

eventually into the canals which lead to the open plains. Thus the dam catches the flood waters and holds them for timely distribution through the tunnel, leading them on to lands that may be irrigated.

Then on the other side of the dam near the top is another great tunnel through the solid rock. This is meant as a spillway for the flood waters. When the freshets raise the water mark to a position anywhere near the top of the great dam the flood gate will be opened into this tunnel, which is 20ft. across and built with a fall of 40deg., and these waters will plunge through the mountains with such a roar as to shake the earth. This arrangement for the storage of the waters, the disposal of flood water and a leading to usefulness of that water that is to serve a purpose, completes the scheme in so far as the great dam is concerned. But all this is done for the sake of the result that will be brought about in the basin below.

The Big Horn Basin lies 60 miles further down. Here the sediment of the ages has washed down from the mountains

of these desert lands over the soils of other regions where rain is more plentiful and where the life is washed out of the soil by too much water.

The reclamation service has diverted small amounts of water into the basin before the completion of the reservoir. For the past three years the Government has thrown open for settlement 15,000 acres each season, and has provided a water supply sufficient for the irrigation of these tracts from the regular flow of the river. They have been absorbed by the land hungry from many States, and new homes and new towns have sprung up. Ralston and Garland were two such towns. The latest village to be born in the basin is Powell, now a rapidly growing infant city of one year. All are located along the Burlington Railroad, which traverses the basin.

It is in these new towns that thought is being taken of the future, and a town is being grown to order, a thing that has happened but a few times in the history of the world. Powell is the best example of

that the capital city ran its avenues named for the States.

The near-in lots are small and intended as business sites. Those a little further out are larger and meant for residences, with a yard and garden around them. Still further out the subdivisions are yet larger, amounting to five acres at a distance of a quarter of a mile. A hundred and sixty acres is set aside as a town site, and the lots are divided in this manner and sold at auction. The map of the future town is in this way absolutely controlled by the men who lay it out. But the Government goes still further and lays the surrounding country in a similar plan. Within a mile of the town site no individual is allowed a tract of more than forty acres. This means that to every square mile there will be not less than sixteen houses, a density of settlement that makes the community almost a village throughout. Outside the mile limit no settler may acquire more than eighty acres of land. There are few of the prosperous farming communities in the best of the eastern States that have a family on each eighty acres.

The irrigated country lends itself to the working out of an ideal manner of life. There the individual needs but a small amount of land to produce a competence. This means that the homes will be close together and that the bane of country life, its isolation, will be done away with. The neighbours will be sufficiently close together to maintain high-class, graded schools, to get rural free delivery, party telephones, to maintain good churches, social life, and libraries.

The new-planted town of Powell is just taking this form. Already it has the central school, a church, the nucleus of a business section. The Government refuses to sell additional land until a given radius is settled up to the prescribed density. The system of its subdivisions will dovetail into that of the near by towns which are similarly built. The roads meet exactly those from adjoining communities. Water is distributed to these people, and their existence depends on the operation of the laterals. These are in the hands of a farmers' organisation which draws all the members together in a community of interest. This has already developed along other practical lines. The farmers found, for instance, that if they would guarantee to produce a given number of earloads of potatoes, they could contract them to good advantage to big dealers. The organisation asked what farmers intended raising potatoes, and to what extent. The report furnished a basis for an agreement and sales were made in advance for good prices. The farmers in these communities are co-operating on the sale of all their products, a thing rare, but much needed in all such communities.

The completion of the Shoshone Dam means that this kind of farming may be extended to 150,000 acres of land as soon as there are settlers for it. This means homes for 30,000 productive people. The Government will extend its canals each year to a sufficient extent to take in as much land as there seems a demand for. Just now there are 300 farms going begging at Powell, because there are no takers on the ground. When these are settled up there will be an additional number put on the market. The land still belongs to the Government, having been withdrawn



GIANT CRANES AT WORK.

round about, and filled in the depression until it is as smooth as a floor, but slightly tilted. There are mountains on all sides of it protecting it from storms, and pushing their peaks into perpetual snow. The Yellowstone Park is but 76 miles to the west, and the town of Cody, near by, is one of the points from which tourists start the overland trip to that great wonder. Yet the region outside the far-famed park differs but little from it and offers wonders of its own that appal those who visit it for the first time.

Since the buffalo disappeared from the Big Horn Basin there has been little use made of it other than the pasturage of an occasional herd of cattle or sheep. It has slept perennially beneath the sun, and harboured its latent productiveness against the time when man might divert the waters of the Shoshone and irrigate it. The rainfall has not been sufficient to produce any manner of growth. Neither have the waters flowed over it to dissolve the salts of the soil that mean great fertility should plant life ever be brought to grow here. The latter fact accounts for the superiority

this taking thought. The reclamation service realises that when it opens up a new tract of intensely fertile land, many towns and cities will develop with a probability of sometime becoming greatly populated. It is, therefore, giving thought to the manner in which the ground plan of a city should be laid out. It appreciated the fact that Boston is labouring under the handicap of a maze of streets that are without system and that grew up from the footpaths of the early settlers.

There is the one American example of a city laid out with the idea in the beginning that it was to grow into considerable proportions—the city of Washington, which is the prettiest and most conveniently laid down municipality in the world. The new towns on the West are being laid out on an almost identical plan. As Washington began with the Capitol building, these begin with the public square containing the schoolhouse. From this, at right angles, extend streets in accordance with the cardinal points of the compass. In the wide right angles of these streets are run diagonal streets in the same way