *The Evening Post*, *The Herald*, or *The World*. The last, indeed, sees only "a clothes-line fight." Still, when symbolism is your quarry, you can often find much of it. Mr. Broun presents his case:

"To be sure, war is not once mentioned in 'The Skin Game,' which is laid in 'a remote country district in England.' There are no guns and no marching troops. The war-theme is entirely within a solution of symbolism, and yet it is easily grasped for all the fact that it is not obtruded.

"We don't see how it can be missed, and yet few, if any, of the English reviewers read such a meaning into the play. . . .

"Mr. Galsworthy seems to have had Germany, England, and Belgium in mind, and if we had the printed play at hand it would be easy to point out a score of speeches which bear out the theory. Of course it may be prest too far, and there were those who greeted the explanation by insisting that if it were so the author probably intended the butler, who spoke one line in the second act, to be Montenegro, and the off-stage noises to be Japan.

"As a matter of fact, it is possible to overlook the symbolism, because the story, taken simply for its face value, is intensely interesting. With the added factor it seems to us a still better play, exceedingly biting and effective in its irony. Nevertheless 'The Skin Game' falls a little short of the very best of Galsworthy, altho it is one of his fine plays. Here and there it is marred by excessive melodrama. There is, for instance, an impossible scene in which a maid steals into a room unobserved by the occupant and hides behind a screen and later tiptoes out again without being seen by two people. Also an auction scene in which the *Hillcrist*s and the *Hornblower*s are bidding against each other for a certain piece of property, altho effective, is too tricky. Mr. Galsworthy has arranged that the scene shall be played directly toward the audience with bids coming from folk in the orchestra. All these are imaginary except the final one, which is bawled out by an actor who sneaks down the aisle just in the nick of time. The characters on the stage identify the various people who are supposed to be taking part in the auction by pointing out over the footlights. We were somewhat abashed when the heroine leveled a finger directly at us and said, 'There's the big bounder now.'"