

## Heavy Rains and City Streets

Damage done at Sixth and Jones Streets



Twenty-first near Castellar Street



West Entrance to Bancroft Street Viaduct



Scene at Thirtieth and Bedford Street

**BY A. M. EASTERLING.**

**W**HEN rainstorms wash the cornfields and freshen alfalfa into a brighter green, the farmer smiles and goes to sleep at night to dream pleasantly of bins full to bursting, of ramparts of harvested hay, of fat bank accounts and automobiles and things, but City Commissioner John J. Ryder of the department of street cleaning and maintenance talks into a telephone, and his foremen pull on their slickers and go out to round up work-weary men with picks and shovels and grading machines, for long before the clouds are cleared away the voice of traffic will be calling for help. Pavements will have been broken up, dirt streets washed away, culverts obliterated. An impatient populace will turn up its trousers and cuss the powers that be, say ill things about contractors and berate the neighbors who live on unpaved thoroughfares from which tons of dirt will have been washed down onto the paved ways, or, damming the streets, will have forced back water into basements, thereby causing damage and stirring up litigation.

Rainstorms and blizzards are the bane of the street cleaning department, for they mean that every available man must be marshalled at the danger points. There are "weak sections" of the city—streets and intersections where the storms delight to play havoc—and there is never a storm or any note that does not attack these weak sections, compelling the street commissioner to reinforce his gangs, and subsequently deplete the precious street cleaning fund, over which all street commissioners, for years on end, have wept with sadness. For this fund runs around \$5,000 a month through the year and a healthy storm will devour a month's apportionment. Hence it is that a street commissioner's opportunity to go back to his constituents with a fine financial record depends altogether upon the weather.

In this respect Commissioner Ryder has cause

to charge the weather man with gross injustice, for spring rainstorms have been so heavy and so frequent, and the consequent damage so great, that the street cleaning and repair fund has a great hole in it which fine weather alone will prevent becoming a deficit. One storm in the month of June, following several minor storms, damaged streets to the extent of \$3,500, and money is still being spent on repairs. Often streets must be closed to public travel and weeks will elapse before the storm damage is repaired.

Knowledge that certain streets will be damaged by every rainstorm has prompted the street commissioner and his general foreman, Dean Noyes, to adopt unique preventive plans. In the worst places tin barrels in which asphalt is packed are being sunk and filled with broken rock, brickbats and other heavy material to form bulkheads.

"Any number of dirt streets are washed out by the volume of water flowing over them during heavy rains," said Commissioner Ryder. "This year downpours in rapid succession practically ruined several streets where side ditches existed. As an experiment we flattened a few streets from curb line to curb line and we found that the plan worked all right. Streets that used to wash out more or less with every rain stood up in good shape, but in the worst places we had to use the tin barrels to form bulkheads at certain distances.

"A rainstorm will clean a paved street to a fair degree and will thoroughly clean every paved street on a hillside. At the same time it will wash down onto the paved streets all the loose earth and

debris from the higher, unpaved levels. Hence, we have to send gangs of men to certain intersections after every storm, because it is a cinch that large quantities of earth will have washed down.

"Our records of repairs to streets show that about 90 per cent of our repair fund has been going into the upkeep of asphalt streets. We are now repairing brick and stone pavements as rapidly as possible where bad conditions exist. On the older brick streets, where small bricks were put down, all we can do is to fill the worst ruts with an asphaltic mixture, and try to keep them passable for traffic until new pavement is ordered and laid.

"Ordinarily we have in this department from twenty-four to thirty red light lanterns. On the evening of Sunday, June 21, Mr. Noyes, after finishing a busy day, had caused to be placed 136 red light lanterns. To do this we had to get from hardware stores all the serviceable lanterns they had in stock, and we were compelled to hire extra help to place the lights in position.

"In some cases we were compelled to close the streets to public travel, either in whole or in part,

until we could correct the worst conditions existing at other points. Each rain was worse than the one preceding, covering a period of a week or ten days, and as a result our daily expense mounted very perceptibly.

"I go on the theory that this department should be conducted on the same lines as any other business, viz., to do the necessary work in the shortest possible time at the smallest possible expense. At times, necessarily, the daily, weekly or monthly expense rolls increase quite materially. At other times we are able to lay off men and teams and thus equalize expense."

Not all the expense of a heavy rainstorm comes out of the street commissioner's funds, for the manner in which streets have been graded have been the direct cause of a great deal of storm damage, lawsuits, judgments, compromises and settlements. Because streets must conform to a certain grade, sometimes high above, sometimes far below the houses on either side of the street, the damage by storms is considerably augmented.

Scores of suits have been handled by the city

legal department and hundreds of dollars have been paid to property owners whose houses have been flooded or the foundations of the houses undermined by reason of the manner in which the streets are graded. While the city attorneys do not recognize the general right of property owners to damages because of the havoc the storm plays with their houses, the suits are generally settled on compromise payments. Thus the street grading problem does not end with the appraisers' award of damages because of high or low grades, but presents itself anew after every storm.

General Foreman Noyes, who, besides being a foreman, is somewhat of a photographer, has taken hundreds of snapshots and time exposures of the damage to streets by rainstorms. This collection he keeps in the street commissioner's office, where it is known as the rogues' gallery of the storm gods. Strange pranks of the storms are shown in these pictures, pavements crumbled and piled into high mounds, street car tracks spanning chasms where once was sound asphalt and curiously serrated dirt streets, over which no vehicle could pass.

Sometimes street car tracks for blocks are buried under two or three feet of mud. Once in a while a motorman looks at this mud and pulls the throttle. Then Mr. Noyes adds another photograph to his gallery, the picture of a street car with its front end covered in mud and patient street cleaners shoveling a path for it. A street car can plow through snowdrifts, if the snow is dry and fluffy but mud is never fluffy nor dry, and a very thin layer is sufficient to tie up traffic completely.