

CAMP SANITATION*

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IN these days of military activity, with soldiers widely scattered throughout the land, a camp is naturally conceived of as having to do with war, and relatively little thought is given to those gatherings of men who are occupied with the activities of peace.

Certain well-defined differences must be recognized between labor camps and those of soldiers, the most notable of which is the existence of military authority in the one and its entire absence in the other. When provision is being made for a group of men accustomed to obey orders, who are equipped in all particulars with uniformity, who are subject to military authority, and who are protected thereby from the dangers of irregular and vicious living, the camp problem assumes a simplicity of solution quite in contrast with that presented when arrangements have to be made for a collection of persons gathered from many sources, frequently of many nationalities and different languages, often very ignorant, and all imbued with a spirit of independence that causes them to resent what they believe to be an interference with their personal liberty.

Camps are Potentially Dangerous

In perhaps no other way is their resentment so likely to be aroused as by attempts to control their movements during off-hours. Any approach toward making prisoners of camp employees is bound to produce resistance on the part of a majority of them, even though the more intelligent few may be persuaded of the advantage accruing from stopping a too free passage to and from the general enclosure. A man-proof fence with single gateway has its advantages, even though no physical interference be attempted with an inmate passing the guard.

Camps are sources of potential damage not only to their own people, but also to the inhabitants of the district wherein they are located, particularly to those who dwell down stream in the same valley. Pollution of a public water supply, either direct or through injury to its general water-shed, may become serious unless guarded against by competent sanitary supervision.

This supervision may be undertaken by those in responsible charge of the camp or else by the sanitary authorities of the municipality threatened. It would be better if it were carefully looked after by both, although it often fails to receive the attention of either.

"Unnecessary Expense"

There is abundance of law upon the statute books wherefrom the local health officer can draw all the power needed to meet the situation, but it too frequently happens that the power is not evoked until the threatening menace has developed into an actual disaster. The public itself should not be required to look into matters of health protection, for the sufficient reasons that they do not possess the skill, and have, moreover, delegated a presumed expert to do that sort of work for them; consequently, many sanitary sins will be overlooked, particularly if rectification should call for heavy demand upon the treasury.

When something serious does happen, however, the public energy will act with great vigor to abate an existing and manifest evil, even though the ounce of pre-

vention that could have saved the day was at an earlier period considered an unnecessary expense.

Of all the forms of danger which may accompany camp life, that arising from the presence of human dejecta is the one requiring the most serious consideration. How shall this material be handled so as to deprive it of power to become a menace to health? Even when the number of men employed upon a job is small, it will never be wise to allow them free license to act as they see fit in the matter of disposing of their bowel discharges. This is particularly true if the job be one involving the possible pollution of a public water supply.

Burial of Dejecta

So simple a device as a "straddle trench" is quickly made and easily cared for, and, if well located, possesses the advantage of placing the material collected in a portion of the soil where pathogenic bacteria will find conditions least likely to favor their longevity.

As illustrating the great difference in numbers of ordinary bacteria found at sundry depths, the following counts are given per gramme of dry meadow soil:—

Immediately under the sod	114,000
1 foot below	47,800
2 feet below	39,000
3 feet below	9,500
4 feet below	6,700

A straddle trench should be dug twelve inches wide, twelve inches deep, and as long as circumstances demand. Dejecta placed therein and covered at once with the excavated earth will be quickly destroyed, in contrast with what happens to it when deposited in pits many feet deep. In the latter case the action is one of imprisonment rather than destruction.

Anyone who has had occasion to uncover very old and large privy pits will recall the exceedingly foul condition in which the contents were found, even after the lapse of many years, while, on the other hand, the appearance of the soil turned by the plough in any field which has been repeatedly manured will furnish illustration of how quickly animal droppings will disappear after shallow burial.

Easy to Start Much Trouble

It would seem scarcely necessary to urge attention to the selection of a proper site for a straddle trench, and yet it was lack of good judgment in such a matter that caused an outbreak of typhoid fever in a New England community through the washing out by heavy rainfall of dejecta carelessly buried on a steep hillside.

It takes but little infected material to produce great damage if the point of its introduction be a vital one. This was instanced at Plymouth, Pa., when the dejecta of a single typhoid patient caused the illness of over twelve hundred people. Nevertheless, it is manifestly wiser to take chances on a little rather than on much of a dangerous article, particularly if that little be so distributed as to encounter conditions favorable to its destruction.

If the dejecta in the Plymouth case, instead of being accumulated upon a steep and rocky hillside during a northern winter, had been scattered upon a flat and sandy southern soil, the polluting material would have been easily and safely disposed of and no disaster would have occurred.

No more safe method of disposal for small amounts of night soil can be secured than placing it in small lots just under the surface of the ground in a level sandy loam. It is the privy system at its best.

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