112 ANNUAL REPORT ALASKA ROAD COMMISSION.

| $\begin{aligned} & \text { Sub- } \\ & \text { Project } \\ & \text { No. } \end{aligned}$ | Name of Route | Wagon Road | Sled <br> Road | Trail | Total Miles |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51** | Talkeetna-Cache Creek | 22 | 20 |  | 42 |
| 55******* | Kenai-Russian River ---------- - - - - - - - |  | 60 |  | 60 |
| $7{ }^{75}$ | Anchorage-Eagle River .------------- | 131/2 |  |  | $131 / 2$ |
| 76 | Cantwell-Valdez Creek ---------...- |  | 55 |  |  |
| 79 | Seward Warchouse ........-----....... |  | 55 |  | 55 |
| 83 90 C |  |  |  | 45 | 45 |
| 930 | Shelter Cabins ---- |  |  |  |  |
| 94 | Chudiak-Abberts ----................... |  |  |  |  |
| 95 | Kanatak-Becharof Lake ...- | 8 |  | 5 | 5 |
| 96 | Chickatoon-King River ------ - - - - - - - |  | 61/2 |  | 61/2 |
|  | als | .1347/2 | 1471/2 | $\stackrel{292}{ }$ | 574 |

, Also Project.

## SUMMARY. OF EXPENDITURES

| Sub-Project Number | Federal | Territorial | Construction | Maintenance | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }_{20}^{20 \mathrm{~B}}$ | - 800.00 | ...----.....- | ...-.-...---... | \$ 800.00 | \$ 800.00 |
| ${ }_{35}^{20 \mathrm{H}}$ | 8,037.35 | $\cdots$ | 6,037.35 |  |  |
| $35 \mathrm{C}^{\text {* }}$ | 8, 141.51 |  | 6,037.35 | 2,000.00 | 8,037.35 |
| 351 | 10,045.19 | - .-.-...-- | 6,546.19 | 3,500.00 | $10,046.19$ |
| ${ }^{355 \mathrm{E}}$ | $6,834.43$ $7,985.99$ |  |  | 6,834.43 | 6,834.43 |
| 3514* | 1,845.60 | 500.00 | 3,495.9 | $4,500.00$ 2345.60 | 7,995.99 |
| 355** | 2,604.54 | 1,000.00 | 1,500.00 | 2,104.64 | $2,345.60$ $3,604.54$ |
| ${ }_{350}{ }^{\text {35* }}$ | 513.35 | 500.00 | --.-.-.-.-.-- | 1,013.35 | 1,013.35 |
| 46 D | 4,261.49 |  |  | ${ }_{960.00}^{210.09}$ | 210.60 |
| 48 |  | -- | 3,301.49 | 960.00 | 4,261.49 |
| 51** | 21,304.67 | 11,408.45 | $22,713.12$ | 10,000.00 | 32,713.12 |
| $75^{*}$ | 13,664.71 | ----- | $4,698.71$ $7,645.48$ | 560.00 $6,000.00$ | 5.258 .71 |
| 75 D | 366.24 |  | 7,645.48 | $6,000.00$ 366.24 | $13,645.48$ 866.24 |
| 76 |  | --7......... | $\ldots$ |  |  |
| 89 | 76.20 597.76 | $\cdots$ |  | 76.20 | 76.20 |
| ${ }_{90}^{80}$ | 597.76 |  | 597.76 |  | 597.76 |
| 93 94 | 2,857.40 | 750.00 | 750.00 $1,957.40$ | 900.00 | 750.00 2.857 .40 |
| 94 |  |  |  |  | 2,857.40 |
| 98 96 | 19,914.49 |  | 19,000.00 | 914.49 | 19,914.49 |
| 95 | 822.00 | - | 800.00 | 22.00 | 822.00 |
| Totals (*)-Also | $\begin{aligned} & 108,133.40 \\ & \text { rritorial } \end{aligned}$ | $\$ 14,158.45$ <br> ject. | $\overline{\$ 79,043.49}$ | \$43,248.36 | \$122,291.85 |

ROU
ROUTE 20B-SUSITNA-RAINY PASS................. (127 MILES TRAIL)
This is a part of the old Rainy Pass mail trail to the Kuskokwim district between the mouth of the Yentna River and the divide.

A contract was let for cutting down heary grades near Happy River Roadhouse; this work was completed during the summer of 1922 but paid for this year.

Though no work is contemplated in the near future on this trail, on account of the mail now being routed via Kobi, it will not be entirely abandoned as there are good possibilities of mining developments.

Etpenditure: $\$ 800.00$.
ROUTE 20 H -NANCY-SUSITNA
This trail connects the railroad at Nancy, Mile 181, with Susitna Station on the Susitna River at the mouth of the Yentna River


as the first link of the Rainy Pass trail; constructed since the completion of the railroad in preference to the route from Knik.

This route is in good condition and no work is planned in the immediate future.

Expenditure: None.
ROUTE 35A-ARCHANGEL EXTENSION......... (51/2 MILES WAGON ROAD)
This road begins at the $11 / 2$ mile point on the Willow Creek Extension, Route 35D; traveling the high bench of the Little $\mathrm{Su}-$ sitna River, it turns up Archangel Creek to the vicinity of several small quartz mines of the Willow Creek mining district.

The principal items of work accomplished were:
$24-5$ miles of new road graded.
3 miles graveled.
13 metal culverts installed.
2,640 lineal feet ditching.
A further extension of this road for a distance of $11 / 2$ miles is contemplated.

Expenditure: $\$ 8,037.35$.
ROUTE 35C-PALMER-MATANUSKA RIVER. $\qquad$ (11/2 MILES

## WAGON ROAD)

This road leads from Palmer Station on tie Matanuska branch of the railroad, follows the railroad $1 / 4$ mile, turns at right angles crossing the track and continues on to the Matanuska River.

A tramway of $3 / 4$-inch cable and a cage were constructed over the Matanuska River on this route to replace the bridge dismantled last season. 100 feet of corduroy were placeed.

Traffic over this road is very light and no further work is contemplated at this time.

Expenditure: \$141.51.
ROUTE 35D-WILLOW CREEK EXTENSION. $\qquad$ (11 MILES WAGON ROAD)
This road climbs the hill from the terminus of the Wasilla-Fishhook road, Route 35E, turns up Fishhook Creek, a fork of the Little Susitna, and crosses the divide into Willow Creek five milles out. It then follows the valley of Willow Creek to point of the ridge between Willow and Craggy Creeks, thence up Craggy Creek to the Gold Bullion Mine.

Work was accomplished during the past season as follows:
2.7 miles of grading.
0.6 miles of graveling.
1.1 miles of ditching.

21 metal cuiverts placed.

Two native timber bridges with pole decks of 12 and 14 foot spans each were built.
This road is now in good condition.

$$
\text { Expenditure: } \$ 10,046.19
$$

## ROUTE 35E-WASILLA-FISHHOOK.... (16 MILES WAGON ROAD)

This is one of the nost important railroad feeders, leading from Wasilla, Mile 160 on the Alaska Railroad, to Fishhook Inn where it connects with the roads to Willow and Archangel Creeks in the Willow Creek mining district. 2,000 tons annually are hauled over this road. With the increasing tonnage and resulting increase in size and weight of motor trucks used, an endeavor is being made to gravel a part of the road each year.

Work this season consisted in repairing gravel surface and surfacing 3.5 miles. Brush was cut from sides of road for four miles. Several sharp turns necessitating some rock work were cut down in the Little Susitna Canyon. This road is now in good condition except for additional gravel surfacing.

Expenditure: $\$ 6,834.43$.
ROUTE 35 F -WASILLA-KNIK. $\qquad$ (15 MILES WAGON ROAD)
This is a portion of the road which served the Willow Creek mines before the completion of the railroad, all freight at that time being landed at Knik at the head of Knik Arm. The section which it traverses is gradually being settled and, with the fine agricultural land which extends to Knik and on down Knik Arm to Anchorage being already surveyed, it is planned to eventually continue the road to a point opposite Anchorage, thus opening the farm land as well as a large quantity of good birch timber.

Work this season resulted in bringing up to standard 3 miles of road which formerly was merely a trail through the woods. The road is now completed seven miles out from Wasilla. The remaining 8 miles of this route is in poor condition.

The items of work accomplished were:

|  |  |
| :---: | :---: |
|  |  |
|  |  |
|  |  |

## Expenditure: \$7,995.99.

ROUTE 35H-WASILLA-FINGER LAKE (12 MILES WAGON ROAD)
This is a 24 -foot graded earth road connecting Wasilla, Mile 160 Alaska Railroad, with Palmer, at Mile 6 on the Matanuska branch of the railroad, passing through a rich agricultural district, It crosses, at right angles, the Matanuska Trunk road, Route 35K, at Forest Hall, a congregating center for farmers of the entire community.

## ANNULAL REPORT ALASKA ROAD COMMISSION. 115

This season the entire road was regraded, 1.5 miles gravel surfaced, 2 timber culverts placed and 600 feet of new road built to avoid sharp turns. This road is now in good condition for light traffic.

## Expenditure:

$$
\begin{aligned}
& \text { Alaska Road Commission ............................................. } \$ 1,845.60 \\
& \text { Territory of Alaska } \\
& 1,845.60 \\
& \text { Total } \\
& \$ 2,345.60
\end{aligned}
$$

ROUTE 35J-WASILLA-MATANUSKA (10 MILES WAGON ROAD)
This road was formerly a railroad construction road and practically parallels the track between Matanuska and Wasilla. It has been maintained at a low standard by this board and the Territory for the use of homesteaders.

Work this season consisted of general maintenance including 2080 feet of gravel surfacing and the construction of one 46 -foot stringer bridge. The road is now in fair condition but as traffic is developed this road will be brought up to standard.

Fxnenditure:

> Alaska Road Commission. .\$2,604.54
> Territory of Alaska 1,000.00
> Total

## ROUTE $35 K$-MATANUSKA TRUNK ROAD....... (8 MILES WAGON ROAD)

This is an important farm road in the Wasilla-Matanuska section, serving the Government Experimental Station and numerous farmers: cutting the Wasilla-Finger Lake-Palmer road at Forest Hall, and terminating at its junction with the Mile $261 / 2$-Palmer road midway between Palmer and the Wasilla-Fishhook Road.

Work consisting of regrading, graceling soft spots, dragging and building one 16 -foot stringer bridge, was accomplished this past season.

This road is in good condition for the present amount of traffic. Expenditure:

|  |  |
| :---: | :---: |
|  |  |

Total.
. $\$ 1,013.35$
ROUTE 350-FISHHOOK-GOLDMINT........ ( 6 MILES SLED ROAD)
This route connects with the Wasilla-Fishhook road at Fishhook Inn and leads to the Goldmint mine and other prospects on the upper Little Susitna River.

## ANNUAL REPORT ALASKA ROAD COMMISSION.

This season 5 miles of the road was located and one stringer bridge 50 feet long of native timber was constructed.

Condition poor.
Expenditure: $\$ 210.00$.
ROUTE 46D-MCKINLEY PARKTRAIL.... (2 MILES WAGON ROAD, 85 MILES TRAIL)
This trail leaves McKinley Park Station, Mile 348 Alaska Railroad, passing through the heart of McKinley National Park which is teeming with wild life, and on into the Kantishna mining district. The trail is used by trappers, prospectors, miners and tourists.

The past season actual construction work was inaugurated on this route. A very good showing was made with the small allotment availā̄le. Two miles of road were built, including the following items of work:

Grading, 12 to 16 feet wide ....................-........................ 1.9 miles

Bridges, native timber .................................1-126-foot trestle

The location was extended 3 miles beyond this season's con
tif mile of this season's work was on a steep hill, a part of which was in solid rock. This section included some of the heaviest work in the first 15 miles of the route.

It is the present plan to prosecute lhis work on a much larger scale next season.

A portion of the money expended this season was contributed by a private party through the Park Superintendent.

Expenditure:

| Alaska Road | Commission |  | ,261.49 |
| :---: | :---: | :---: | :---: |
| Contribated |  |  | 700.25 |

Total
ROUTE 48-ILIAMNA BAY-ILIAMNA LAKE.... (10 MILES WAGON ROAD, 2 MILES TRAIL)
This route serves as a pontage, in connection with lliamna Lake, from Cook Inlet to Bristol Bay, supplying lliamna Village on the lake.

Nothing has been done on this road for two years, and it is badly in need of repair.

Expenditure: None.
ROUTE 51-TALKEETNA-CACHE CREEK -... 22 MILES WAGON ROAD, 20 MILES SLED ROAD)
This route connects the railroad at Talkeetna, Mile 227, with the placer mines and quartz prospects of Cache Creek mining dis-
trict, which before the assistance of railroad and wagon road was kept alive at heavy cost. The freight rates are being cut as the wagon road gradually nears completion.

The wagon road was extended six miles as a result of the past season's work. The following are items of work accomplished with unit costs. These costs are characteristic of new construction through this section of the territory.


Completed portion of road in good condition.
Expenditure:


Total. . $\$ 32.713 .12$

ROUTE 55-KENAI-RUSSIAN RIVER........ ( 60 MILES SLED ROAD)
This is the west end of the winter trail between the town of Kenai on Cook Inlet and Moose Pass Station, Mile 29 Alaska Railroad, the Department of Agriculture having assumed the maintenance of the east end beyond Russian River which is in the Forest Reserve. The trail is used for mail and light freight in winter only.

No work had been done on this trail for a number of years. A reconnaissance was made in the spring of 1923 as a result of which this trail was rehabilitated. Portions of the trail were relocated, avoiding lakes where possible. In all, 18 miles of new trail were cut, average width 9 feet; 27 miles of old trail were widened an average of 5 feet; two shelter cabins were erected at Miles 19 and 37 from Kenai, and one old cabin at Mile 46 was repaired for use as shelter.

Federal Expenditure: (exclusive of cabins) \$5,258.71.

## 118 ANNUAL REPORT ALASKA ROAD COMMISSION.

## ROUTE 75-ANCHORAGEEAGLE RIVER-( $131 / 2$ MILES WAGON ROAD)

Starting at a point near the Alaska Railroad headquarters, this road parallels Knik Arm a mile back on the bench land for $51 / 2$ miles, then turns east for $41 / 2$ miles crossing the railroad at its Mile 123 and Mile 10 on the wagon road. It then turns south for $1 \frac{1}{2}$ miles and thence west for one mile, connecting with the Whit ney road, being the beginning of a proposed loop around Anchorage to serve farmers, dairymen and woodhaulers.

The main items of work were:

| Clearing, $41 / 2$ miles, 40 feet wide................... 22 acresGrubbing, $41 / 2$ miles, 28 feet wide......................... 45.3 acresGrading, $41 / 2$ miles, 28 feet wide................. $41 / 2$ miles |
| :---: |
|  |  |
|  |  |
|  |  |

Graveling ................................................................. 2,175 cu. yds.
This is a cooperative project partly supported by Territorial divisional funds. Road is in fair condition jut the graveling will be continued until a good surface is obtained.

Expenditure: $\$ 13,645.48$.

## ROUTE 75D-ANCHORAGE WAREHOUSE

The new combination warehouse, office and garage, size $30 \times 56$, was painted, lights installed and other minor improvements made. Now in good condition.

Expenditure: \$366.24.
ROUTE 76-CANTWELL-VALDEZ CREEK (65 MILES SLED ROAD)
This route connects placer mines on Valdez Creek, a tributary of the upper Susitna River, with the Alaska Railroad at Mile 320. 300 tons each winter are freighted over this sled road.

No work was done on this route during past ssasou.
Expenditure: None.

## ROUTE 79—SEWARD WAREHOUSE.

This frame building, size $28 \times 80$, at the ocean terminal of the Alaska Railroad, used for handling and storing supplies, is in good condition.

## Expenditure: $\$ 76.20$

## ROUTE 83-TALKEETNA-IRON CREEK.

$\qquad$ (45 MILES TRAIL)
This proposed trail extends from the town of Tallveetna up the Talkeetna River to the prospects on Iron Creek.

An investigation of the route was made and plans formulated for the construction of a bridge over Iron Creek. Part of the material for this bridge has been purchased.

Expenditure: $\$ 597.76$.

ANNUAL REPORT ALASKA ROAD COMMISSION. 119

## ROUTE 93-CHULITNA TRAIL

$\qquad$ (3 MILES TRAIL)

This trail extends from Honolulu station, Mile 389 on the Alaska Railroad, $21 / 2$ miles to the Chulitna River over which a 360 -foot suspension bridge, 6 feet wide, capable of carrying a pack horse, was constructed in the spring of 1923. One-half mile of trail leads from the bridge. This gives access to a large area, accommodating miners and prospectors.

Work this saason consisted in clearing up bridge site to eliminate danger from forest fires; tightering turnbuckles on bridge and cutting $11 / 2$ miles of trail. Expenditure includes vouchers covering payment for work performed last year.

## Expenditure: \$2,857.40.

ROUTE 94-KODIAK-ABBERT'S ROAD. ... (5 MILES TRAIL)

This trail leads from the town of Kodiak on Kodiak Island to Abbert's Ranch, serving several ranches in that vicinity. Prior to the construction of this trail, all travel came to Kodiak by boat. The passage was impassable in stormy weather.

A wagon road was located and sufficient work aecomplished last year to make a pack trail over this route. Further work is contemplated pending cooperation of the citizens of this District.

Expenditure: None.

## ROUTE 95-KANATAK-BECHAROF LAKE....... (8 MILES WAGON ROAD)

Progress in oil drilling resulted in construction of a road from the town of Kanatak at Portage Bay, Alaska Peninsula, to Becharof Lake, there connecting with road constructed by oil companies and leading to drilling operations on Pearl Creek dome, a total distance of $191 / 2$ miles. This work does away with the 25 per cent grades which had been used over Kanatak Hill where three tons with a 60 horsepower tractor was an average load.

Work the past season consisted of construction of new portions of road, eliminating steep grades and getting on better location. The road built by the Oil Companies was used where practicable. The items of work accomplished were:


This road is now in fair condition for traffic passing over it.
The Standard and Associated Oil Companies expended on the 191/2 miles between Kanatak and Pearl Creek Dome a total of $\$ 39,123.58$.

## 120 ANINUAL REPORT ALASKA ROAD COMMLSSION.

Expenditure:
Oil Companies
Alaska Road Commission

Total
ROUTE 96-CHICKALOON-KING RIVER.- ( $61 / 2$ MILES SLED ROAD)
This is a new road opened in the fall from the end of the Matanuska branch of the Alaska Railrcad to promising coal properties from which several hundred tons of coking coal were shipped during the winter.

Work commenced in September and was completed in November, a contract being let to clear road ten feet wide and do all necessary grading. No further work is contemplated until more positive developments are accomplished on the coal properties. Expenditure: $\$ 822.00$.

## ROUTE 9OC—SHELTER CABINS

Tw: $14 \times 16 \log$ cabins with door, two windowa, corrugated iron roof and stove were built on the Kenai-Russian River trail, Route 55, at Miles 19 and 37 from Kenai, and one old cabin at Mile 46 on this route was repaired.

Expenditure: Territory of Alaska $\qquad$ $\$ 750.00$

DISTRIBUTION OF EXPENDITURES

|  |  |  | Miles* | Unit Cost |
| :---: | :---: | :---: | :---: | :---: |
| Type |  | Expenditures | Dollars per Mile |  |

(*)-Includes only routes maintained during fiscal year.
Non-cooperative Territorial projects not included.
TERRITORIAL PROJECTS.

Territorial Road Commission-Third Division
Anton Eide, Chairman and Secretary.
Gust F. Johnson, Member.
R. V. Walkins, Member


| Wagon | Rod | Trail | Total |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| $81 / 2$ |  |  | $881 / 2$ |
| ${ }_{2}^{3}$ |  |  |  |
| $61 / 2$ |  |  | ${ }_{61 / 2}$ |
| 5 | 30 |  | 30 |

ANNUAL REPORT ALASKA ROAD COMMISSION. 121

(*)-Cooperative Projects with A. R. C.
ROUTE 10B-SEWARD-NASH. $\qquad$ ( $2^{1} / 2$ MILES WAGON ROAD)

From Mile 3 Seward-Kenai Lake route, this road runs in a soutlcasterly direction heading toward the bay and radio station, passing through rich agricultural and timber lands.

This inf das gravel surfaced dur:rig pasi season for a distance of twe miles. The bridge over Salmon River washed out by floods in se fall of 1923 was rebuilt by contract.

It is contemplated widening the gravel surface over the entire road.

## Expenditure: Territory of Alaska (Divisional).... $\$ 4,814.20$

ROUTE 35B—MILE 261/2-FALMER........ ( $81 / 2$ MILES WAGON ROAD)
So called because it leaves the old Knik Road $261 / 2$ miles from Knik or $111 / 2$ miles from Wasilla on the Wasilla-Fishhook road, running southeast to Palmer Station on the Matanusha branch of the Alaska Railroad, opening a. large area of promising agricultural land.

The road had been previously graded. This season's operations consisted of cutting down grades, graveling soft spots and building one pole decked stringer bridge 30 feet long and 14 feet wide, over Wasilla Creek.

Present condition good.

## Expenditure: Territory of Alaska (Divisional).... $\$ 867.08$

ROUTE 35G-PALMER-SPRINGER -..... (3 MILES WAGON ROAD)
This route connects several ranchers along Matanuska River with Palmer, Mile 6 Matanuska branch of the Alaska Railroad. For the amount of traffic passing over it, this road is in fair condition.

Expenditure: None.
ROUTE 351-MOOSE-PALMER. $\qquad$ (2 MILES WAGON ROAD)
This route is the continuation of an old railroad construction road along the Matanuska branch line. It is used by a few farmers.

Expenditure: None.
ROUTE 35L—PALMER-MATANUSKA...-( $61 / 2$ MILES WAGON ROAD) Built for railroad construction purposes this road has since been maintained with Territorial funds. It passes through an im.

## 122 ANNUAL REPORT ALIASKKA ROAD COMMMISSION

portant farming section along the Matanuska branch of the railroad between Palmer and Matanuska.

Road in poor condition.
Expenditure: None.
ROUTE 35 M —KNIK-CORDUROY. $\qquad$ ( $3 / 4$ MILE CORDUROY)
This corduroy, 10 feet wide, was placed on the route of the old Rainy Pass trail, one mile from Knik, to accommodate ranchers for summers use. The work was done several years ago and is used very little.

> Expenditure: None.

ROUTE 35N-HOUSTON-WILLOW CREEK... ROAD)
From Mile 175, Alaska Railroad, this serves three months of the year as a means for transporting winter freight to the mines. on Willow Creek.

Road in good condition at this time. Expenditure: None.
ROUTE 35P-MOOSE CREEK-BAXTER... (5 MILES WAGON ROAD)
This route leads from Mile 13, Matanuska branch of the Alaska Railroad up Moose Creek to coal mines and quartz prospects and has served as a means of hauling coal to the railroad until the Moose Creek spur was completed.

Condition fair.
Expenditure: None.
ROUTE 35Q-EDLUND ROAD $\qquad$ (1/2 MILE WAGON ROAD)
This new road connects farmers on the south side of the rail road at Mile 157 with the Wasilla Matanuska road at Mile 3, giving them an outlet to the railroad on an easy grade.

Work consisted of building a new graded road 2,200 feet long with one 12 -foot stringer bridge of native timber.

Expenditure: Territory of Alaska (Divisional).... \$994.29.
ROUTE 55-KENAI-RUSSIAN RIVER...... ( 60 MILES SLED ROAD)
Already described above under Federal Projects.
Expenditure: Territory of Alaska (Divisional).... $\$ 359.25$.
ROUTE 75-ANCHORAGE-EAGLE RIVER ( $131 / 2$ MILES WAGON
ROAD) ROAD)
Already described above under Federal Projects. Expenditure: Territory of Alaska (Divisional).... $\$ 564.57$.

## ROUTE 75A—ANCHORAGE-LAKE SPENARD.... (4 MILES WAGON ROAD)

 ROAD)This road
our miles southwest the town of Anchorage with Lake Spenard four miles southwest, serving six farms, but used principally as a
pleasure drive both winter and

ANNUAL REPORT ALASKA ROAD COMMISSION. 12*
This season the entire road was widened to an average width of 28 feet. Two small plank decked bridges of 10 and 22 feet spans respectively were built. The road was dragged twice and chuck holes filled.

Road at present is in good condition.
Expenditure: Territory of Alaska (Divisional) .... $\$ 2,552.53$.
ROUTE 75B-WHITNEY ROAD. $\qquad$ (6 MILES WAGON ROAD)
From the Alaska Railroad yards at Anchorage this road follows the railroad on the south side for three miles; crossing at that point it parallels the north side for two miles and again crosses running due east for one mile where it connects with the Eagle River road. The route was laid out as an artery of supply during railroad construction days.

The last mile between the railroad and the Eagle River road, which was only a narrow wagon road, was cleared 40 feet wide and graded 30 feet wide. A small amount of gravel spread and repairing of three small culverts constituted the work done on the first five miles.

Road is in fair condition.
Expenditure: Territory of Alaska (Divisional) ... $\$ 1,213.15$.

## ROUTE 75C-CHESTER CREEK BOAT LANDING. <br> $\qquad$ (1) MILE

 WAGON ROAD)This new road runs from the southwest corner of the Anchorage town site to water level on Knik Arm near the mouth of Chester Creek where small boats dock. The road was cleared, grubbed and graded 18 feet wide.

Now in fair condition.
Expenditure: Territory of Alaska (Divisional) .... $\$ 500.00$.
ROUTE 93A-BULL RIVER... $\qquad$ . ( $41 / 2$ MILES TRAIL)
This is a new trail leading from Coloradn station, Mile 297 on the Alaska Railroad to Bull River. A bridge capable of carrying park animals, consisting of one center span supported by two bents Which rest on the canyon walls was built this season. Total length of bridge 100 feet. Four and one-half miles of trail were built from Colcrado station to the bridge, including 750 feet of side hill grading. This trail and bridge were built to accommodate prospectors and trappers.

Expenditure: Territory of Alaska (Divisional).... $\$ 1,598.81$.
DISTRIBUTION OF EXPENDITURES

| Type Miles* | Expenditures | Unit Cost <br> Dollars per Mile |
| :---: | :---: | :---: |
| Wapon Road .................................... 36 | \$11,505.82 | \$319.61 |
| Trail | 1,598.81 | 355.29 |
|  | 359.25 | 5.99 |
| Totals ...................................1001/2 | \$13,463.88 | \$133.97 |

## KUSKOKWIM DISTRICT.

W. W. Lukens, Asst. Supt., July 1, 1923 to Mar. 1, 1924

Ross J. Kinney, Asst. Supt., April 15 to June 3n, 1924
This district embraces that portion of the territory west of the 154th meridian bounded by the Yukon River on the north and west and the Alaska Range on the south and east. Within this area are the mining camps of Iditarod, Ruby and the placer operations around Tokotna and Ophir.

Prior to the post war period of administration, very little was known or performed in this important portion of the territory, except at Ruby. Reconnaissances were extended winter aind summer by the Engineer Officer and his assistonts in all directions especially aiming at bringing this traffic to the Yukon River or the Government Railroad. Through routes were opened from Ruby to McGrath and from McGrath to Iditarod. This district is of such wide extent that a great deal of the work has consisted, due to the vast mileage included, of rehabilitation of summer and winter trails.

In addition to this, important summer road construction has been performed between Ophir and the new mining camp of Tokotna and also around Iditarod. This district, of all others, has revived most strongly.

Since the war period, a very important contribution to this revival has been the new and excellent overland trail from the Government Railroad at Kobi along the north slope of the Alaska Range to McGrath, Iditarod and Bethel. This new and excellent trail has proven to be the main winter artery for this entire district.

This district was organized during 1921 and an assistant superintendent placed in charge. Due to the lode mining developments at Nixons Forks, northeast of McGrath, and to the successsful dredging operations southwest of McGrath, prospecting in this hitherto inaccessible region has been much stimulated. Members of the Board made reconnaissance trips throughout the lengths of the Yukon and Kuskokwim Rivers, crossing the portages from the Kantishna to the north fork via Lake Minchumina, from Ruby to Ophir via Long-Poorman-Cripple, from Ophir to Tokotna and from Kalchagamut to Russian Mission.

Many years ago, during the Iditarod stampede, the Board constructed the Rainy Pass Trail from Seward to Kaltag, with branches to Ruby and Iditarod. It has since maintained and extended the system of winter trails in this region as far south as Iditarod. Some

E.R.E. 5+37. 6

short roads were constructed around Iditarod and Flat, an excellent road was built from Ruby to Long Creek, and three years ago, construction of the Ophir-Tokotna Road, connecting the upper Innoko with the Tokotna River, was begun.

A start was made in 1921 in extending this system to Bethel, the ocean port at the head of the estuary of the Kuskokwim. Should this country continue to develop, as seems likely, the system will be extended, to Cape Newenham and across to the oil developments on the Alaska Peninsula. Work in Bethel sub-district. is supervised from the Juneau office.

Due to the working out of mines and diversion of travel to shorter or better routes, the following sub-projects have been abandoned:

| Route | Name | Whagon Road | Sled <br> Road | Tra | Total Miles |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 17 A | Lewis Landing-Dishkaket ....... |  |  | 108 | 108 |
| 17B | Nulato-Dishkaket .....------ |  |  | 90 | 90 |
| 20D |  |  |  | 66 | 66 |
| 33A | Otter Creek Towpath .-.-...----...- |  |  | 22 | 22 |
| 33B | Summit-Otter Creek .................... | 6 |  |  | ${ }^{6}$ |
| 34 | Iditarod-Dishkaket ................... |  | 30 | 68 | 98 |
| 64 | Cripple-Lewis Landing ---------- |  |  | 60 | 60 |
|  | Total | 6 | 30 | 414 | 450 |

There are 39 sub-projects remaining in this district, upon 21 of which no expenditure was made during this fiscal year.

| SUMMARY OF ROADS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { Route } \\ \text { No. } \end{gathered}$ | Name | Wlagon Road | Sled <br> 'Road | Trail | Total Miles |
| 20 C | Rainy Pass-Big River .-.-.-......... |  |  | 110 | 119 |
| 20DA | Tokotna-Ohpir .............................. |  | 19 |  | 19 |
| 20 DB |  |  |  | 55 | 矿 |
| 32 A | Tokotna-Flat - |  |  | 95 | 95 |
| 32 AN | Tokotna-Flat (Via Moore Creek) |  |  | 93 | 93 |
| 32 AB | Flat-Moore Creek (Summer) |  |  | 7 | $1{ }^{7}$ |
| ${ }_{32 \mathrm{AC}}{ }^{\text {a }}$ | Candle Creek-Tokotna ................ | - 8 |  | 12 | 12 |
| 32 C | Ophlr-Tditarod |  |  | 79 | 79 |
| 32 D | Flat-Crooked Creek (winter) |  |  | 62 | 62 |
| 32DD | Flat-Georgetown (summer) --- |  |  | 65 | 65 |
| $33 \mathrm{C} *$ | Flat Clty-Flat Creek ............. |  |  |  |  |
| $33 \mathrm{D} *$ | Head Flat Creek-Willow Creek. | $41 / 2$ |  |  | $41 / 2$ |
| ${ }_{33} 3 \mathrm{E}^{*}{ }^{\text {* }}$ | Willow Creek-Chicken Creek.....- | 3 |  |  |  |
| 33 G | Candle Landing-Candle Creek.... | - 9 |  |  | 9 |
| 34 A . | Flat-Anvik .......... |  |  | 80 | 80 |
| 34 B | Iditarod-Anvik (proposed) -......-- |  |  |  |  |
| \%8B | Poorman - Cripple .-..........-..........- |  |  | 47 | 47 |
| ${ }_{38 \mathrm{D}}{ }^{38}$ | Ophir-Cripple (winter) -.....-------- |  |  | 47 | 47 |
| ${ }_{38 \mathrm{~F}^{*}}^{38 \mathrm{~S}^{*}}$ |  | $231 / 2$ |  | 125 |  |
| 38 G | Tokotna-Tokotna Landing -..----- | 11/2 |  |  | 11/2 |
| 38 H | Flume Dredge Roxd ................ | $81 / 2$ |  |  | $81 / 2$ |
| 38 I | Ganes Creek-Yankee Creek - | 5 |  |  |  |
| 64 A | Cripple-Crpple Mt. (summer) |  |  | 12 | 12 |
| 64AA | Cripple - Cripple Mt. (winter) <br> (Proposed) |  |  |  |  |
| 80 A | McGrath-Tokotna (summer) .-. |  |  |  |  |
| 80 AA | McGrath-Tokotna (winter) ........ |  |  | 18 | 18 |
| 80 B | McGrath-Telida . |  |  | 94 | 94 |
| 80 C | MeGrath-Candle Creek ...........-- |  |  | 11 | 11 |
| 80 D | Nixon Fork-Nixon Mine .-......... |  |  | 37 | 37 |

126 ANNUAL REPORT ALASKA ROAD COMMISSION.

(*)-Also Territorial Projects
SUMMARY OF EXPENDITURES

| Sub-Project Number | Federal | Territorial | Construction | Maintenance | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 20 C | \$ 3,800.00 | -.....----...- | \$ 2,500.00 | \$ 1,300.00 | \$3,800.00 |
| 20 DE | 260.00 | $\ldots$ | $\cdots$ | 260.00 |  |
| 32 A | 1,650.04 | ---- | ----------- | 1,650.04 | 1,650.04 |
| 32 AA 32 AB |  | $\cdots$ |  |  |  |
| 32 AC | 1,033.20 |  | -...-......... |  |  |
| ${ }^{32 \mathrm{~B}}{ }^{*}$ | 12,706.97 | 900.00 | 5,000000 | 1,033.20 | 1,033.20 |
| 32 O | 764.50 | 100.00 |  | $8,606.97$ 864.50 | $13,606.97$ 864.50 |
| ${ }_{32 \mathrm{D}}^{32 \mathrm{D}}$ |  | $\cdots$ | -.-. |  | 86, 5 |
| $33 \mathrm{C}^{*}$ | 100.00 | ... | $\cdots$ |  |  |
| $33 \mathrm{D}^{*}$ |  | -............... | $\cdots$ | 100.00 | 100.00 |
| 33E** | -......... | .-......-- | ----3.-.... | - | $\cdots$ |
| ${ }_{33 \mathrm{G}}$ | .-......------ | $\cdots$ | $\cdots$ | -..----1.-. | ----------> |
| 34 A |  | - | $\cdots$ | -----1. | --.... |
| 34 B |  | ---------....- | $\ldots$ |  |  |
| ${ }_{38} 38 \mathrm{C}$ | 203.00 140.00 | .......---.-. |  | 203.00 | 203.00 |
| 38 D * | 15,977.40 | 6,000.00 | 18,577.40 | 140.00 $5.400,00$ | 140.00 |
| 385* |  |  | 18,6\% | 5,400,00 | 21,977.40 |
| ${ }_{38}{ }^{38 \mathrm{G}}$ | 8,274.68 | ---------- | 7,374.68 | 900.00 | 8,274.68 |
| 381 | ....... | --------- | $\cdots-$ |  | --------... |
| 64 A A | - | ---3---- | --........ | $\cdots$ | .-......... |
| 64AA |  | $\cdots$ | ---------> |  |  |
| 80 AA | 125.97 100.00 |  | ...-....-...... | 125.97 | 125.97 |
| 80 B | 6,229,71 | - -....... | 5,500.00 | 100.00 | 6. 100.60 |
| 80 C | 200.00 | ------ | $\bigcirc$ | 729.71 200.00 | $6,229.71$ 200.00 |
| 80 E | $\cdots$ |  | --7-1-7. | $\cdots$ | -.-....-.-...- |
| 80 F |  |  | $\cdots$ |  | ------......- |
| 80GG | 300.00 |  | --...------- | 300.90 | 300.00 |
| 90 D | ... | 472.00 | 472.00 | -------...... | 472.00 |
| Totals | \$51,865.47 | \$ 7,472.00 | \$37,424.08 | \$21,913.39 | \$59,337.47 | (*)-Also Territorial Frojects.

ROUTE 2OC-RAINY PASS-EIG RIVER $\qquad$ (110 MILES TRAIL)
This is a portion of the through route from the head of Cook Inlet to the Kuskokwim. It joins the MeGrath-Telida Trail 3 miles north of Big River. Since the completion of the new Kobi-McGrath trail, this route is little used. It affords an outlet for overland travel in summer, however, and will be maintained.

The expenditure shown is for work done during the season of 1922, vouchers for which were not taken into the account until this fiscal year.

Expenditure: $\$ 3,800.00$

ANNUAL REPORT ALASKA ROAD COMMISSION. 127
ROUTE 2ODA-TOKOTNA-OFHIR. $\qquad$ (19 MLLES SLED ROAD)
The winter sled road from Tokotna to Ophir is in good repair. From Tokotna it follows the wagon road th the summit of the divide, a distance of approximately 5 miles. Here the new winter sled road turns off and follows down the bed of Butte Greek, then down Independence Creek to the Yankee Creek Roadbouse on the Innoko River, a distance of about 9 miles. At this point it joins the old sled road again following down the Innoko Valley to Ophir. This sled road is in good repair.

Expenditure: None.
ROUTE 2ODB-OPHIR-DISHKAKET $\qquad$ ( 55 MILES TRAIL)
This is a winter mail trail serving the Tolstoi mining district. Freight landed at Dishkaket late in the season is also moved over this route into Ophir. During the past season three bridges were constructed. Two of 16 foot and one of 20 foot spans.

## Expenditure: *\$260.00.

ROUTE 32A-TOKOTNA-FLAT. $\qquad$ (95 MILES TRAIL)
This is a summer trail, connecting Tokotna with the Iditarod mining district by way of Flat. It follows the high ridges between these points.

During the past season windfalls were cleared out where needed and blazes renewed. Substantial tripods were erected along the barren ridge sections of the trail and provide a great aid to travelers in foggy weather. Further improvement of this trail is contemplated.

Expenditure: $\$ 1,650.04$.

## ROUTE 32AA-TOKOTNAFLAT (WINTER, VIA MOORE CREEK)

 (93 MILES TRAIL)This is a trail which was cut out to provide for the winter mail duxing the early days of the Iditarod-Flat mining camp. Afterwards, many small creeks were struck in the Innoko district and, due to better snow conditions, travel and mail were diverted by

- Way of Ophir. There is one hydraulic outfit on the upper part of Moore Creek near Flat. The portion of the trail from Flat to Moore Creek is most uscd. A shelter cabin was erected at the head of Bonanza Creek. This expenditure is shown under shelter cabin fund.

Expenditures: None.
ROUTE 32AB-FLAT-MOORE CREEK (SUMMER) _-.-....... (7 MILES TRAIL)
Upon leaving Flat for Moore Creek the summer travel passes over Route 32 A for a distance of approximately thirty-five miles.

At Fourth of July Creek cabin the Moore Creek trail turns out to the east and dropping down into the head of Moore Creek continues for a distance of seven miles to the present workings. The total distance from Flat City to Moore Creek is approximately forty-two miles.

## Expenditures: None.

ROUTE 32AC-CANDLE CREEK-TOKOTNA........ ( 12 MILES TRAIL)
This summer pack trail connects Tokotna with the dredge on Candle Creek.

During the past season all windfalls and brush were cleared from the trail. A number of soft places were filled with brush and corduroy and several sloughs bridged. A cable suspension foot bridge was erected over the Tatalina River of 100 foot span. A total of 296 feet of trestle for footbridge was constructed.

Expenditure: $\$ 1,033.20$.
ROUTE 32B-IDITAROD-FLAT $\qquad$ (8 MILES WAGON ROAD)

This road connects the Iditarod wireless station with Flat City. Iditarod is also the head of navigation on the Iditarod River. The summer wagon road is used for the winter sled and mail trail. Some trouble is encountered by drifts at the summit of a low divide over which the trail and summer road passes.

During the past season light repairs were made to this road consisting of redecking culverts and surfacing soft places in the road with brocken rock and gravel.

The principal work on this route was the erection of an 80 -foot Howe truss span with 105 feet of trestle approackes. The timber for this structure was all reclaimed from an old dredge which was purchased near the bridge site and dismantled. The timber was of fir and sound. This old dredge was purchased for $\$ 600$, effecting a considerable saving in cost of material for this bridge. This road is not in good condition and further repair and surfacing is contemplated.

Expenditures:

$$
\begin{aligned}
& \text { Alaska Road Commission } \\
& \text {. } \$ 12,706.97 \\
& \text { Territory of Alaska. } \\
& 900.00
\end{aligned}
$$

## Total

$\qquad$
ROUTE 32C-OPHIR-IDITAROD $\qquad$ (79 MILES TRAIL)
This is the winter mail trail between the Innoko and Iditarod mining districts, and serves practically all of the winter travel between these districts, being located through a section of lighter snow fall than the Tokotna-Flat route and affording better grades.

During the past season a new location of 6 miles was made

ANNUAL REPORT ALASKA ROAD COMMISSION. 129
and constructed eliminating the steep climb over Beaver Hill near Ophir. Four bridges were built of spans from 23 to 28 feet, total length of bridges constructed being 100 feet. . One mile of new trail was cut across the California Creek Valley.

This trail is now in good condition.
Expenditures:

$$
\begin{aligned}
& \text { Alaska Road Commission. } \\
& \text { Territory of Alaska } \\
& 100.00
\end{aligned}
$$

Total $\qquad$ $\$ 864.50$

ROUTE 32D-FLAT-CROOKED CREEK (WINTER)........ (62 MILES TRAIL)
This trail serves as a means of communication between the Iditarod district and the Lower Kuskokwim Valley.

Over this route passes all the winter mail for the Lower Kuskokwim.

This trail was cut through in the fall of 1922 and shelter established. It is now in fair condition but further improvement is planned.

Expenditures: None.
ROUTE 32DD—FLAT-GEORGETOWN (SUMMER)........ (65 MILES TRAIL)
The best summer route from Flat to the Kuskokwim follows the ridge across much open and barren country. One shelter cabin and bridges across Bonanza and Donlon Creeks are required. Bonanza Creek will require a 100 -foot cable suspension span. Estimated cost of proposed work is $\$ 5,000.00$.

## Expenditures: None.

ROUTE 33C-FLAT CITY-FLAT CREEK (. 5 MULES WAGON ROAD)
This road extends from Flat City to Flait Creek serving the miners on the latter creek and connects with Route 33 D and the proposed route to Chicken Creek.

Minor repairs were made to this road during the past season.
Expenditure: $\$ 100.00$.

## ROUTE 33D-HEAD FLAT CREEK.WILLOW CREEK... (41/2 MILES

 WAGON ROAD)This wagon road is an extension of Route 33 C to the mining operations on Willow Creek. It also forms a portion of the winter trail from Flat to Crooked Creek. This road is in poor condition and repairs are planned.

Expenditure: None.

130 ANNUAL REPORT ALASKA ROAD COMMISSION.

## ROUTE 33E-WILLOW CREEK-CHICKEN CREEK............ (3 MILES WAGON ROAD)

This road serves operators on Chicken Creek and branches from the Flat Creek-Willow Creek Road. A high divide is crossed and considerable improvement is required.
Expenditure: None.

ROUTE 33 F-FLAT-OTTER DISCOVERY $\qquad$ (3 MILES WAGON ROAD)
This road from Flat City serves the miners on Otter Creek near Discovery and the two dredges operating below Discovery. It replaces the old road, Route 33 H , Summit-Otter Creck, which is now abandoned.

## Expenditure: None.

## ROUTE 33G-CANDLE LANDING-CANDLE CREEK........ (9 MILES WAGON ROAD)

This summer wagon road constructed by the operators in the district extends from the river steamboat landing on the Kuskokwim River across the Kuskokwim Valley and over a low rolling mountain into the Candle Creek district. The grade is approximately 8 per cent. The Roadway is very narrow and has not been constructed with a view to permanency. The Kuskokwim Dredging Company hauls from 125 to 175 tons over this road each season. To improve to standard would cost approximately $\$ 29,000.00$.

Expenditures: None.
ROUTE 34A—FLAT-ANVIK.. $\qquad$ (80 MILES TRAIL)
This winter trail extends west from Flat to Holy Cross and thence up the Yukon River to Anvik. It is the winter mail route at present.

> Expenditures: None.

## ROUTE 34B-IDITAROD-ANVIK... ... (75 MILES PROPOSED TRAIL)

This route would connect Iditarod and Anvik by way of Shag. Iuk. At Shagluk is located a Bureau of Education School and Reindeer camp and the construction of this trail would give an outlet for this settlement.

Expenditures: None.
ROUTE 38B-POORMAN-CRIPPLE $\qquad$ (47 MILES TRAIL)
This is the winter trail between Poorman and Cripple and forms a part of the Ruby-Ophir route.

During the past season the following improvements were made to this trail:

One bridge, 40 ft ., constructed over Silver Creek.

One $12 \times 14$ shelter cabin erected at Silver Creek.
Cleared trail of brush between the North Fork of the Innoko and Lone Mountain Roadhonse.

Expenditure (not including cabin): \$203.00.
ROUTE 38 C -OPHIR-CRIPPLE $\qquad$ (47 MILES TRAIL)
This is the continuation of the winter trail up the Innoko River to Ophir. During the past season two small bridges were built and some tripoding performed.

Expenditure: $\$ 140.00$.
ROUTE 38D-OPHIR-TOKOTNA........ (231/2 MILES WAGON ROAD)
This road, which is a cooperative project, forms a portage route between the Kuskokwim and Innoko Rivers. It serves a very active mining region at the head of the Innoko River. Three dredges are now operating in this vicinity. Construction of this road has been in progress for the past three years.

During the past season work was wholly confined to the repair of the completed section. It was necessary to reconstruct portions of the road where it was in a poor location.

The roadway was widened, ditches cleaned, culvarts repaired, two new culverts constructed and $21 / 2$ miles of grading accomplished. Expenditures:

| Alaska Road Com | \$15,977.40 |
| :---: | :---: |
| Territory of Alaska | 6,000.00 |
| Total | \$21,977,40 |

ROUTE 38F-POORMAN-OFHIR (SUMMER).... ( 125 MILES TRAIL)
A reconnaissance was made of a summer trail from Poorman to Ophir. Starting from Ophir for Poorman, the trail fords the Innoko River, then proceeds in a northerly direction over rolling hills for a distance of twenty-three miles where a shelter tent is located in a small valley near the head of Dominion Creek. The trail continues down Dominion Creek and across Folger Creek and Valley, then up the Bonanza Creek valley, continuing over a 18 su, divide and down into the Cripple Creek district, an additional distance of twenty-two miles.

From the cabins on Cripple Creek the trail continues in a northerly direction, and passes west of Cripple Mountain. After crossing the basin of Colorado Creek the trail follows a high, rolling divide or watershed with several large domes rising much higher than the Dominion Ridge. After traveling about sixty-five miles in a northerly direction from the mining camp at Cripple Creek the trail bears to the northwest for a distance of about fifteen miles down a long, low ridge into the Timber Creek Valley and across

Timber Creek over a low divide into Solomon Creek, then over another low divide into Poorman camp and mining district. Be tween Cripple Mountain and Poorman, three shelter tents have been erected, spaced approximately twenty miles apart.

This trail was constructed and shelter erected during the summer of 1922, and is now in good condition.

> Expenditure: None.

## ROUTE 38G-TOKOTNA-TOKOTNA LANDING

$\qquad$ (11/2 MILES WAGON ROAD)
This new wagon road leads from the Tokotna Trading Post, terminal of the Tokotna-Ophir road, Route 38 D , to a suitable steamer landing on the Tokotna River, where the river steamers can land at low water stages. Construction of this road was initiated last season and $11 / 4$ miles of road completed.

Principal items of work accomplished were as follows:


## Expenditure: $\$ 8,274.68$.

## ROUTE 38H—FLUME DREDGE ROAD

$\qquad$ (81/2 MILES WAGON ROAD)
This section of roadway extends from Mile 6 out of Tokotna on Route 38 D , to upper Yankee Creek. It was constructed the summer season of 1921 by the Flume Dredge Company, road scrapper, plows and grader being furnished by the Alaska Road Commission The Flume Dredge Co. expended $\$ 18,047.81$ on this work.

This road is graded and very narrow. It should be widened out, also some ditch work and several culverts placed, at an estmated cost of $\$ 5,000.00$.

## Expenditure: None

## ROUTE 38I-GANES CREEK-YANKEE CREEK.... (5 MILES WAGON ROAD)

This is an extension of Route 38 H . It was constructed by the Innoko Dredging Co., to freight in a large dredge in the winter of 1922-23, to be installed on Ganes Creek at Claim No. 6, above, where the roadway terminates. The Alaska Road Commission furnished a grader and wagons for this work. The road is very narrow and should be widened.

Expenditure: None.
ROUTE 64A—CRIPPLE.CRIPPLE MOUNTAIN... (12 MILES TRAIL)
This is the summer trail connecting Cripple mining district with

ANINUAL RFPPORT ALASKA ROAD COMMISSION.
133

Cripple City on the Innoko River, where this small district receives its supplies. Approximately $\$ 1,800.00$ for grading and small bridges is required for improvement of this trail.

Expenditures: None.

## ROUTE 64AA-CRIPPLE-CRIPPLE MOUNTAIN (WINTER) <br> $\qquad$ MILES PROPOSED TRAIL)

This is a proposed new route for a winter trail to be located from Cripple City up the Colorado Creek bottom, thence up Cripple Creek to the workings., The estimated cost of this work is $\$ 1,400.00$.

Expenditures: None.
ROUTE 80A-McGRATH-TOKOTNA (SUMMER)... (5 MILES TRAIL)
This summer pack trail, constructed during the past season, connects the towns of McGrath and Tokotna serving summer travel between these points. The total distance from McGrath to Tokotna is 18 miles but as the first 4 miles out of McGrath is identical with the McGrath-Candle Creek winter trail, Route 80 C , and the last 9 miles into Tokotna is identical with the Candle Creek-Tokotna summer trail, Route 32 AC , this route is shown as 5 miles, which is the length of new trail.

Expenditure: $\$ 125.97$.

## ROUTE 8OAA-MCGRATH-TOKOTNA (WINTER) <br> $\qquad$ (18 MILES TRAIL)

This is a section of the new through trail from Nenana to Flat. During the past season a new bridge was constructed over Candle Creek; minor repairs were made to the trail such as removing windfalls, stumps and niggerheads.

Expenditure: \$100.00.

## ROUTE 80B-McGRATH-TELIDA

.. (94 MILES TRAIL)
This is a section of the throngh winter trail from Nenana to Flat. Originally known as the McGratl-Berrys Landing Trail, it has been relocated and extended to Telida village where it connects with Route 46 E . During the past season the trail was located and constructed beginning at a point 17 miles from McGrath, up the Crocked Creek valley over a low ridge to Medfra (Berrys Landing), thence along the north bank of the North Fork $2 \frac{1}{2}$ miles. At this noint the trail crosses the river and follows along the flats south t:f the East Fork to Telida. This route affords good shelter being through timber, nearly the entire distance, with few river crossings. A total of $411 / 2$ miles of new trail was built 8 feet wide.

Expenditure: $\$ 6,229.71$.

134 ANNUAL REPORT ALASKA ROAD COMMISSION.

## ROUTE 80c—McGRATH-CANDLE CREEK <br> $\qquad$ (11 MILES TRAIL)

From McGrath to Candle Creek both wincer and summer travel follows the same trail. During the past season several small bridges on this route were repaired.

## Expenditures: $\$ 200.00$.

## ROUTE 80D-NIXON FORK-NIXON MINE........ (37 MILES TRAIL)

This trail is the winter route for traveling to and from the Nixon Mine by the way of Nixon Valley. It is in very poor condition and will require $\$ 500.00$ to clear out brush and windfalls and to build small bridges across open streans and deep narrow channels.

Expenditure: None.

## ROUTE 8OE-TOKOTNA-TWIN PEAKS

$\qquad$ 12 MILES TRAIL
This is a proposed new summer pack trail from Tokotna north across the mountains, which would greatly assist the prospeotors in this district. 'rhere is an old pack trail along this route and it is planned to rehabilitate it by clearing out brush and renewing blazes.

## Expenditures: None.

ROUTE 80F—MEDFRA-NIXON MINE...-(12 MILES WAGON ROAD)
The summer wagon road from Medfra (Barry's Landing), on the Kuskokwim River to the Nixon Mine extends six miles across low benches in the Kuskokwim River and six miles up the mountain with an average grade of about five per cent.

The Alaska Treadwell Gold Mining Company have so far constructed a very narrow and lightly graded roadway. A caterpillar tractor and accessories were furnished by the Alaska Road. Com. mission. About $\$ 24,000.00$ is the estimated cost of completing the road.

Expenditures: None.
ROUTE 8OG—NIXON FORK-TOKOTNA (SUMMER)....... (151/2 MILES TRAIL)
This summer pack trail serves the travel from Nixon Fork on the Tokotna River to the town of Tokotna it was constructerl during the past season and in general parallels the winter trail between these points.

Expenditure: $\$ 300.00$.
ROUTE 80GG-NIXON FORK-TOKOTNA (WINTER) .... ( $141 / 2$ MILES

## SLED ROAD)

This winter sled road is cut out 20 feet wide and is used to

ANNUAL REPORT ALASKA ROAD COMMISSION.
haul freight, arriving at Nixon Fork too late in the fall to go further up river by boat to Tokotna after the freeze up.

Expenditure: None.


## DISTRIBUTION OF EXPENDITURES

| Tyue | Miles* | Expenditure | Unit Cost Dolhers per Mile |
| :---: | :---: | :---: | :---: |
| Wagon Road | 38 | \$43,959.05 |  |
| Trail | 5881/2 | 14,906.42 | 25.33 |
| Totals | 6261/2 | $\overline{\$ 58,865.47}$ | \$ 95.55 |

## NOME DISTRICT.

## R. J. Sommers, Supt., July 1st to Oct. 31st, 1923

Chas. D. Jones, Asst. Supt., July 1st to Oct 31 st, 1923 and Supt., Nov. 1st, 1923 to June 30, 1924.
This district embraces that portion of the Territory lying west of the 158 th meridian and north of the Yukon River.

This very old district had retrograded, as had all others, dur ing the war period. Additions were made to the road building equipment and while no important new projects have been started, all existing roads have been made passable for traffic Reconnaissances were made winter and summer, looking to a connection between Nome and Kotzebue Sound, and for the necessary information upon all trails. All winter trails have been reopened, shelter reestablished and programs for progressive improvement prepared. These trails extend as far as Point Barrow, on the extreme northern coast of Alaska.

The Territory of Alaska purchased the narrow guage railroad from Nome to Shelton and established it as a public highway and tram, thus preventing the scrapping of the same and its consequent public loss. Bridges have been rebuilt on this tram and the track connected where gaps occur. With the very lively revival of placer mining at Nome, the road system, while also contributing to such revival, is in condition to carry the increased traffic already moving.

The peculiarly unfavorable soil conditions prevailing and the absence of timber suitable for corduroy add both to the cost of original construction and to the cost of maintenance of roads and trails in this district.

The first boat from Seattle reaches Nome late in June and the last boat leaves early in November. All supplies for the entire year must be delivered upon the Seward Peninsula between these dates. During the winter, mail is received by dog leam from Dunbar, on the Government Railroad, 659 miles from Nome.

Nome is of especial importance as its location on the exposed shore of Bering Sea makes it the first port of call open to navigation in the spring and the last to close in the fall of all ports on the Seward Peninsula. While the bulk of the freight to Seward Peninsula points is delivered in midsummer through the nearest port, for the great majority of personnel wintering outside, Nome will always remain the point of debarkation in the spring and em-
barkation in the fall, at the beginning and close of the season, respectively. From Nome or intermediate points on the through mail trail from Fort Gibbon and Dunbar, mail trails radiate to all inhabited points in Western Alaska, as far north as Point Barrow and South to Cape Newenham.

The creeks in the immediate vicinity of Nome are now well supplied by a system of about 60 miles of wagon and auto-truck roads. There are also local systems in the vicinity of Davidson's Landing, Deering, Candle, Council and Dime Landing. The principal through summer road extends from Nome to Council, a distance of 82 miles.

Two types of winter mail trails are maintained in this district: first, the permanent trails which follow a definite location and are permanently tripoded or otherwise marked across the open tundra; and second, the temporarily flagged trails, which cut across lakes and arms of the sea, or represent short-cuts and alternative routes dependent upon winter snow drifts, storms or other seasonal climatic conditions, and which are restaked in whole or in part each winter, after conditions become somewhat stabilized. Upon the opeu tundra where there are no distinguishing land marks, and during snow storms, the traveler is absolutely dependent upon working his way from stake to stake. Travelers have occasionally been found frozen to death within a few yards of shelter.

All work was handled upon a cooperative basis, all available Territorial funds being added to funds of the Board to maintain and improve the entire system of roads and trails.

No chairman and secretary of the Territorial Road Commission for the Second Division was appointed. The two elected members are W. J. Rowe and J. J. Keenan.

Much work is in isolated sections from which bills have been as mucl as two years in showing up. The definite determination in advance of the work to be done and a prompt inspection after completion have been entirely impossible at any reasonable cost. The superintendent of the Board has been forced therefore, in many cases to depent upon mail carriers, other Federal or Territorial officials, and local merchants, for the letting of contracts and the supervision of the work. As a result of its investigations, the Boaril has picked up some additional mileage upon which some expenditures have been made in the past, either by the Territory or itself, and has definitely adopted several new sub-projects.

Of the 62 sub-projects formerly shown in this district, 10 have been consolidated with other projects. Eleven of those remaining have fallen into disuse and have been abardoned as the mining localities served by these routes are worked out, and there is little likelihood that any future need will require their rehabilitation. These are:

| SubProject No. | Name of Routs | Whagon | Sled |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 8 D | Council-Ophir Creek |  |  |  | Miles |
| ${ }_{8}^{8 \mathrm{E}}$ | Melsing Creek | 12 |  |  | 12 |
| 8 I |  |  |  |  | 4 |
| 13 D | Bessie-Dry Creek .-.........-- | 5 |  |  | 5 |
| 13 E | Dry Creek-Newton --.-.................... | 11/4 |  |  |  |
| 136 | Grass Gukeh --.............................- | , 1/2 |  |  | 1/24 |
| 131 |  | $\stackrel{2}{11}$ |  |  | $2^{1 / 2}$ |
| 13 J | Nome River Extension ............-- | $5^{1 / 2}$ |  |  | 11/2 |
| 25 H | Otter Creek Creek ....-................. | 2 |  |  |  |
|  |  | 11/2 |  |  | $11 / 2$ |
|  | Totals | 343 | - |  |  |
|  |  | 344 |  | 11 | $453 /$ |

Of the 41 sub-projects maintained by this Board, expenditures periodically and repairs made The remaining routes are investigated

SUMMARY OF ROADS


ANNUAL REPORT ALASKA ROAD COMMISSION

## SUMMARY OF EXPENDITURES

| Sub-Project Number | Federal | Territorial | Construction | Maintenance | Ti)TAL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | \$10,484.87 | \$ 9,860.00 (b) | \$ $2,344.87$ | \$18,000.00 | \$20,344.87 |
| $8{ }_{8}{ }^{\text {H }}$ |  | 9,80.00(b) | \$ 2,34 | 818,00.0. | \% |
| 13A | 1,337.06 | 2,000.00 | -.-.-........ | 3,337.06 | 3,337.06 |
| 13 B | $1,926.30$ | 1,660.00 |  | 2,526.30 | 2.526 .30 |
| 13 C | 366.01 | 200.00 |  | 566.01 | 566.01 |
| 13 F | 1,680.62 | 3,994.23 | 3,000.00 | 2,674.85 | 5,674.85 |
| 13 K | 237.07 | 100.00 |  | 337.07 | 337.107 |
| 18 | 1,349.70 | 1,500.00 | 364.70 | 2,485.00 | 2,849.70 |
| 18 A | 132.00 | 100.00 |  | 232.00 | 232.00 |
| 18B | 34.00 | 30.00 | --.---...-.-. | 64.00 | 64.00 |
| 21 | 150.00 | 250.00 | -7--7.-....... | 400.00 | 400.00 |
| 25A | 104.00 | 150.00 | --------..... | 254.00 | 254.00 |
| 25B | 38.00 | 60.00 | .-............- | 98.00 | 98.00 |
| 25 C |  |  | ------.....- |  |  |
| 25D | 25.00 | 50.00 | -----7.-....- | 75.00 | 75.09 94100 |
| 25 E | 341.00 | 600.00 | ....-........ | 941.00 | 941.00 |
| 25 F | 651.30 | 1,000.00 | ............... | 1,651.30 | 1,651.30 |
| 25G | 840.50 | 1,200.00 | -------- | 2,040.50 | 2.040.50 |
| 26 | 1,368.66 | 1,500.00 | --1.-- | 2,868.66 | 2.868 .66 |
| ${ }_{26 \mathrm{~B}}^{26 \mathrm{~A}}$ | --..-.......... | ----------- | --7. | --. | - |
| 27 | 1,516.40 | 2,500.00 | ----------------- | 4,016.49 | 4,016.49 |
| 28 |  |  | - |  |  |
| 28. | 100.00 | 150.00 |  | 250.00 | 2511.119 |
| 41 |  | ... | …-...... | --------- |  |
| 41 A | 365.00 | 600.00 | --- | 965.00 | 965.10 |
| $4_{42}{ }^{\text {B }}$ | 74.00 | 100.00 | $\cdots$ | 174.00 | 174.00 |
| 49 | 1,721.25 | 2,500.00 | --- | 4,221.25 | 4,221.25 |
| 62 | 50.00 | 100.00 | -..........---- | 150.00 | 150.00 |
| 67 | 586.92 | 900.00 | .-... | 1,486.92 | 1.436.92 |
| 67 A |  |  |  |  |  |
| ${ }_{67}^{67}$ | 263.50 | 300.00 | 383:50 | 180.00 | 563.59 |
| 67 C 68 | 396.00 | 600.00 | 796.00 | 200.00 | 996.1510 2569.37 |
| 68 73 | 1,069.37 | 1,500.100 |  | 2,569.37 | 2.569 .37 |
| 73 A | 115.00 | 150.00 | .--7.......... | 265.111 | 265.1019 |
| 73 B |  |  |  |  |  |
| 89 A | S2,653.85 |  | 5,000.00 | 27,653.85 | 32.653 .85 |
| $9 \\| \mathrm{B}$ |  | 2,249.32 | 1,749.32 | 5100.00 | 2,249.32 |
|  |  |  |  | \$81,182.63 | \$94,821.02 |
|  |  |  |  |  |  |

ROUTE 8-NOME COUNCIL.... (57 MILES WAGON ROAD, 25 MILES TRAIL)
From Nome this road follows the coast to Bonanza, Mile 32. then along the Solomon River to East Fork, Mile 49. It then follows the bed of the East Fork, for a listance of about ten miles to the divide and crosses over the Skookun Divide, passing the head of Skookum Creek into the head waters of Fox River, a distance of six miles. Thence down Fox River, a distance of twelve miles, it follows the creek bed to the end of the Council corduroy which it follows to Council, a distance of five miles.

There are three ferries crossed en route and one trolley. These ferries and the trolley, originally carriel as Routes 8A, 8B, 8C, and SG, are now included under this route. They were all maintainen and operated during the past season.

The road was maintained during the past season. Considerable repair work was accomplished. The work was distributed as follows:

## 140 ANNUAL REPORT ALASKA ROAD COMMISSION.

## NOME TO EAST FORK:

The road was regraded through the tailing piles of the Eskimo Dredging Co., on Solomon River. Considerable damage, which occurred to the first three miles out of Nome during a storm, was repaired. Bridges and culverts were repaired over the section Nome to Safety.

## EAST FORK TO COUNCIL:

Five miles of corduroy near Council were covered with gravel. Five new bridges and 10 new culverts were constructed and repairs made to 5 bridges and 5 culverts. Seven hundred and fifty lineal feet of brush corduroy was laid and covered. General repairs were made to the section across Skookum divide and at the head of East Fork.

This entire section is now in fair condition.
The Nome River Bridge, formerly shown under Route $77 B$, is also a part of this route.

Expenditure:

| Alaska Road Commission |  |
| :---: | :---: |
| Territory of Alaska ............ | $9,860.00$ |
| Total | \$20,344.87 |

ROUTE 8H-CASA DE FAGA ROAD....... (20 MILES WAGON ROAD)
From East Fork this road follows the Solomon River Bed for about one mile to the mouth of Montana Creek, then crosses the Ruby Divide into Ruby Creek, a distance of three and four-tenths miles. From Ruby the road follows down to the various camps at work on the Casa. Some poll tax money has been spent on this road in addition to the work done by the Territory. There is a total of about twenty miles of wagon trail to the various creeks served in the Casa de Paga

An inspection was made of this route during the past season. With the limited money avallable it was impossible to accomplish any appreciable improvement. With adequate money available however, this route should be improved. At present two outfits are oerated in this vicinity and, with improved transportation, activities would surely increase.

Expenditure: None.
ROUTE 8J-SHOVEL CREEK $\qquad$ (5 MILES WAGON ROAD)
Commencing at the thirty-eight mile post on Route 8 at Shovel Creck, a road follows up Shovel Creek to the works on Kasson and supplies the works along Shovel and its tributaries.

Expenditure: None.




## ROUTE 13A—NOME-BESSIE

$\qquad$ (31/2 MILES WAGON ROAD)

This is the main road leading from Nome in a northerly directicn to the Bessie Claim on the Third Beach line.

Work the past season consisted in general maintenance. The road was scarified, dragged and rolled early in the season and dragged at intervals when needed. The Bourbon Creek bridge was redecked.

## Expenditure:

$$
\begin{aligned}
& \text { Alaska Road Commission } \\
& \$ 1,337.06 \\
& \text { Territory of Alaska } \\
& \text { 2,000.00 }
\end{aligned}
$$

Total $\qquad$

## ROUTE 13B-BESSIE-BANNER

 (31/2 MILES WAGON ROAD)This road commences at the Bessie Roadhouse at the end of Route 13A and goes to Anvil Creek at the mouth of Specimen Gulch. This road was also the main artery used in connection with the Bessie Road for the transportation of the material hauled to Glacier Creek and upper Snake River. Work the past season consisted of surfacing 5,030 lineal feet of this road, necessary repairs to culverts and general maintenance. This road is now in fair condition.

Expenditure:

| Alaska Road Territory of |  |
| :---: | :---: |
|  |  |

Total $\qquad$ $\$ 2 ; 526.30$

ROUTE 13C-BESSIE-LITTLE CREEK.... (2 MILES WAGON ROAD)
Commencing at the end of Route 13A this road runs west to Little Creek and supplies the workings of the Pioneer Mining Company on Little Creek. This road was also used for transporting the material hauled to Little Creek for the two dredges being installed there. The road extends on to Anvil Creek where a dredge is operating.

Work the past season was entirely maintenance. The road was dragged several times during the summer as needed.

Expenditure:

| Alaska Road | Commission | \$366.01 |
| :---: | :---: | :---: |
| Territory of A | laska | 200.00 |

Total
ROUTE 13F-NOME-OSBORNE $\qquad$ (8 MILES WAGON ROAD)

This road starts from Route 13A at about the mile and threequarter post and goes in an easterly direction to Osborne Creek.

Substantial improvement has been made to this route in the past two seasons.

Work the past season consisted in surfacing 9,785 lineal feet of road, construction of six new culverts, some ditching and general maintenance. About 4,000 feet of road remains to be surfaced to put this route in very good condition. A trolley for passengers is located at the end of this route across Nome River. This trolley was formerly shown under Route 77 C .

Expenditure:

| Alaska Road Commission | \$1,680.62 |
| :---: | :---: |
| Territory of Alaska | 3,994.23 |

## Total

## ROUTE 13K-BESSIE-BUSTER

$\qquad$ ( $71 / 2$ MILES WAGON ROAD)

This road commences at the end of Route 13 A and follows over the divide at the head of Dry Creek down the right limit of Dexter Creek to Nome River, where it fords Nome River to the mouth of Buster Creek and follows up Buster Creek on the left limit to Union Gulch.

Light regrading was done during the past season over the first $21 / 2$ miles. Other light repairs were made during the season.

Expenditure:

| Alaska Road Commission | \$237.07 |
| :---: | :---: |
| Territory of Alaska | 100.00 |
| Total | \$337.07 |

ROUTE 1こ-KALTAG-SOLOMON.
.................. (2481/2 MILES TRAIL)
Commencing at Kaltag, this overland mail trail crosses the divide or portage to the Unalakleet River, which it follows to Unalakl : t. From Unalakleet it follows the coast to Bonanza on the east shore of Norton Bay, crossing to Isaacs Point on the west shore it follows the coast to Walla Walla, where it crosses the divide into Quinahock. It then follows the Quinahock to its head, crossing the divide into McKinley Creek, which it follows to Golovin Bay and thence to Golovin. From Golovin it crosses to Portage Creek, which it foilows to its head, crossing the divide into Cheruk Creck, which it follows to the coast. It follows the coast to Solomon and thence over Route 8 to Nome.

This is the most important winter trail in this district, as all the mail for Nome and the Seward Peninsula comes in over this route.

During the past season the Kaltag-Unalakleet section was permanently staked, four new bridges were built and all old bridges repaired. From Unalakleet to Solomon the staking was all gone

ANNUAL REPORT ALASKA ROAD COMMISSION. $14:$
ore: and renewcd where necessary. The staking on this entire route is now in very good condition.

Expenditure:


## Total

## ROUTE 18A-BONANZA-KOTZEBUE

$\qquad$ ( 240 MILES TRAIL)
This winter mail trail leaves the Kaltag-Solomon mail trail, Route 18, at Bonanza, Mile $931 / 2$, or 155 miles east of Nome on the east shore of Norton Bay and follows up Norton Bay to the mouth of Koyuk River. Crossing over Star Mountain it reaches the Koyuk River again at Dime Landing and follows Route 62 to Hayrock. Crossing successively the Peace River divide, the Peare River Valley and the Sweepstakes Divide, it follows up Sweepstakes Creek to its head. Crossing into the Keewalik Valley, it follows the risht limit to Snyder's Roadhouse, then crosses to the left limit as far as the mouth of Lava Creek. It then follows the river to Candle. From Candle, it follows the Keewalik River for two miles , then cuts across the tundra for sixteen miles to Willow Bay, and then follows the coast to Deering. From Deering it crosses Kotzebue Sound on the ice to Choris Peninsula, and follows the coast to Cape Blossom. After a portage of five miles behind Cape Blossom, the coast is followed to Kotzebue.

This route was thoroughly gone over during the fall of 1922 and is in very good condition.

Expenditure:

Total $\qquad$
ROUTE 18B-GOLOVIN-COUNCIL $\qquad$ (35 MILES TRAIL)
This winter mail trail leaves the Kaltag-Solomon Trail, Route 15. at Golovin, Mile $1701 / 2$, or seventy-eight miles east of Nome on the east shore of Golovin Bay. It follows up Golovin Bay to White Momntain and thence up the Fish and Ninkluk Rivers to Council.

All portages are well staked and marked and this trail is in var good condition. Minor repairs were made to permanent staking.

Expenditure:
Alaska Road oCmmission ..................................................- $\$ 34.00$
Territory of Alaska .30 .00

## Total

$\qquad$ ....... $\$ 64.00$

ROUTE 21-UNALAKLEET-ST. MICHAEL $\qquad$ ( 60 MILES TRAIL)
This is the mail trail following the coast from Unalakleet to St. Michael Bay, where it crosses to St. Michael .

During the past season the permanent staking was repaired over the entire route. A new trail was cut between Coal Mine Creek and Devil's Gulch, through the timber, placing the trail between these points back from the beach.

Expenditure:

$$
\begin{aligned}
& \text { Alaska Road Commission } \\
& \text { Territory of Alaska }
\end{aligned}
$$

## Total

$\qquad$ $\$ 400.00$

ROUTE 25A—CRIPPLE RIVER $\qquad$ .. (12 MILES WAGON ROAD)
This road commences at the beach at the mouth of Cripple River and follows the river for twelve miles to the workings near Willow Creek and on to Arctic and Sidney Creeks. It is mainly on the left bank of the river.

Minor repairs were made to this route during the past season.
Expenditure:

$$
\begin{aligned}
& \text { Alaska Koad Commission } \\
& \$ 104.00 \\
& \text { Territory of Alaska } \\
& 150.00
\end{aligned}
$$

Total
ROUTE 25B—PENNY RIVER. $\qquad$ ( $11 / 2$ MILES WAGON ROAD)
This road commences at the beach at the mouth of Penny River and extends one and one-half miles up the river to allow travel to get around some deep sloughs.

All the freight into Hungry, Oregon, and Nugget Creeks is hauled over this route. From the end of one and one-half miles of work it follows the creek bottom onto the Divide and then around to these creeks.

Minor repairs were performed last season.
Expenditure:

$$
\begin{aligned}
& \text { Alaska Road Commission } \\
& . \$ 38.00 \\
& \text { Territory of Alaska } \\
& 60.00
\end{aligned}
$$

Total $\qquad$

## ROUTE 25C-NOME WIRELESS

$\qquad$ (1/2 MILE WAGON ROAD)
This road serves the wireless plant at Nome. It commences at Steadman Avenue near the beginning of Route 13 A and extends east to the wireless station.

Expenditure: None.

## ROUTE 25D-MOUTH OF CENTER CREEK........ (2 MILES WAGON ROAD)

This road commenecs at the west city limits and follows the left bank of the Snake River to a short distance beyond the mouth of Center Creek.

Slight repairs were made to this road during the past season. One hundred feet of road was surfaced and chuck holes filled. Expenditure:

```
Alaska Road Commission \(\$ 25.00\)
Territory of Alaska 50.00
```

Total

## ROUTE 25E—SUBMARINE PAYSTREAK. <br> $\qquad$ (3 MILES WAGON

 ROAD)This road commences near the one-half mile post on Route 25 D , crosses the Snake River Bridge and follows the right bank of Snake River to the workings on Submarine.

During the past years the center pier on the Snake River bridge, composed of two 100 -foot spans, had raised five feet due to the attion of frost on the piles. This pier was cut down during the past season and the bridge leveled to its original position. Several loads of gravel were placed at the ends of the approaches to the bridge.

Expenditure:

Total ........................................................................................... 8941.00

ROUTE 25F-ANVIL-GLACIER $\qquad$ (3 MILES WAGON ROAD)
This road commences at Anvil Creek at the end of Route 13 B and crosses the Divide to Glacier Creek.

All of the mining operations in the vicinity of Glacier Creek and the upper Snake River basin are served by this road.

During the past season the summit between Anvil and Glacier crecks was regraded. 1,500 lineal feet of road was surfaced and necessary repairs made to culverts. With the exception of some arditional surfacing required this roarl is in good condition.

Expenditure:

| Alaska Road Commission | \$ 651.30 |
| :---: | :---: |
| Territory of Alaska | 1,000.00 |
| Total | \$1,651.30 |

ROUTE 25G-SNAKE RIVER EXTENSION....... (3 MILES WAGON ROAD)
This road commences at Glacier Creek at the end of Route 25F. extends to and across Snake River and thence across the tlat to Boulder Creek.

During the past season several short sections of road were graded, 4,220 lineal feet surfaced, and eight new box culverts constructed. This route is in fair condition.

```
Expenditure:
    Alaska Road Commission .........................................-. $ 840.50
    Territory of Alaska ...-............................................. 1,200.00
```

            Total
            .....-..................................................................................
    ROUTE 26-GANDLE-CANDLE CREEK... (6 MILES WAGON ROAD) This road commences in Candle and follows up Candle Creek to Paterson Creek and serves all of the mining on Candle Creek. General maintenance work was performed on this route during the past scason. 8,000 feet of ditch was cleaned, 278 lineal feet of new road constructed, 450 cubic yards of gravel was hauled surfacing $3, \$ 50$ lincal feet of road and 525 lineal feet of willow bruch corduroy was lail and surfaced. One bridge was repaired and two new culverts built.

Expenditure:


## Total

$\qquad$
ROUTE 26A—KUGRUK RIVER APPROACH …... (li4MILE WAGON ROAD)
No work was done on this project which consists of aup approach from the coal mine to the Kugruk River.

Expentiture: None.
ROUTE 26B-BEAR CREEK TRAIL. $\qquad$ (45 MILES TRAIL)
This trail is used to haul mining supplies from Candle to Bear Creek. The Keewalik River is crossed and a ridge is followed to Bear Creek.

Expenditure: None.
ROUTE 27-DEERING-INMACHUK....... ( 25 MILES WAGON ROAD)
This roall commences at Deering and extends to the workings on the Inmachuk. It is improved for a distance of twelve miles on the left bank. From the latter point it follows the river bed. The road was maintained during the past season. 2,390 lineal feet of new road was built and 5,555 lineal feet of road surfaced. Four new culverts were placed.

## Expenditure:


Total

ROUTE 28-DAHL CREEK-CANDLE TRAIL.... (140 MILES TRAIL)
This is an overland trail between Dahl Creek and Candle, going in a northeasterly direction from Dahl Creek to the Kougarok River,

Then following the east slope of the diviae to tine head of Boulder, where it crosses into Aurora Creek. It follows to the mouth of furora Creek, crosses the Noxapaga, and goes up berry Creek, crossing the divide to the mouth of the rigint fork of Good Hope, thence up Cottonwood to Divide Creek, thence up Divide Creek crossing the Divide and following the ridge to the Inmachuk river, hence down the Inmachuk to Arizona Creek, thence easterly ovor Hhe Divile to Wate Creek, thence crossing Wale Creek in an nasterly direction acloss Kugrnk Flats to the Kugruk River, thence fasterly over the divide to the mouth of Paterson, thence down the Candle-Candle Creek Road to Candle

This trail is in fairly good condition. It is used mostly by foot travelers between Nome and Candle.

Expenditure: None.

## ROUTE 28A-NOME-TAYLOR

$\qquad$ (135 MILES TRAIL)
This winter mail trail leaves Nome over Routes 13 A and 13 K to the mouth of Dexter Creek. Crossing Nome River, it follows the left limit to the mouth of Willow Creek, then recrosses and follows the right limit to the U. S. Roadhouse at Dorothy Creek, then the left limit again and over the divide to Nugget Creek. From the Nugget Roadhouse, it crosses Salmon Lake, follows down Pilgrim River to Iron Cross, then across the flats to the Hot Springs. It then cuts across to Mary's Igloo and up the Kusatrin River to SheIton, the northern terminus of the summer tram line (Seward leninsula Railway). From Shelton, the trail proceeds to Dahl, and then up the Kougarok River to Taylor.

This trail was repaired in the fall of 1922 and is in very good conlition. The bridge over the Kougarok River at the mouth of Coarse Gold Creek was rebuilt.

Expenditure:

| Alaska Road Commission Torritory of Alaska $\qquad$ $\$ 100.00$$\qquad$ 150.00 |  |
| :---: | :---: |
|  |  |
| Total |  |

## Total

$\qquad$
ROUTE 3 T-TOPKOK-CANDLE WINTER TRAIL (154 MILES
TRAIL)

This trail leaves the overland main trail Route 18 at Topok, fitty-three miles east of Nome, and follows the Topkok River to its head, thence over the Divide into Skookum, crossing the same and the Fish River and Niukluk Flats to Council. This portion is the regular Council winter trail. From Council the trail follows ap Melsing Creek to the head, crosses the divide into the Fish River Flats, then crosses same in a general northeasterly direction (0) Telephone Creek. Following Telephone Creek to its head it lhen crosses the Divide and goes down the Koyuk Valley. It then
crosses over into First Chance Creek and up to its head, then over the Divide into Gold Run Creek. Following down Gold Run to within two miles of the mouth, the trail then swings northerly and parallels the Keewalik River to Glacier Creek, then on the left bank of the Keewalik River to near the mouth of Lava Creek and then on the Keewalik to Candle. The portion between Council and the mouth of Hunter Creek is but slightly used as the mail. now goes in via Haycock, and the two trails join at the mouth of Hunter Creek or near Snyder's Roadhouse. There is considerable travel on this trail between Council and the coast at Topkok. The staking between Topkok and Council is in good and this is the most largely used section of this route.

Expenditure: None.
ROUTE 41-KIANA-KLERY CREEK...(1 MILE WAGON ROAD, 11 MILES TRAIL)
A permanent staked winter trail, twelve miles in length, connects Kiana on the Kobuk River with the mining camp on Klery Creek.

Expenditure: None.
ROUTE 41A-KOTZEBUE-SHUNGNAK................ (200 MILES TRAIL)
This winter trail extends from Kotzebue, an open summer port on Kotzebue Sound, across to the mainland and up the Kobuk River to Shungnak. Several shelter cabins have been built by the Territory. $1922-23$ the permanent staking on this During the winter of 1922 , approaches to rivers graded down and minor trail was repaired, approaches to rivers graded cluded in this fiscal year.

## Expenditure:

$$
\begin{aligned}
& \text { Alaska Road Commission ............................................................................................................ } 600.00 \\
& \text { Territory of Alaska ......... } \\
& \hline
\end{aligned}
$$

Total
ROUTE 41B-KOTZEBUE-POINT BARROW........ (500 MILES TRAIL)
This winter mail trail extends from Kctzebue across to the mainland and then along the coast to Point Barrow.

During the past season a combination shelter cabin and dog barn was erected on the Cape Lisburne portage.

This expenditure is shown under Territorial Shelter Cabin Fund. is planned to establish further shelter on this route.
Expenditure: None.
ROUTE 42-ST. MICHAEL-KOTLIK TRAIL...... (70 MILES TRAIL)
This is a winter mail trail to Kotlik and on up the Yukon to Marshall. From St. Michael it follows the left bank of the

St. Michael Canal for eight miles, thence across the Canal to the mainland, thence in a southwesterly airection to Pitmatalik Village, a distance of twenty-seven miles, thence back to Point Romanof to the beach seven miles, thence to Coifee Point, twelve miles, thence by Pastolik to Kotlik, twelve miles.

The permanent staking on this route was rehabilitated during the past season. Trail is in good condition.

Expenditure:

$$
\begin{aligned}
& \text { penditure: } \\
& \text { Alaska Road Commission ........................................................................................................... } 100.00 \\
& \text { Territory of Alaska ............ }
\end{aligned}
$$

## Total

$\qquad$

## ROUTE 49—DAVIDSON'S LANDING-TAYLOR.... (24 MILES WAGON

 ROAD, 16 MILES SLED ROAD)This road connects the head of navigation on Imuruk from Teller with Taylor Creek. From Davidson's Landing it follows the Mary's River to its head, a distance of twenty-four miles, thence over Coco Hill to the head of Coarse Gold Creek to Henry Creek, thence down Henry Creek to the Kougarok; it follows the Kougarok to Taylor Creek. This road was originally built by the Kougarok Mining and Ditch Company and has had work done upon it by them and also by the Taylor Ditch and Mining Company, Kelliher Dredging Company, the Bering Dredging Company and Dave Johnson Freighting Company. In 1916 this ronte was taken over by the Alaska Road Commission and since then has been maintained by it.

During the past season repairs were made over the entire route, several bad washouts were repaired, culverts rebuilt and some willow corduroy placed. A new location was made and road constructed between the 8 and 9 mile posts, avoiding low ground. Several new culverts ware placed and other improvements made to the section beyond the 24 mile post. This route is now in fair contition.

Expenaiture:

| Alaska Road Commission | \$1,721.25 |
| :---: | :---: |
| Territory of Alaska | 2,500.00 |
| Total | \$ $\$ 4,221.25$ |

ROUTE 62-DIME CREEK.
(9 MILES WAGON ROAD)
This road connects Dime Landing, which is situated on the Koyak River about thirty-five miles from the confluence of Dime reek and the Koyuk, with the workings on Dime Creek at the jost office of Haycock and extends on up Dime Craek to No. 7 above.

The bridge and abutments across Dime Creek at Haycock were repaired. No other work was accomplished.

150 ANNUAL REPORT ALASKA ROAD COMMISSION. Expenditure:


ROUTE 67-NOME-TELLER. $\qquad$ (80 MILES TRAIL)
This is the winter mail trail to Teller and Cape Prince of Wales. It is permanently staked from Nome to Teller. It follows the coast from Nome to Cape Douglas, where it cuts across to Cape Riley, and then into Teller.

General repairs were made to this trail during the past season. The permanent staking was renewed where necessary. Two ferries are located on this route for the convenience of summer travelers, one at Sinrock and one at Cripple River. Both these ferries were maintained and operated during the past season.

Expenditure:

| Alaska Road Commission | \$ 586.92 |
| :---: | :---: |
| Territory of Alaska | 900.00 |

Total

## ROUTE 67A-TELLER-GAPE PRINCE OF WALES (142 MILES

 TRAIL)This is the extension of Route 67 to Cape Prince of Wales. It crosses the Bay from Teller to the Reindeer Station and thence on the bearh to Lost River. From Lost River it follows the beach to the mission settlement at Cape Prince of Wales. This trail was permanently staked in the fall of 1922 and is in good condition. Expenditure: None.

## ROUTE 67B-TELLER-BLUESTONE

$\qquad$ (18 MILES TRAIL)
From Teller there is a trail leading across the tundra to Gold Run and the Eluestone country, a distance of eighteen miles

This trail has had some road tax expended on it and the Alaska Road Commission has furnished some timber for constructing several small bridges. It is still used for hauling to Gold Run and the Bluestone.

During the past season the entire route was permanently staked. Expenditure:


## Total

ROUTE 67C-TELLER-MARY'S IGLOO
(40 MILES TRAIL)
Though not a mail trail, this is a well traveled winter route from Tellor to Mary's Igloo via Grantly Harbor, Imuruk Day and the Fuzitrin River

ANNUAI REPORT ALASKIA ROAD COMMISSION. 151
This trail was permanently staked lluring the past season from the head of Grantly Harbor to Salt Lake, a distance of 25 miles Expenditure:
Alaska Road Commission $\qquad$ $\$ 396.00$
Territory of Alaska 600.00
Total $\qquad$
$\qquad$ (712 MILES TRAIL)

## OUTE 68-FLAGGING TRAILS

 Gnfer this heading all expenditures for temporary winter work are included. The expenditure includes the purchase of material for making flags, and the cost of straightening up all stakes and replacing the missing ones on the permanently staked winter trails aromp Nome throughout the Seward Peninsula and connecting with the Yukon Valley. Many of the trails are only seasonal ones and are staked by the miners themselves to the creeks on which their workings occur. In these cases this board furnishes the material for staking and the miners do the work.

ROUTE 73-MARSHALL ROAD. ( $41 / 4$ MILES WAGON ROAD)
This road was constructed by the Territory. Two and twelve. hundredths miles are corduroy and two and thirteen-hundredths milos graded road. It connects the landing ten miles above Marshall with the workings on Willow Creek.

Expenditure: None.
FOUTE $72 A-K O T L I K-M A R S H A L L$. $\qquad$ (190 MILES TRAIL)
This trail follows the general trend of the lower Yukon.

152 ANNUAL REPORT ALASKA ROAD COMMISSION.
A reconnaissance was made during the early spring of 192\% and last season the portages between Old Hamilton and Pilot Station were restaked.

This trail is now in fair condition.
Expenditure:

$$
\begin{aligned}
& \text { Alaska Road Commission .............................................................................................. } \\
& \text { Territory of Alaska }
\end{aligned}
$$

## Total

$\qquad$
ROUTE 73B-STUYAHOK $\qquad$ (11 MILES SLED ROAD)
This is a new project. It consists of an eleven mile winter sled road and summer trail from the landing on the Yukon River above Russian Mission across to the new diggings on Stuyahok Creek. The route was cleared in the summer of 1921.

Expenditure: None.
ROUTE 89A—SEWARD PENINSULA RAILROAD. $\qquad$ (87 MILES TRAM)
Chapter 39, Session Laws of Alaska, 1921, authorized the Federal Board of Road Commissioners for Alaska, with the consent and approval of the Territorial Board of Road Commissioners, to purchase the Seward Peninsula Railroad extending from Nome to Shelton, for use as a public tram and highway. This narrow gauge railroad for many years, following its abandonment as a steam railroad, had been used as the main overland artery of commemication with the Kougarok mining district and the other placer mining camps on the northern portion of the Seward Peninsula. The repair of the bridges and washed out portions of track was of great public interest and could be accomplished provided the structure was publicly acquired.

An examination and inventory of this road was made by Mr . A. G. Blake, a competent civil engineer, engaged for the purpose.

At the close of Mr. Blake's examination negotiations were entered into with the Pioneer Mining \& Ditch Company, the owners of the Nome-Shelton Railroad. These negotiations, in reference to the terms of the conveyance and price, continued until October 3, 1922, it which time the railroad was purchased for $\$ 24,000.00$. Included in the purchase were certain blocks of real estate within the City of Nome. An agreement was incorporated in the instrument of conveyance stating that the mining company would restore the tracks and right-of-way at any location disturbed by them in the ordinary course of their mining operations.

The railroad was at once taken possession of by a representa tive of this Commission at Nome and a considerable amount of information required for its final rehabilitation was obtained during the summer and fall of 1922.

Work of rehabilitation was inaugurated during the past season. Considerable preparation was necessary in the way of assembling

ANNUAL REPORT ALASKA ROAD COMMISSION.
personmel and equipment. The rolling stock was in very poor condition and it was necessary to rebuild cars suitable for the work.

42 miles or approximately one-half of the total line was placed in good operating condition for the comparatively light loads passing over it.

This work consisted first of realignment. and resurfacing the track. In many instances the roadbed had been washed entirely away. In these places the track was thrown over alongside the trench washed out. All the track is now in good condition over the distance covered. Ties were renewed where necessary.

All the small bridges were repaired. One 150 foot Howe truss span on fir pile foundations was erected over Nome River, Mile 14. This bidge was built entirely of fir lumber transferred to the Board from the abandoned Army Post at St. Michael.

A sixty-foot temporary bridge was built across Charette Creek, Mile 65.

The 600 -foot trestle over Dry Creek, one-half mile from Nome, was practically rebuilt. This trestle was badly out of line and a mumber of bents were entirely washed away. Thirty bents were replaced and the trestle realigned and surfaced, placing it in good condition.

All the bridges and trestles were planked between the rails to allow the use of horses for pulling the cars. This method of traction is very slow however, and the purchase of a light gasoline locomotive is contemplated.

Next season's work will complete the rehabilitation of this route and a very important trunk line will be added to the transportation system in this district.

Expenditure: Alaska Roarl Commission, $\$ 32,653.85$,
ACCOUNT NO. 90B-SHELTER CABINS, 2ND. DIVISION.

| ¢ | Trail | Location and Description |  |
| :---: | :---: | :---: | :---: |
|  | Nome-Council | ---Fox River, cabin repaired ................ ${ }^{\text {a }}$ |  |
|  |  | Timber cabin repained | 65.10 |
| 19 | K:llas-Solomon | .....Ten Mil. Creek, shelter cabin and dog barn built | 500.00 |
| 18.1 | Ponanza-Kotzebue | --..-Quartz Creek, shelter cabin built.. | 291. 131 |
| 41 B | Kotzebue-Pt. Barro | ...... Aane Lisburne barn built ............................... | 674.92 |
|  | Kotlik-St. Michael | ...-Point Romanoff, shelter cabin built. | 275.101 |
| f, | Nome-Teller | -.-...-Cape Wooley, dog barn built; Cape Douglas, dog barn built $\qquad$ | 337.90 |
|  | Teller-Mary's Igloo | ......Asiapuk, shelter cabin and dog barn ropaired | 1010 |

Total Expenditure: Territory of Alaska
ITURES.

| Type Miles* | Expenditures | Unit Cost <br> Dollars per Mile |
| :---: | :---: | :---: |
| Wham Road ..................................... 257 | \$80,756.21 | \$214.61 |
| Sled Rnad ......................................- 16 | 500.00 | 31.25 |
| Fermanent Trail ....-...................... $13411 / 2$ | 8,746.12 | 6.52 |
|  | 2,569.37 | 5.38 |
| Totals ..........................-....... 2092 | \$92,571.70 | \$ 44.25 |

154 ANNUAL REPPORT ALASKA ROAD COMMISSION.

## SUMMARY OF FUNDS EXPENDED BY DISTRICIS.




## SPECIAL REPORTS

## INVESTIGATION AND REPORT REQUIRED BY THE ACT OF CON

 GRESS APPROVED JUNE 30, 1921.In compliance with the following proviso contained in the Act of Congress approved June 30, 1921.

> Provided further, That not to exceed $\$ 10,000$ of the foregoing amount shall be expended for a preliminary investigation and report on the feasibility, desirability, and cost of the best and most practicable connection between the Nome-Shelton system of communtications and the cond deposits of the Kugruk River, Chicago creck, and the Keewalik mining district, whether by wagon poad, sled road. tramway, trail or other means,
the board had a prefiminary reconnaissance nutade of existing amd prospective routes of communications on the Seward Peninsula in the fall of 1921. The investigation was completer during the summer of 1922. Report dated December 1, 1922, was transmitted to Congress and printed in House Document No. 514, SixtySeventh Congress, fourth session. A plan of improvement is presented to the extent of:
From Shelton to Dahl, extension of the Nome-Shellon tramway
 From Dahl to inmachuk, improvemert of wister trail to summer From inmarchu, to Candile Creek, construction of a tramway, 30 Total


ANNUAL REIPORT ALASKA ROAD COMMISSION. 155
Maintenance is to be provided for by the board with its own funds, supplemented by contributions from the Territory.

The above report was referred to the Committee on the Teritories on December 20, 1922. House Joint Resolution 60, authorizing the improvement of the system of overland communications on the Seward Peninsula, Alaska, in accordance with the above report was introduced by Delegate Sutherland on December 5, 1923. It was reported out by the Committee on the Territories with the reconmendation that it do pass on April 18, 1924, and was committed to the Committee of the Whole House on the state of the Uniou.

INVESTIGATION AND REPORT REQUIRED BY THE ACT OF CONGRESS APPROVED MARCH 2, 1923.

In compliance with the following item coniained in the Act of Congress approved March 2, 1923:
"For cost of survey and the preparation of plans
and , estimates for a Government Dock at Juneau, Alaska,
the Board made the necessary survey and has completed negotiations for approach to the upland. Plans and estimates have beeu completed and report will be submitted shortly after the close of the fiscal year.

The expenditure of $\$ 600$ is included in Account No. 100, Juneau Office.

STATEMENT OF RECEIPTS AND DISBURSEMENTS.
This report covers vouchers received and placed in the account, including June 30, 1924.

## RECEIPTS

Watance on Hand July 1, 1923 $\qquad$ \$ 124.773.99
Received since from:


Refunds, War Dept. Acts.
Contribution from City of Nome
DFIMCTIONS:
Total
eredit Trmasurer of United States
Dosited to eredit Tresumer of hand close of f. y. 1923 . $\$ 124.773 .94$
Sithes, ete, Alaska Fund
Verund, Contributed Funds
Refund, War Dept. Acts. $\qquad$
1.633 .56

Refund, War Dept. $\qquad$ $2,457.74$
4.28


## DISBURSEMENTS.


\$ $969,727.37$
*-Does not include $\$ 413.05$ charged arainst nvailable appropriations hy direct U. S. Treazury Settlement, nor $\$ 14,531.18$ settled with the tion the Alarka Railroad furnished free passenger and freight service amounting to $\$ 30,464.93$.

## EXPENDITURES IN DETAIL.

FEDERAL APPROPRIATIONS AND "ALASKA FUND" AND FUNDS CONTRIBUTED BY THE TERRITORY OF ALASKA AND OTHERS.

| $\begin{aligned} & \text { Acct. } \\ & \text { No. } \end{aligned}$ | Name of Route C | Construction | Maintenance | Totals |
| :---: | :---: | :---: | :---: | :---: |
| 3 A | Haines-Wells |  | \$ 7,642.49 | \$ 7,642.49 |
| 3B | Pleasant Camp Extension, 1st Sec. | 18,076.00 | 1,9\%0.0) | 19,976.00 |
|  | Pl/asant Camp Extension, 2nd. | 15,500.20 | 1.600.01) | 17.100 .20 |
| 3 C | Porcupine Extension | 700.00 | 305.69 | 1,0175.69 |
| 3D | Haines-Mud Bay |  | 2,104.41 | 2,104.41 |
| 4 BA | Valdez-Ptarmigran Drop, 1st sec. Valdez-Ptarmigan Drop, 2nd. | 8,826.00 | 10,500.00 | 19,326.100 |
|  | Sec. ............................................ | 4,200.20 | 6,000.00 | 10,200.20 |
| 4 BB | Ptarmigan Drop-Ernestine |  | 6,340.35 | 6,340.35 |
| 4 C | Ernestine-Willow Creek |  | 11,912.79 | 11,912.79 |
| 4 D | Willow Creek-Gulkana, 1si Sec. | 1,280.00 | 12,804.00 | 14,680.60 |
|  | Willow Creek-Gulkana, 2nd. Sec. | 701.52 | 12,400.00 | 13,114.52 |
| 4 E | Guikana-Sourdough, 1st Sec....- | 6,400.89 | 5.750 .00 | 12,150.89 |
|  | Gulkana-Sourdough, 2nd. Sec.... | 5,141.00 | 5,900.00 | 10,240.06 |
| 4 F | Sourdough-Mile 168, 1 ist Sec.-...- | 9,742.41 | 4,600.00 | 14,342.41 |
|  | Sourdough-Mile 168, 2nd. Sec.... | 9,840.00 | 4,400.00 | 14.240.00) |
| 4 G | Mile 168 Post-Delta River. | 6,730.62 | 11,400.00 | 18,130.62 |
| 4 HI | Delta River-Rapids, 1st Sec. | 13,217.63 | 6,250.90 | 19,467.63 |
|  | Delta River-Rapids, 2nd. Sec....- | 13,200.00 | 6,300.00 | 19,500.00 |
| 4 H | Rapids-Grundler |  | 16,224.11 | 16,224.11 |
| 4 I | Grundler-Richardson, 1st Sec..... | 10,134.19 | 5,25n.00 | 15,384.19 |
|  | Grindler-Richardson, 2nd. Sec... | 10.300.010 | 5.0190 .019 | 15,3010.100 |
| 4J | Richardson-Salchaket | 3,786.74 | 9,000.00 | 12,786.74 |
| 4 K | Salchaket-Fairbanks, 1st Sec. | 9,230.00 | 7,000.00 | 16,230.00 |
|  | Salchaket-Fajrbanks, 2nd. Sec..- | 9,650.73 | $6,500.00$ | 16,150.73 |
|  | Salchaket-Fairbanks, 3rd. Sec.-- | 9,550.00 | 6,500.00 | 16,150.10 |
| 5A | Dunbar-Ft. Gibbon | 500.00 | 1,047.00 | 1,547.01 |
| 6 A | Willow Creek-Tonsina | 2.898.05 | 12,000.00 | 14,898.15 |
| 6B | Tonsina-Chitina | 7,821.91 | 12,000.01 | 19,521.91 |
| 7 A | Summit-Chatanisa | 5,127.79 | 3,300.00 | 8,427.79 |
| 7 C | Summit-Fairbanks Creek |  | 187.01 | 187.019 |
| 7 D | Ester Creek |  | 100.010 | 100.60 |
| 7 Cr | Fairbanks-Gitmore | 1,885.58 | 3,910.00 | 5,785.58 |
| 7 I | Gilmore-Summit | 526.20 | 1,800.00 | 2,326.2 |
| 7 J | Fairbanks-Chena Hot Springs... |  | 3,014.22 | 3,014.22 |
| 7 V | Wireless Road |  | 342.00 | 342.00 |
| 8 | Nome-Council, 1st. Sec. | 1,200.00 | 9,000.00 | 10,200, 111 |
|  | Nome-Council, 2nd. Sec. | 1.144.87 | 9,000.00 | 10.144.87 |
| ${ }^{9}$ | Rampart-Eureka |  | 1,280.110 | 1.281.060 |
| 11 A | Eagle-O'Brien Creek |  | 4,670.05 | 4,670.115 |
| 11P | O'Brien Creek-Fortymile | - | 122.64 | 122.64 |
| 11 C | Steel Creek-Jack Wade |  | 610.011 | (6).fil |
| 11E | Eagle-serentymile | - | 1,406.53 | 1,4116.53 |
| $11\left({ }^{\text {a }}\right.$ | Steel Creek-Moose Creek |  | 35.04 | 35.010 |
| 11H | Liberty Cabin-Dome | ...............- | 381.84 | '351.84 |
| 13A | Nome-Bessie |  | 3,337.06 | 3,337.06 |
| 13 B | Bessie-Banner |  | 2,526.31 | 2,526.31 |
| ${ }^{13 \mathrm{C}}$ | Bessie-Little Creek |  | 566.01 | 566.01 |
| 13 F | Nome-Osborne | 3.000 .019 | 2,674.85 | 5,6it 4.85 |
| 13 K | Bessie-Buster |  | 337.07 | 337.107 |
| 14 A | Sitka-National Monument | 500.00 | 1.094.85 | 1,594.85 |
| 14 B | Sitka-National Cemetery |  | 230.35 | 2313. 25 |
| 15 | Circle-Miller House --.... |  | 3.482 .90 | 3.482.90 |
| 16 | Chatanika-Miller House, 1 st. Sec. | 15.700 .100 | 2.5101 .00 | 18.209 .141 |
|  | Chatanika-Miller House, 2nd. See. | 15.741.10 | 2,500.00 | 18,241.101 |
|  | Chatanika-Miller House, 3rd.Sec. | 14,720.62 | 2,500.70) | 17.221. 62 |
|  | Chatanika-Miller House, 4ih.Sec. | 14,848.19 |  | 14.848.19 |
| 17 | F't. Gibbon-Kaltag | 1,759.74 | 2,570.010 | 4,329.74 |
| 18 | Kaltas-Solomon | 364.70 | 2,485.00 | 2.8:9.711 |
| 18A | Bonanza-Kotzebue |  | 232.01) | 282.(10) |
| 18B | Golovin-Council |  | 64.1010 | 64.1917 |
| ${ }^{20 \mathrm{~B}}$ | Susitna-Rainv Pass |  | 800.100 | 8097.00 |
| 20 C | Rainy Pass-Big River | 2,500.00 | 1,300. 10 | $3,800.010$ |
| $2_{21}$ DB | Ophir-Dishkaket |  | 261.019 | 261. (17) |
| 21 | Unalakleet-St. Michael |  | 400.00 | 4010.10 |
| 22 | Hot Snrines-Sullivan Cr . |  | 5,760.90 | 5,760.90 |
| 23A | Olnes-Beaver .-.............................. | 2,549.64 | 1,209.00 | 3,749.64 |

EXPENDITURES IN DETAIL-(Continuted.)

| Acct. No. | Name of Route Conder | Construction | Maintenance | Totals |
| :---: | :---: | :---: | :---: | :---: |
| 2313 | Bayer-Caro | 3,607.64 | 1,875.00 | $5.482 .64$ |
| 23 C | Caro-Big Creek |  | 277.64 | 277.64 |
| 23 D | Caro-Flat Creek | 803.26 | 1,125.00 | 1,928.26 |
| 23 E | Caro-Coldfoot | 6,119.15 | 850.00 | 6,969.15 |
| 25 A | Cripple River |  | 254.00 | 254.00 |
| 25B | Penny River |  | 98.00 | 98.00 |
| 25 D | Mouth of Center Creek | . ..--............. | 75.00 | 75.00 |
| 25 E | Submarine Paystreak |  | 941.00 | 941.00 |
| 25 F | Anvil Glacier ......... |  | 1,651.30 | 1.651 .30 |
| 25 G | Snake River Extension |  | 2,040.50 | $2,040.50$ |
| 26 | Candle-Candle Creek |  | 2.868 .66 | $2,868.66$ |
| 27 | Deering-Inmachuk |  | 4,016.49 | 4,016.49 |
| 28 A | Nome-Taylor |  | 250.00 | 2.390.00 |
| 29 B | Alatna-Shungnak | 2,397.25 | 1,096.00 | 1,096.00 |
| 30 | Hot Springs Landing-Eureka |  | 1,278.64 | 1,278.64 |
| 32 A | Takotna-Flat (Summer) |  | 1,650.04 | 1.650 .04 |
| 32 AC | Candle Creek-Takotna |  | 1,033.20 | 1,033.20 |
| 32 B | lditarod-Flat | 5,000.00 | 8,606.97 | 13,506.97 |
| 32 C | Ophir-Iditarod (Whnter) |  | 864.50 | 864.50 |
| 33 C | Flat City-Flat Creek |  | 100.01 | 100.00 |
| 35 A | Archangel Extension | 6,037.35 | 2,000.00 | 8,037.35 |
| 35 C | - Palmer-Matanuska River |  | 141.51 | 141.51 |
| 35 D | Willow Creck Extension | 6,546.19 | 3,500.00 | 10,046.19 |
| 35 E | Wasilla-Fishhook |  | 6,834.43 | 6,834.43 |
| 35 F | Wasilla-Knik | 3,495.99 | $4,500.00$ | 7.995 .99 |
| 35 H | Wasilla-Finger Lake |  | 2,345.60 | $2,345.60$ |
| 35 J | Wasilla-Matanuska | 1,500.00 | 2,104.54 | 3.564 .54 |
| 35 K | Matanuska-Trunk Road |  | 1,013.35 | $\underline{1}, 013.35$ |
| 350 | Fishhook-Goldmint |  | 210.00 | 210.00 |
| 36 | Valdez-Mineral Creek | . ....-..........- | 2,924.56 | 2,924.56 |
| 38 A | Ruby-Long Creek |  | 5,594.02 | 5.594 .02 |
| 38B | Poorman-Cripple |  | 203.00 | 203.00 |
| 38 C | Ophir-Cripple |  | 140.00 | 140.00 |
| 38 D | Ophir-Takotna, 1st. Sec............... | - 8,000.00 | $3,000.00$ | 11,000.00 |
|  | Ophir-Takotra, 2nd. Sec.... | 8,577.40 | 2,400.00 | 10,977.44 |
| 38 E | Long-Poorman (Summer) | 4,093.98 | 750.04 | 4,843.98 |
| 38 EE | Long-Poorman (Winter) |  | 60.00 |  |
| 389 | Takotna Landing . | 7,374.68 | 900.00 | 8.274 .68 |
| 411 | Douglas-Gastineau Channel |  | 179.80 | 179.80 |
| 414 | Hawk Inlet Trail | 25.00 |  |  |
| 41A | Kotzebue-Shungnak |  | 965.00 | 96.5 .14 |
| 42 | St. Michael-Kotlik |  | 174.00 | 174.00 |
| 46 | Kobi-Eureka |  | 349.99 | 349.99 |
| 46.4 | Roosevelt-Kantishma | 11,843.47 | 4.500.00 | 16,343.47 |
| 46 C | Nenama-Knight's Roadhouse |  | 151.60 | 151.60 |
| 460 | Mckinlev Park Trail ............ | 3,301.49 | 960.00 | 4,261.49 |
| 46 E | Diamond-Telida |  | 398.52 | 398.52 |
| 469: | Kobi-Bonnifleld | 538.73 |  | 538.73 |
| 47 | Coldfoot-Wiseman | 1,942.61 | ${ }^{6010.010}$ | 2.542.61 |
| 49 | Davidson's Landing-Taylor |  | 4.221 .25 | 4,221.25 |
| 31 | Talkeetna-Cache Creek, 1st.Sec. | 11,413.12 | 5,040 010 | 16,413.12 |
|  | Talkeetna-Cache Creek, 2nd.Sec. | 11,300.00 | 5,000.00 | 16,300.00 |
| 53 | Cagle-Circle |  | 412.51 | 412.51 |
| 5 | Kenai-Russian River | 4,698.71 | 560.101 | 5,258.71 |
| 57 | McCarthy-Nizina | 16,355.24 | 2,760.181 | 19.1055 .24 |
| 57A | Nizina River Bridge | 14,197.58 | 2,500.70 | 15.697 .58 |
| :9 | Fairbanks Bridge |  | 5.227.59 | 5,227.59 |
| $\mathrm{f}_{1}$ | Strelna-Kuskulana. |  | 1,056.85 | 1,056.85 |
| f.1. | Kotsina-Recomnaissance | 475.93 |  | 475.93 |
| i:2 | Dime Creek-Corduroy ................ |  | 150.019 | 150.1011 |
| fi3 | Dunbar-Brooks |  | 1,450.12 | 1.450 .12 |
| f:3B | Brooks-Amy Creek |  | 610.00 | 610.010 |
| 6.5 .1 | Gulkana-Chistochina, 1st. Sec..- | - 11.000 .00 | 1,200.00 | 12.300 .90 |
|  | Gulkana-Chistochina, 2nd. Sec. | . 11,752.41 | 1,300.00 | 13,452.41 |
| 8.50 | Ketchumstuk-Tanana Crossing.- |  | 189.00 | 189.00 |
| 65 E | Chicken-Ketchumstuk |  | 672.00 | 672.01 |
| $6_{65} 5$ | GrundIer-Tanana Crossing ... | . 1,000.00 |  | 1.0600 .01 |
| $6 \cdot$ | Nome-Teller |  | 1,486.92 | 1.486 .92 |
| fir | Teller-Blupstone | 383.50 | 180.00 | 563.51 |
| fice | Teller-Marv's Igloo | 796.00 | 200.00 | 996.04 |
| 9.8 | Flageing Trails |  | 2,569.37 | 2.569 .37 |
| 73 | Kotlik-Marshall ........................... | - | 265.00 | 265.100 |

EXPENDITURES IN DETALL-(Continued.)


## EXPENDITURES IN DETAIL-COOPERATIVE FUND.

(Included in Preceding Table.)
FIPST DIVISION.

(a)--Includes $\$ 500.00$ contributed by the National Park Service

## SECOND DIVISION.

|  |  | Foderal | Territorial | Total |
| :---: | :---: | :---: | :---: | :---: |
|  | Nome-Council -.............................. ${ }^{\text {S }}$ | 10,484.87 | \$ 9,86\%.00(b) | 210,344.87 |
| $1: 3$ | Nomme- Fussie | 1,337.06 | 2,0000.00 | 3,337.116 |
| 1:31: | Bessie-Banner | 926.30 | 1,600.00 | 2,526.31 |
| 130 | Bersie-Little Creek | 366.01 | 200.101 | 566.11 |
| 13 F | Nome-Osborne | 1,680.62 | 3,994.23 | 5,674.85 |
| 13\% | Bessie-Buster | 237.07 | 100.00 | $337.10{ }^{1}$ |
| 18 | Kaltag-Solomon | 1,349.70 | 1,500.00 | 2,849.71 |
| 18.1 | Bonanza-Kotzebue | 132.00 | 100.00 | 232.00 |
| 1513 | Golovin-Council | 34.00 | 30.10 | 64.191 |
| 21 | Unalakleet-St. Michael | 150.00 | 250.610 | 409.1017 |
| $\underline{5} 5$ | Cripple River | 104.00 | 150.00 | 254.00 |
| 25 B | Penny River | 38.00 | 60.00 | 98.106 |
| $251)$ | Mouth of Center Creek | 25.00 | 50.00 | 75.10 |
| 25 E | Submarine Paystreak | 341.90 | 6010.111 | 941.191 |
| 25 F | Anvil Glacier | 651.30 | 1.000 .00 | 1,651.31 |
| 250 | Suake River Extension | 840.50 | 1,200.00 | 2,040.511 |
| $\bigcirc$ | Candle-Candle Creek | 1,368.66 | 1,500.00 | 2,868.66 |
| - | Deering-Inmachuk | 1,516.49 | 2,500.00 | 4,0116.49 |
| 28- | Nome-Taylar | 100.00 | 150.00 | 251.00 |
| 41. | Kotzebue-Shungnak | 365.06 | 600.00 | 965.111 |
| 42 | St. Michael-Kotlik | 74.00 | 100.00 | 174.919 |
| 49 | Daviclson's Landing-Taylor .... | 1,721.25 | 2,500.00 | 4,2\%1.25 |
| 6 | Dime Creek Corduroy . | 50.00 | 100.110 | 151.1919 |
| 6 |  | 586.92 | 900.00 | 1,486.92 |
| 63 | Teller-trluestone | 263.50 | 300.6 (if) | 563.511 |
| 67 C | Teller-Mary's Igloo | 396.100 | 600.00 | y96.03 |
| 69 | Flagging Trails | 1,1169.37 | 1,500.00 | 2,569.37 |
| $\because 1$ |  | 115. 10 | 150.111 | 265.18 |
| 801 | Soward Peninsula Railroad | 32.453 .95 |  | 32.6553 .85 |
| (10] | Shelter Cabins, 2nd. Div. |  | 2,249.32 | 2,249.32 |

(b)--Includes refund of $\$ 635.78$.

THIRD D: $N$.

|  |  | :1 | Territorial |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 35 H | Wasilla-Finger Lake | $\bigcirc 15.60$ | \$ | 500.00 | \$ | 2.345 .60 |
| 35 J | Wasila-Matanuska | 574.54 |  | 1,000.00 |  | 3.604 .54 |
| 35 h | Matanuska-Trunk Road | [13.35 |  | 500.00 |  | 1,113.35 |
| 36 | Yaldez-Mineral Creek .... | +.24.56 |  | 1,500.00 |  | 2,924.56 |
| $\underline{1}$ | Talkeetna-Cache Creek ..... | $\bigcirc 3104.67$ |  | 11,408,45 |  | 32,713.12 |
| 5 A | Nizina River Bridge | . 697.58 |  |  |  | 16,697.58 |
| 61 | Streina-Kuskulana | 556.85 |  | 500.00 |  | 1,056.85 |
| 910 | Shelter Cabins, 3rd Div. |  |  | 1,750.00 |  | 1,750.00 |
|  | Totals | 44,947.15 |  | 17,158.45 |  | 62.115.6 ${ }^{6}$ |

## FOURTH DIVISION.



| Federal | Territorial | Total |
| :---: | :---: | :---: |
| \$ 1,080.00 | 200.00 | \$ 1,280.00 |
| 5,360.90) | 400.00 | 5,760.90 |
| ${ }^{696.00}$ | 400.00 | 1,096.04 |
| 738.64 | 540.00 (c) | 1,278.64 |
| 12.706.97 | 900.00 | 13,606.97 |
| 764.50 | 100.00 | 864.50 |
| 5,094.02 | 500.00 | 5,594.02 |
| 15,977.40 | 6,000.00) | 21,977.40 |
| 4,353.98 | 490.00 | 4,843.98 |
| 50.00 | 10.00 | 60.00 |
| 14,343.47 | 2,000.00 | 16,343.47 |
|  | 5,325.00 | 5.325 .00 |
| 195.00 | 200.00 | 395.00 |
| 784.00 | 800.00 | 1,584.00 |
| 196.00. | 200.00 | 396.00 |
| 1.659.32 | 758.45 | 2,417.77 |

## SUMMARY.



DISTRIBUTION OF EXPENDITURES.


## DISTRIBUTION BY APPROPRIATIONS.

From appopriations for support of War Department:
F.Y. ${ }^{1922,}$ Act of June 30,1921 $\qquad$ .... $\$$ 61.44
792.81
F.Y. 1923-24, Act of June 30,1922 ,--
F.Y.
Act
1923-24,
Act
$\qquad$ $1,792.81$
-
$-\quad 560,072.61$
 From Increase of Compensation, War Department:
F.Y. 1923, Act of June 29,
F.Y.
1924, Act of March 4,
1923 $\qquad$ $3,988.95$
$41,686.41$ From the Alaska Fund, Act of Jan. 27, 1905 as amended ............ 67.683.67 From Contributed Funds, Act of June 30, 1921:

National Park Service, Sitka National Monument
Tewart \& Denhart, Caribou Trail $9,324.32$
$81,961.13$
Territory of Alaska, Roads, Bridges and Trails 81,961.13

Total . $\$ 936.107 .65$
DISTRIBUTION OF WAR DEPARTMENT APPROPRIATIONS BY PROCUREMENT AUTHORITY NUMBERS.

| Act of March 2, 1923: Authority No. |  |  |
| :---: | :---: | :---: |
| "Eng.311P-4686-A34" | --............ $\$ 112,948.55$ | Construction Work. |
| 4687 | 203,417.70 | Maintenance and Repair Work. |
| 4688 | .............. ................ | Report on Transportation Connection between Nome-shelton System and Coal Deposit |
| ‘4689 | 1,798.10 | Travel Expenses of Officers, (Reimbursement of) |
| '4691 | 72,856.10 | Subsistence (Persons and ani- mals.) |
| 4692 | 31,973.48 | Transportation, (Persons, Animals and Freight.) |
| 4693 | '748.38 | Rent and Storage. |
| 4694 | 1,245.89 | Sundry Office Supplies and Equipment, including Stationery. |
| 4696 | 74,469.96 | Field Equipment and Material. |
| 4697 | 77.25 | Teluphone and Telegraph. |
| 4698 | 4,566.82 | Incidental expense, inc. ex- change. |
| 4699 | 24,357.32 | Salaries. |
| 4701 | 31,613.06 | Wages. |
| Tota | --7--.... \$560,072.61* |  |

*-Includes refund account correction of vouchers of $\$ 664.93$.

162 ANNUAL REPORT ALASKA ROAD COMMISSION.


AINNUAL REPORT AILASKA ROAD COMMISSION. 163

## I. APPROPRIATIONS.

1. Construction and Maintenance of Military and Post Roads, Bridges



a-For Fairbanks-Council Survey.
b-Includes $455,000.00$ for Valdez dike.
c-Includes $\$ 10,000.00$ for Nome-Kewalik Survey.
d-Includes $\$ 6610.00$ for survey. Juneau Dock.
2. Construction and Malntenance of Wagon Roads, Bridges and Trails,


ANNUAL REPORT ALASKA ROAD COMMISSION.

## II. CONTRIBUTED FUNDS.

ACT OF CONGRESS APPROVED JUNE 30, 1921, ALASKA SFECIAL FUND.

1. By the Territory:
Act of Legislature approved April 21, 1919,
Public Roads, Bridges, Trails and Ferries.
Fiscal Year:
1920 $\qquad$

Approved May 7 , 1921, Public Roads, Bridges
Trails and Ferries.
Fiscal Year:

$28,0000.00$
$43,237.28$ $43,237.28$
$88,533.33$
Approved May 5, 1921, Nizina River Bridge.
Fiscal Year:
1922
1923

5,000.00 20,000.01)
Approved May 7, 1921, Shelter Cabins
Fiscal Year:
1923 $\qquad$ \$ 6.500 .00 3.500 .00
Approved May 4, 1923
Fiscal Year 1924: Shelter Cabins etc. (refunds $\$ 635.78$ )
Public Roads, et.......... $\qquad$ $\$ 15,000.00$ Total Territory $\qquad$ 1,961.13
. By Others:
Fiscal Year 1922:
 220.02
500.00
500.00
 500.00
463.75
Fiscal Year 1923:
City of Vaddez
City of Juncau $\qquad$ $\begin{array}{r}601.83 \\ -\quad 777.71 \\ \hline\end{array}$
Fiscal Year 1924:
Stewart \& Denhart $\qquad$ 540.010
City of Nome $3,504,00$1,379.54
4,5411.141
Total Contributed Funds

## The Alaska Railroad

$\qquad$ 37,802.9

> Construction and Operalion of Railroads in Alaska Construction and Equipment of Railroads Construction and Equipment of Railroads
in Alaska, $1922-23$. in Alaska, 1923 peration Construction and Equipment of Railroads Maintenance and Operation of Railroads
 161,745.97 401,613.81 210.482 .17 323,188.02 $394,212.71$
$20,635.37$

Total
. $\$ 1,511,878.05$
4. For National Park Service:

Mt. Mekinley National Park Road $\qquad$ 700.25

Total of Supervised Funds, Fiscal year 1924 \$ 1,591,775.56 Grand Total, Supervised Funds \$ $3,872,943.87$ Grand Total, All Funds $\qquad$ $\$ 3,872,943.87$




KEYSTONE CANYON RELOCATION, MILE 16, RICHARDSON HIGHWAY.


GRADING WITH TRACTORS, SEWARD PENINSULA.


FREIGHTING POLES FOR CORDUROY, SEWARD PENINSULA.


INTERLOCKING SHEET-PILES, NIZINA RIVER BRIDGE.


READY TO DRIVE PIER NO. 5, NIZINA RIVER BRIDGE,


PIER NO. 3, NIZINA RIVER BRIDGE.


WORTHINGTON GLACIER, MILE 29, RICHARDSON HIGHWAY.


DRIVING NIZINA RIVER BRIDGE PIERS.

CONSTRUCTION CAMP, MILE 151, RICHARDSON HIGHWAY.


TOLOVANA TRAMROAD BEFORE REHABILITATION.


CATERPILLAR TRAIN NEAR MILLER'S, MILE 220, RICHARDSON HIGHWAY.


ANCHORAGE-EAGLE RIVER ROAD.


KANATAK-BECHAROF LAKE. COLD BAY OIL FIELDS.


THE FLOWER-BORDERED RICHARDSON HIGHWAY, MILE 140.


MILE $11 / 2$, MT. McKINLEY NATIONAL PARK.


CHULITNA RIVER BRIDGE NEAR HONOLULU, 360 FOOT SPAN FOR PACK HORSES.


TRAIL FERRY ACROSS TANANA RIVER, RICHARDSON
HIGHWAY, A.T MILE 281.


SNAKE RIVER BRIDGE, TWO 100 FOOT SPANS, NEAR NOME.


BRIDGE ERECTION DURING WINTER TIME,


PILEDRIVER BRIDGE, MILE 343, RICHARDSON HGHWAY.


NOME RIVER BRIDGE, 150 FOOT SPAN, SEWARD PENINSULA RAILROAD (PUPMOBILE).


CHATANIKA RIVER BRIDGE, ONE 100 FOOT AND ONE 150
FOOT TRUSS.


OTTER CREEK BRIDGE NEAR IDITAROD, 100 FOOT TRUSS.


BRIDGE AT TACOTNA, OPHIR-TACOTNA ROAD.


CLEARING TALKEETNA.CACHE CREEK ROAD.


BURNS SLOUGH BRIDGE, SEWARD-KENAI ROAD.


NOME-COUNCIL ROAD, POLES TO LOCATE CULVERTS AFTER


TYPICAL SEWARD PENINSULA TERRAIN, BESSIS-BANNER ROAD.



ENGINEER OFFICER OF THE BOARD AT SUMMIT OF RAINY
PASS, NOME: 669 MI.; SEWARD, 389 MI.


WINTER FREIGHTING, TALKEETNA-CACHE CREEK ROAD.


DRIVING NEW BRIDGE ACROSS VALDEZ GLACIER DEETA AFTER


ELEVEN DOGS DRAWING 1,300 POUNDS, TALKEETNA-CACHE CREEK ROAD.



HAULING PILES WITH TRACTOR IN $3 / 2 \mathrm{FT}$. SNOW.


TRESTLE ACROSS GLACIER STREAM NEAR MILLERS, MILE 230, RICHARDSON HIGHWAY.


WINTER TRAIL, BROAD PASS, ALASKA RANGE,


SHEEP CREEK CANYON, 175 FOOT SPAN, MILE, 19, RICHARDSON HIGHWAY,

