

INVICTUR.

Out of the night that covers me, Black as the pit from pole to pole. I think whatever gods there be For my unconquerable soul.

THE UNFIT SURVIVOR

The woman sat up, and pressed her palms against her throbbing head. Her wet garments steamed in the hot sunshine. Hopelessly bewildered, she looked out on an empty world of sea and sky.

To the east lay a barren island, apparently of volcanic origin, separated from him by scarcely a mile of quiet water, while north and south stretched a line of surf punctuated by black dots and eloquent of the reef which girdled the island.

It was only after tremendous concentration that she began to piece together the events which had preceded her period of unconsciousness.

"You saved me, Paul?" she inquired. "You were dashed against a rock and stunned," he answered. "I managed to catch hold of you."

Had the man looked around instead of flinging this information over his shoulder, he would have seen the warm color flood her face at the thought that it was he—she who had saved her.

He looked round at that and a maddeningly ironic smile played about his lips.

"So you have reverted?" he mocked. "I can't help it," she said deprecatingly. "On the steamer it was different, somehow. When we walked up and down the deck and talked, words seemed to prove things and I was carried away by what you said. But now it isn't words, Paul—it's facts. Can't you see that it is by no chance we have been saved?"

"A miracle, then?" he scoffed. "It was no chance. Think! Just you and I, Paul, of all in the boat—you and I who love each other."

"The man gave a little, mirthless laugh. "I'm afraid I can't flatter myself by creating a Providence whose sole duty it is to preserve me and mine," he said.

"First of all, I am a strong man and keep myself always in a state of physical fitness; therefore, when danger comes, I have nerves and muscles at command. That explains my presence here. And that, while saving myself today, I saw you in difficulties and, glorying in my own strength, must needs show that I had enough for two. There you have it—stripped of glamour. It's very simple."

He paused here as if he expected her to dispute this, but the woman covered her face with her hands and was silent.

"You said just now that it was facts, not words, that counted," he continued. "Well, here are the facts of your 'miracle' as I see them: 'First of all, I am a strong man and keep myself always in a state of physical fitness; therefore, when danger comes, I have nerves and muscles at command. That explains my presence here. And that, while saving myself today, I saw you in difficulties and, glorying in my own strength, must needs show that I had enough for two. There you have it—stripped of glamour. It's very simple.'"

She raised her head and he saw that the light had died out of her eyes. "Do you mean to say that you saved me practically from motives of vanity?" she asked.

"It was rather like that, I own," he said, groping for words to express the exact truth, "but you must make allowances, also, for the sexual instinct, which would naturally prompt the animal to preserve his mate."

"I hate to hear you speak of love in that way!" the woman exclaimed passionately. "That's because you're a hopeless sentimentalist, Christine. But this is a lot of talk about nothing, for we are not by any means saved yet. I'd like you to help me solve the problem of how we are to get away from here."

"Why, we can swim to the island! It's only a little way." "I'm afraid there are reasons which make swimming impossible."

"Reasons which— Oh-h!" "In a flash she had remembered the boat's grisly following of sharks. "Look!" he said.

She followed the direction of his gaze and saw a cruel, evil shape cruising round their haven of refuge. It disappeared and, fascinated, she watched for its reappearance.

"Yes," said the man meditatively, "I saw one poor devil starting to sprawl onto this rock ahead of me. Suddenly he threw his arms above his head and went under, leaving a track of red froth behind him. At that I began kicking up the water with my feet and managed to keep them off, but it was no easy job to hold you and swim and splash all at once. There wasn't much time for awaiting miracles, I can tell you. By the time I got

you here the place was alive with the brutes. It wasn't a pretty sight."

He paused for a moment and then continued: "Some of the men crossed the reef and made for the island, only to be picked off, one by one, and in the still water of the lagoon. One man—that jolly, red-headed chap you used to like so much—got about half way, but I suppose his strength gave out with the constant splashing necessary to frighten the brutes and at last I heard a faint scream and knew it was all up with him."

"Look!" she panted. He obeyed and, at a little distance, saw first one and then another dorsal fin cleave the water, apparently in attendance on some objects which were drifting towards them out of the white turmoil of the reef surf. He realized the meaning of the thing before she did and, at the thought that these mangled fragments were all that remained of men who had been their comrades, his face became distorted into the semblance of a Japanese mask, the mouth opening squarely in a snarl of horror.

A flash of white belly as a shark turned over was followed by the disappearance of something that had been floating on the water. After a while this happened again, quite close, and the woman at his side shrieked. He turned, to find her convulsed by a paroxysm of vomiting and sobbing which, in its violence, threatened to part soul from body.

The paroxysm terminated in a shivering fit and then, at last, the man became human, interposing his body between her and the horror. She became conscious that he was pressing her to his breast, while huskily and brokenly murmuring terms of endearment.

"Hold me, hold me tightly," she whispered, and his grasp tightened until presently she ceased to tremble and felt some return of strength.

"We shall have to wait here until we are picked up by some ship or one of the other boats, then?" she asked faintly.

"I'm afraid that can't happen in time, little one." Womanlike, she roused herself at that and endeavored to instill fresh hope into him.

"Why, Paul! The chances were all against our being alive now," she said. "You mustn't lose heart yet. How long do you think we can hold out without food or water?"

"That isn't the point, Christine. This rock is covered at high tide."

He had resisted an impulse to keep her in ignorance as long as possible, deciding that truth alone was admirable. With that decision, his humanity dropped from him and he became once more the thinking machine.

"So, you see, the chance is so remote that we might as well dismiss it from our minds."

He paused for a second that she might realize the awful import of his words, and then continued: "It will be some hours yet. The tide is going out now."

"And presently we shall be watching it creep up, inch by inch, slowly, inevitably, and then— Oh, God! God! Don't let it be—don't let it be!"

She slipped to her knees, uttering vehement repetitions of the same prayer, until the thought that she was behaving like a coward and that he must scorn her for it, helped her to control herself. She rose to her feet and spoke his name timidly.

"Paul!" His back was turned to her and he made no answer.

"How you must despise me for rushing back to futilities at the first show of danger! Do you despise me?" "Paul, speak to me! I've come to my senses now. Don't let us waste this time, this little, precious scrap of time that's left to us. Let's live every moment of it. There are things I want to say to you and things I must hear you say to me before—before—"

She faltered for a second and then went on bravely. "After all, death is no more real than it has always been, only a little nearer, and we won't think about it till the very end, will we? We're alive now—we two—you and I, and remember three nights ago you told me that you loved me."

He disengaged her arms from about his neck and pointed, without speaking, to something that was drifting towards them and which she recognized far an unopened biscuit barrel which had been with them in the boat. Thereafter they watched it with breathless interest and a few minutes later managed to land it. She waited hungrily while Paul stayed in the top and then, having seized on a biscuit, she paused with it half way to her mouth to wonder why he was emptying out the barrel. As she was about to remonstrate, with stunning suddenness came the realization of all that this barrel meant. It was a chance of escape for one of them.

At that, the biscuit dropped unheeded from her hand and all of nobility that was in her died. Flinging herself at his feet in a passion of tears, she besought him frantically to let her have the chance, in her state of panic not caring who should die if only she might live. He broke in on her entreaties with apparent harshness.

"Listen, and stop crying. This is no time for hysteria." His roughness had the calculated effect of calming her almost instantly. He continued: "One of us is probably going to live and it has got to be the one who is most worth life, who will be of the most good to the race. Do you understand? If you can convince me that your life is more valuable than mine, you are welcome to this means of escape and I will stay behind. If not, you must stay."

She stared at him with dilated eyes. Used as she was to his theories, she had never realized till now that they could embody more than a kind of perverse philosophy, very fruitful of heated argument and with no relation to life.

"Paul, you can't mean it," she gasped. "Why, I am a woman and you are bound to save me by all the laws of chivalry."

"Sheer sentimentalism," he remarked. "To train a colt to walk fast is a matter of months. To make a slow walker, hitch the colt with a lazy old horse and spoil him. If you wish him to walk fast start him that way. Put him in a place where he will have to walk fast, and then keep him at it."

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—Subscribe for the "Watchman."

"But you love me—Paul, you can't mean it; you can't mean to leave me to a death like that. Think, Paul, all alone to watch death creeping nearer and nearer—and such a death. To be eaten by a fish! Oh, it would be horrible, to finish like that!"

"Sentimentalism again," he argued relentlessly. "Reasons; give me reasons."

She tried desperately to gather her wits together. "I was so happy, Paul, and I wasn't wicked. Lots of people love me and would miss me. And then there's the money. Money's a big thing, isn't it—a great power? And I will swear to do a great deal of good with mine. But if I die, you know Jim Treversk will get it, and he's a drunkard and a waster, so—so you see I must live, don't you, if only because of the responsibility of my wealth?"

She finished breathlessly, scanning his face for a sign of relenting. "I didn't ask you your worth as a member of society," he said, "but as a woman, a human being, a perpetrator of the race. I've given you a hearing; now listen to me."

"To begin with, you are hampered by your sex. This ought not to be, but it became so when your female progenitors ceased to be strong, deep-chested women and became triumphantly ineffectual ladies. Things being as they are, therefore, I, as a man, am stronger, more likely to survive hardships, to overcome obstacles. I, as a man, have power to generate more children. Leaving sex out of it, however, your constitution is inferior to mine. Remember that just now, when you saw an ugly sight, you were sick! Also, my mind is more vigorous and sane. You become hysterical, emotional, superstitious in time of danger; I remain a reasonable being. It is I who am capable of foresight, courage, strength—far beyond your small powers. I can save myself. You might fail. So you see, it is I who have the right."

He began to move the barrel. "Kill me before you go!" she prayed, but he got into the barrel and pushed off.

Somehow she did not understand his words of hope that he might reach the island and by some means rescue her. But, if she had understood, she would have seen the futility of such a hope, for, once in the grip of the current, he was rapidly carried towards the open sea, despite all his efforts at rowing with pieces of the barrel-top.

Realizing his helplessness, he presently abandoned effort and gave himself up to watching the solitary figure on the rock.

She seemed stunned at first and stayed quietly as he had left her; then suddenly, unexpectedly, she gave vent to a series of wild, terrible shrieks that shook even his control. He had a momentary vision of a tragic figure with its arms flung to the sky—then she fell face downwards upon the rock and he heard no more.

It was some hours later when the woman lifted her head. She did not know whether she had lain there a short or a long time till she saw the sun low in the heavens. Out to sea there was nothing visible upon the waters, strain her eyes as she might, but, when she turned her hopeless gaze towards the land, she stared for a moment incredulously and then sprang to her feet.

It was true—it was true! The tide had gone out—gone out so far that she might walk to the sterile-looking land almost without wetting her feet. She turned again to the west, scanning the sea for a black speck that was no longer there. Then came a revelation of the ironic humor of the situation and she laughed aloud.—By Katherine Harrington, in The Cosmopolitan.

Why does the water in the great lakes that lie between a large portion of the United States and Canada rise and fall in periods which average seven years?

This natural phenomenon has been a puzzle since the day when France held sway in Canada 200 years ago.

In an unpublished diary of an English traveler who voyaged up the St. Lawrence river to Niagara, Ontario, in the summer of 1785, the following reference to this mystery of the waters: "A remarkable circumstance was told me by Mr. Pansee, our conductor, who had been constantly engaged in this navigation for nearly twenty years, and which he advised me is a matter of fact both from his own observation and that of the oldest inhabitants."

Each year the St. Lawrence river settles or falls a little until the seventh year, when it is visible that it has sunk between three and four feet, and then for the next seven years it continues to rise in the same proportion. The river is at this time at its greatest elevation (July 1, 1782). I took great pains to gain some information of this uncommon phenomena. I find that the lakes have the same appearance.

Careful government records were begun about the year 1820 and since then it has been found that the periods between high and low water are sometimes as high as nine years. This year the water is again at its lowest in the lakes and river, and freight carriers are having trouble in various harbors.—Selected.

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JAZZ IS SINGING HER SWAN SONG.

Good-bye Jazz! The great god of topsy-turvy ragtime which has been tangling up the feet of Terpsichore these many months and leading dance devotees through a maze of intricate "side-slips," "tail-spins" and other grotesque pantomime is on his way out.

Up and down the boardwalks of the Jersey shore resorts, as one mingles with the throng of vacationists in Atlantic Coast palaces of pleasure, near the close of another summer vacation, there is to be heard the dying wail of the musical monstrosity—the swan song of Jazz. Into his place in the orchestra leader's pit, is stepping the sane young goddess of Melodious Rhythm, scion of the good old days of "The Merry Widow," the "Waltz Dream" and the "Blue Danube," harbinger of a new day of dignity, grace and sheer simplicity in music and dancing. Welcome the renaissance of old-fashioned harmony!

If the leaders of orchestras in the big beach-front hotels of Atlantic City are to be believed—and they occupy a strategic position to judge public sentiment as they observe the toddlers and the fox-trotters—Jazz shortly is to be done a shroud and occupy a last stumbering place in the burial plot wherein John Barleycorn was interred.

Just as Bolshevism was born out of the unrest following the war, so jazz was ushered in with the unrest attendant upon the demise of John Barleycorn. Now jazz is going the same way as Bolshevism.

Remarkable, too, is the way this controversy over dancing in a prohibition era is working out. "It simply cannot be done," was the almost unanimous verdict of very many hotel and cafe proprietors along the seashore strand, Broadway and other rendezvous of pleasure-seekers when the Eighteenth Amendment was adopted and stimulating beverages divorced from the lobster palaces. Their argument was that it required the bubbles of "joy-water" properly to set the feet of the dancers in rhythmic motion.

But now come the dance orchestra leaders who declare time has proved this argument a fallacy. In fact, Max Fischer, leader of the Ritz-Carlton orchestra at Atlantic City, is not only convinced that the art of terpsichore has not suffered any setback as a result of the passing of John Barleycorn but that, on the contrary, the drought has benefited dancing.

"Go to any good restaurant or hotel in Atlantic City where there is a dance orchestra about dinner time," he said, "and you will have a hard time getting in. In many places you will find people lined up for a considerable distance waiting their turn to secure tables. Furthermore, where there used to be one boy or girl taking dancing lessons two years ago there are a dozen learning to dance today."

"The passing of John Barleycorn has not hurt dancing—far from it. Those people who like music with their meals have nothing to divide their attention with dancing now except the food. You can get just as good a jolt out of the dance as out of a cocktail, and your head is clearer next morning. The day of jazz is done. People don't want the tin-pany squawk and the weird noises any more. The demand is for melodious rhythm. We are drawing on the classics for our music for the dance and finding that this is popular. I have arranged 'Kamenoi Ostrow,' by Rubinstein, and his Melody in F for one-step, not eliminating a single note, but changing the rhythm so that it is in one-step time—and it is always enjoyed. We have made 'One Fine Day,' from 'Madam Butterfly,' and 'The Own Sweet Voice,' from 'Samson and Delilah,' into fox-trots, and they go with a bang. There are at least a half dozen others which have been similarly arranged and which heretofore have been heard only at so-called 'high-brow' concerts."

"The old-fashioned waltz is coming back into its own. I mean the waltz of our fathers and mothers, not the hesitation. It is pretty and graceful, and this generation is beginning to realize it. The fox-trot still retains its popularity, although of late it has been changed somewhat by the addition of other steps. Most orchestras find they have to play it over all other forms of dance music by a ratio of six to one in point of popularity."

Maestro Fischer says the happy-go-lucky musician who "fakes" his music is giving way to the bona fide well-educated, experienced musician of worth. "There are a lot of alleged musicians out of jobs right now," he said, "and many more are finding themselves on the street every day. The jazz faker from New Orleans who couldn't read a note is giving up his place—and he has to—to the player with a sound musical education, who can read music and who can improvise, if need be. I expect always to have in my organization as high-class musicians as I can get; and the fact that three of our orchestra at the Ritz were first-chair men in philharmonic orchestras shows it is possible to get this class of musician, provided, of course, one is willing to pay the price."

Tactful Hubby. "Before we were married," said the young wife, "you used to bring me flowers every day. Now you never even think of buying me a bunch of violets."

There were tears in her eyes. But he was equal to the occasion. "My darling," he said, with great tenderness, "the pretty flower girls don't attract me now as they used to do."

After which of course, she told him that she didn't really care much for flowers.

Didn't Hurt Them. A man was walking along the street and he drew near to some laborers, who were engaged in building a house. As he passed the scaffolding a brick fell, striking him on the shoulder.

Looking up to the men who were two stories high, he shouted indignantly: "Hi, up there! You've just dropped a brick on me."

"All right!" responded one of the bricklayers. "You needn't trouble to bring it up!"

FOR AND ABOUT WOMEN.

DAILY THOUGHT.

A weak mind is like a microscope, which magnifies trifling things but cannot receive great ones.—Lord Chesterfield.

Knickerbocker suits are becoming the fad for women. They are to be worn generally for the street and are being made in winter fabrics and knitted materials. Coats are made to match, or in the woolen knitted suits there is a combination of color shown.

Riding habits are made with an extra pair of knickerbockers, to be used when walking, that match the coat used when riding.

Dresses or separate skirts are being made with the deft change of a few buttons a woman can change her dress or skirt into a knickerbocker suit and be prepared for walking at any time.

Fur jackets are again conspicuous. Coatees are made of fur for the small woman. All fur coats show mandarin sleeves.

Coats are replacing the wraps in many instances. All coats are being belted this season.

Hand painted quills are used to trim the new tailored hats. Indications during the past week point to the revival of the felt hat.

Tan and gray are the colors which are specially favored. Considerable crepe lace is used, both in sash and drape effects. Red, jade and black are being used for junior wear.

Individuality rules. In shapes as well as colors. The large hat is smart; and there are quite as many small ones.

All black is everywhere; and the high colors are quite as popular. More than for some time, one chooses the hat most becoming without slavish regard to Fashion's whim.

Colors new this season, and just a thought different from any others, include pheasant, coffee, paradise, honeydew, Jiggs red and Dinty green.

A glorified version of the willow plume hangs from many hats at the right back to the waist line. This note is repeated in chenille, weighted at the shoulder with jet rings.

Duveltyne occupies an important place in the mourning millinery. Its dull sheen has both beauty and quiet dignity.

Whatever else one may do, one must not overlook the Spanish note of lace trimming. Alluring, bewitching, smart, it softens the face and adds dash and charm. Chantilly is a favorite, but all soft laces are used. It may be draped about the brim, falling piquantly, or it may swathe the hat, become a scarf at the neck and hang to the waist.

All shades of purple are very popular. These are charming when trimmed with the autumn colorings of frosted grapes and tinted leaves. A handsome imported model is a draped turban of panne velvet, which shades from deepest purple to mauve.

The graceful, dashing black hat depends more on line than trimming. A shape seen frequently is wider at the sides than front or back. Distinctive ornaments noted were a single cut steel wheel at the front of one and roses of crepe ribbon, edged with silver lace, at the sides of another.

Duveltyne in its soft, exquisite colorings makes an entrancingly lovely hat. One in honeydew is embroidered in long pearl beads. Another, in Harding blue, has a wreath of laurel leaves about the crown in green, orange and black.

A model, extreme, but chic and individual, is a small, close shape with a coronet effect of sparkling jet. It has two long chin straps of huge jet beads.

Beads, by the way, are much used as trimming. They cover whole crowns or turned brims. Fish scale beads are glitteringly new. A flat, square, iridescent bead in one or two rows is seen on many hats. And white beads on black felt follows the Paris idea of black and white.

It is doubtful if any shape is more universally becoming than the slightly rolled brim. It is shown this season in a delightful variety of finish and underfacings. The roll brim sailor of hatter's plush in black or seal brown is a distinctive complement of the tailored costume.

It was easy to guess that with full skirts and hip length bodices, or flat skirts and side draperies, the fabrics of the new season would be supplied. For this reason crepe in its various manifestations remains the choice of the majority of those who design clothes. Not much velvet was shown in the recent collections, surprising as it may seem, but metallic brocade held its place of power for the evening and also for bodices which were joined to cloth skirts. Serge has something of a fling this season, but it is not demurely treated. Steel beads and other devices to attract attention are used.

The combination of serge and satin has passed into the discard. Little braiding is seen. Fur is used for bands when bands are needed. And fur is simply treated. It is no longer tortured. Neither metallic embroidery nor figured impressions dent its supple surface.

Taffeta is rarely shown except in picture frocks for young girls. The Dresden figurine coloring does not appear; a bold design of bright small flowers on a black background is used. For adults, taffeta, it appears, is dismissed. Satin has not much chance for popularity. It even gives way to soft silk as a foundation skirt. Georgette crepe is used in a lavish manner for evening gowns, when splendid beading or crystal work forms the conspicuous feature of the frock.

Probably the thing that attracts the lasting attention of those who suddenly see its importance is the tight hip line formed by a girdle of gorgeousness. This is the Oriental touch on most frocks, and on all frocks there is a lowered waistline which is invented to balance the longer skirts. It is this that hits one between the eyes that the full conviction that the ankle skirt is here, not only for the minority, but the majority.

FARM NOTES.

Pennsylvania produced 37.3 per cent. of the buckwheat grown in the United States in 1919. Her crop of 4,755,739 bushels was larger than that produced by any other State.

Poultry and bees are no small item in our farming activities. The value of poultry on farms in 1920 was \$373,950,055, and the value of bees was \$16,855,251. Add to this the value of all the poultry kept in the villages and city suburbs and there is a sum that outranks some of the supposedly much larger industries.

One part of the farm business which has continued to pay through good times and bad is poultry. First quality eggs continue to bring first-class prices. With the declining prices of grain the farmer who has a flock of well-kept hens is in position to make some money with them, but it cannot be done without giving them the same care that the good dairyman gives his cows.

The three most important constituents of a fertilizer are nitrogen, phosphorus and potassium. Nitrogen is the most expensive constituent of the fertilizer and the one most likely to be needed first on soils. The legumes have the adaptation of using free nitrogen and storing it in their roots. Farmers may buy phosphate and potash, where these are needed, and grow legumes to put nitrogen and humus in the soil.

The hog, having a small stomach, requires water at frequent intervals. It is a requisite to digestion and health. It is the cheapest essential ingredient that enters into the make-up of the body of the growing pig. At the same time water is an easy conveyer of diseases if it is impure, stagnant or filthy. This shows the necessity of having fresh water. Water assists the machine that transports the different ingredients of feed into the form of bone, muscle and blood. A thirsty pig, worrying for a drink, is a waste of energy, strength and flesh.

Mulching the strawberry bed is highly important. The straw used in mulching protects the plants from alternate freezing and thawing. When the plants remain frozen all winter and then gradually thaw out in the spring not much damage will be done, but when left bare and the beds freeze and thaw alternately in spring and during warm weather in winter great injury is done to those plants left partly out of the ground.

Mulching will mean clean berries and it will also conserve moisture and take the place of cultivation in the spring, when the latter is not practicable. Mulching also keeps down weeds, and the humus made by the decaying straw improves the mechanical and chemical condition of the soil.

The material used in mulching should be open and loose in texture. Leaves and sawdust pack down and are apt to smother the plants. Old wheat straw is probably the best and cheapest material that could be used, and sometimes straw manure can be employed to good advantage. Care must be taken that no material is used that might be foul with weed seeds, as is often the case with some manures.

In the fall of the year, when the ground freezes sufficiently hard to bear the weight of a wagon, mulching should be done. Should the ground be covered with several inches of snow, the straw may be placed on top, and this will prevent the snow from melting. Snow makes an excellent mulch so long as it does not melt.

A calm day should be chosen for the work so that the light litter may not be blown away, and it will be all the better if cornstalks or manure be thrown over the bed to keep down the mulch.

The mulch should be spread to an equal depth in all places, not necessarily more than an inch or two, just enough to hide all the plants.

An overplanted orchard will result in a rapid deterioration of the trees. They should be thinned out before the branches begin to touch. Trees will not thrive in a wet soil and this should be avoided by draining or the ground will sour. In the latter case lime should be applied.

An orchard will sooner or later wear out where there is not proper pruning. Unsymmetrical branches, dead or dying branches, and a great growth of water-sprouts will be the result. It should be the aim to correct such defects, to permit the entrance of air and sunlight and to facilitate operations in cultivation, etc.

Too heavy pruning of the top will cause wood growth. By proper pruning the trees will be invigorated and errors of former years will be rectified.

It is well to remove all the water-sprouts, as some of them if carefully selected will help to form a new top and take the place of the decayed and old limbs. In cold climates heavy pruning should not be done until late winter or early spring, after severe weather is past. The wound should be made as near the tree trunk as possible and parallel with it. In order to prevent decay, the large wounds should be painted.

When old trees are in an unthrifty condition or "hide bound," the bark becomes shaggy and insects and fungi are harbored. Such trees should be immediately scraped and all the dead and dying branches removed and burned. Cankers, gummosis, dead spots and borers and other wood troubles should be cut out.

There is very little plant food in worn-out orchard lands, and they should be supplied by stable manure, cover crops, potash and phosphoric acid in varying quantities to suit different conditions. The best way to supply nitrogen is by an occasional cover of clover or vetch.

Stable manure will improve the physical condition of the soil as well as to furnish plant food. Where nitrogen has been supplied through a cover