

GREAT NORTHERN RAILWAY LINE

EASTERN DIVISION.

TIME TABLE NO. 3

To Take Effect at 12:01 a. m., Central Time,

Sunday, Aug. 31st, 1902.

DESTROY ALL TIME TABLES OF PREVIOUS DATE WHEN THIS TAKES EFFECT. Rule No. 5.

General Rules, Regulating the Movement of Trains, are contained in Book of Rules for the Government of the Operating Department, a copy of which must be in Possession of each Employee in Train Service while on Duty. Rules A and B. This Time Table is in no case intended for the information of the public, or as an advertisement of the time or hours of any train. The Company reserves the right to vary from it at pleasure. It is for the information of Employees only. Rule 4.

E. L. GILBOY,
Train Master.

J. C. HOWARD,
Asst. Supt.

D. M. PHILBIN,
Superintendent.

J. M. GRUBER,
Asst. Gen. Supt.

F. E. WARD,
Gen. Supt.

FIRST DISTRICT. DULUTH TO COON CREEK JUNCTION.

TRAINS GOING WEST.

STATIONS	TRAINS GOING WEST.															Telegraph Office	Distance from Duluth	Coal and Water Stations.	STATIONS
	Third Class				Second Class		First Class		First Class		First Class		First Class						
	No. 233	No. 253	No. 249	No. 251	No. 219	No. 223	No. 31	No. 15	No. 13	No. 17	No. 19	No. 19	No. 19	No. 19					
Way Freight	Local Freight	Local Freight	Local Freight	Time Freight	Time Freight	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger						
Except Sunday				Daily		Except Sunday		Daily		Daily		Except Sunday							
Duluth															D N	0.00		Duluth	
Bridge Switch															D N	2.20		Bridge Switch	
West Superior, U. D.															D			West Superior, U. D.	
West Superior															D N	4.02	CW	West Superior	
South Superior															D	8.25		South Superior	
Saunders															D N	10.14	W	Saunders	
Boylston															D N	13.29		Boylston	
Dedham															D	18.41	W	Dedham	
Foxboro															D	24.59		Foxboro	
Holyoke															D	29.91	W	Holyoke	
Nickerson															D N	36.66	W	Nickerson	
Kerrick															D	43.11		Kerrick	
Bruno															D	48.84	W	Bruno	
Partridge															D	57.23		Partridge	
Sandstone															D N	63.28	CW	Sandstone	
Hinckley															D N	71.91		Hinckley	
Brook Park															D N	80.51	W	Brook Park	
Cornell															D	85.75		Cornell	
Grasston															D	91.32	W	Grasston	
Braham															D N	96.62		Braham	
Grandy															D	102.47		Grandy	
Cambridge															D N	107.43	W	Cambridge	
Isanti															D	113.07		Isanti	
Bethel															D	119.09	W	Bethel	
Cedar																125.20		Cedar	
Andover															W	131.16		Andover	
Coon Creek Jct.															D N	136.89		Coon Creek Jct.	
Minneapolis																149.48		Minneapolis	
Como																156.89		Como	
St. Paul																159.92		St. Paul	

SPECIAL RULES.

WEST BOUND TRAINS HAVE RIGHT OF TRACK OVER EAST BOUND TRAINS OF THE SAME OR INFERIOR CLASS. See Rule 43

Yard limit extends from West Superior to Bridge 16 west of Boylston.
Switch at west end of passenger track, near Twenty-fifth St., West Superior, is kept set for East bound freight track.

Yard limit boards at Sandstone are located three-quarters of a mile west of west lead track, and three-quarters of a mile east of east end Kettle River Bridge.—See Rules 52, 53 and 230.

All *Span Bridges* must be carefully approached and run over at reduced speed. First-class trains will not cross Nemadji or Kettle River Bridges at greater speed than 30 miles per hour, and other

On the Terminals Division and Duluth & Superior Short Line, Eastern Division Trains will be governed by the Time Tables and Rules of these Companies respectively. RULE F.

Switch at end of double track at Boylston will be kept set for S cond District trains. See Rule 59.
Double track extends from West Superior to Boylston and from Hinckley to Brook Park.

trains at more than 15 miles per hour. Air must in all cases be released before reaching these bridges and not kept set while crossing. Engineers must not work steam over Kettle River Bridge when it can be avoided. See Rule 109.

All trains will register at West Superior, Allouez, Boylston, Sandstone, Hinckley, Brook Park and Coon Creek Junction. Nos. 19 and 20 will register at Boylston and Hinckley by time ticket. (Form 1115). See Rules 45 and 160.

On double track all trains will take left hand track, except as provided for in special rules or orders, or when necessary to cross over to do work at stations. See rules 45, 48, 49, 57 and 59.

Switch at end of double track at Hinckley will be kept set for west bound trains.
Switch at end of double track at Brook Park will be kept set for east bound Eastern Division trains.

D. McNAB, CHIEF TRAIN DISPATCHER.

SECOND DISTRICT. BOYLSTON TO CASS LAKE.
 TRAINS GOING EAST.

FIRST DISTRICT. DULUTH TO COON CREEK JUNCTION.

TRAINS GOING EAST.

STATIONS	Track Scales, Turn Tables & R.R. Cross	Car Capacity of Sidings and Spurs	Distance From St. Paul.	Telegraph Call	TRAINS GOING EAST.											STATIONS		
					First Class	First Class	First Class	First Class	First Class	Second Class	Third Class	Third Class	Third Class	Third Class				
					No. 20	No. 18	No. 14	No. 16	No. 34	No. 224	No. 250	No. 252	No. 234	No. 254				
					Time Freight	Local Freight	Local Freight	Way Freight	Local Freight									
Duluth	O T		159.92	D U	2 00 PM Ar	6 30 AM Ar	6 43 PM Ar	12 40 PM Ar										Duluth
Bridge Switch			157.72		1 50	6 23	6 38	12 35										Bridge Switch
West Superior, U. D.				B Y	1 39 Mt 19	6 10	6 25	12 22										West Superior, U. D.
West Superior	O T		155.90	W S					5 30 AM Ar		6 15 PM Ar		7 45 PM Ar					West Superior
South Superior	X		1151.67	S U	1 24	5 53	6 15	12 05	5 07		5 50		7 25					South Superior
Saunders			200149.78	B	1 20	5 47	6 11	12 01 PM	5 00		5 40		7 15					Saunders
Boylston			146.68	J	1 15	5 38	6 03 PM De	11 55 AM De	4 50		5 30		7 00 PM De					Boylston
Dedham			105141.51	D M	1 07	5 27			4 37		5 10							Dedham
Foxboro			147135.33	B O	12 58	5 12			4 20		4 45							Foxboro
Holyoke			70130.01	H Y	12 49	4 56			4 05		4 15							Holyoke
Nickerson			227123.26	N S	12 39	4 42			3 45		3 50							Nickerson
Kerrick			76116.81	K	12 29	4 23			3 25		3 25							Kerrick
Bruno			157111.08	U N	12 21	4 07			3 05		3 02 Mt 19							Bruno
Partridge			82102.69	R D	12 08	3 43			2 33		2 20							Partridge
Sandstone	O T		70096.64	O N	11 58	3 25		8 55 PM Ar	2 10 Mt 17	4 30 PM Ar	1 45 PM De	6 15 PM Ar						Sandstone
Hinckley	X		8588.01	H	11 44	3 00		8 40	1 00	3 40 Mt 19		5 40						Hinckley
Brook Park			7279.41	B K	11 33	2 35	2 23	8 25 PM De	12 35	2 50		5 15 PM De						Brook Park
Cornell			7474.17	C N	11 23	2 22			12 15 AM	2 15								Cornell
Grasston			11268.60	S A	11 13	2 10			11 57	1 45								Grasston
Braham			14263.30	R A	11 03	1 58			11 42	1 15								Braham
Grandy			8457.45	S D	10 52	1 40			11 26	12 30 PM								Grandy
Cambridge			15052.49	C A	10 44	1 30			11 12	11 59 Mt 249								Cambridge
Isanti			13146.85	I S	10 34	1 14			10 57	11 00								Isanti
Bethel			13040.83	B E	10 24	1 00			10 40	10 24 20 Ps								Bethel
Cedar			8134.72	C D	10 14	12 45			10 23	9 25								Cedar
Andover			8128.76	D O	10 04	12 32			10 07	9 00								Andover
Coon Creek Jct.	X		6923.03	C K	9 55	12 20	AM De		9 50 PM De	8 35 AM De								Coon Creek Jct.
Minneapolis			10.44		9 25	11 50												Minneapolis
Como			3.03		9 20	11 35			7 30 PM De	6 30 AM De								Como
St. Paul			0.00		9 00 AM De	11 10 PM De												St. Paul
					Except Sunday	Daily	Daily	Except Sunday	Except Sunday	Daily	Except Sunday	Except Sunday	Except Sunday	Except Sunday				
					No. 20	No. 18	No. 14	No. 16	No. 34	No. 224	No. 250	No. 252	No. 234	No. 254				

D. S. & W. T. Co.

D. S. & W. T. Co.

Alfouez	O X		BJ
Saunders	X		B
Pokegama Junction			

Alfouez	5.00
Saunders	1.81
Pokegama Junction	

BOYLSTON TO CASS LAKE.

SECOND DISTRICT.

TRAINS GOING WEST.

TRAINS GOING EAST.

TRAINS GOING WEST.				Telegraph Offices	Distance from DULUTH	Coal and Water Stations	STATIONS	T'k scales, 'n tables wyes & RR crossings	Car Capacity of Sidings and Spurs	Telegraph Calls	TRAINS GOING EAST.				
Third Class	Second Class	First Class	First Class								First Class	First Class	Third Class		
No. 253	No. 219	No. 15	No. 13								No. 14	No. 16	No. 254		
Local Freight	Time Freight	Passenger	Passenger								Passenger	Passenger	Local Freight		
Except Sunday	Daily	Except Sunday	Daily												
5 45 am De	8 40 pm de	3 00 PM De	8 35 am De	D N	13.29	Boylston	None	J	6 03 PM Ar	11 55 AM Ar	7 00 PM Ar				
f 6 05	9 00	3 10	8 45		19.19	Dewey	None		5 52	f 11 42	f 6 40				
f 6 17	9 12	f 3 15	8 50	D N	21.99	State Line	X	None	S	5 46	f 11 37	f 6 25			
f 6 40	9 45	f 3 24	9 00	D N	28.59	Huson	70	U		5 36	f 11 27	f 6 10			
f 6 55	10 03	f 3 32	9 08		32.04	Wrenshall	70			5 28	f 11 19	f 5 55			
f 7 10	10 13	s 3 37	s 9 13	D N	34.71	Carlton	X	81	A	s 5 23	s 11 13	f 5 45			
f 7 35	10 40	s 3 54	s 9 30	D	41.15	Cloquet	O	182	K N	s 5 06	s 10 57	s 5 20			
f 8 10	10 50	f 3 57	9 32	D N	42.33	North End	None	H N		5 02	f 10 52	f 5 10			
f 8 50	11 10	f 4 05	9 38	D	46.00	Nagonab	144	N A		4 55	Pass 254	f 10 47	s 4 55		
9 25	11 20	4 11	9 44		49.14	Draco	68			4 49	10 41	4 30			
f 9 49	11 30	f 4 17	9 49	D N	52.00	Brevator	69	B V		4 44	f 10 36	f 4 17	Mt 15		
s 10 25	12 01 am	s 4 34	s 10 00	D N	57.71	Brookston	181	X	s	4 34	Mt 15	s 10 25	Mt 253		
f 10 45	12 25	f 4 45	10 12		64.21	Congo	69	C T		4 20	f 10 12	Mt 13	f 2 50		
					65.60	Paupores Siding	19								
f 11 05	12 55	f 4 55	10 22		70.18	Gowan	142	G W		4 10	f 9 55	f 2 15			
s 11 25	1 15	s 5 06	s 10 32	D N	75.53	Floodwood	238	O D	s	4 00	s 9 45	s 1 45			
f 11 50	1 35	f 5 17	10 46		81.61	Island	143	D X		3 48	f 9 34	f 1 00			
f 12 20	2 00	f 5 32	11 01		88.32	Wawina	69	W I		3 33	f 9 22	f 12 20	PM Mt 253		
s 1 00	s 2 30	s 5 40	s 11 10	D N	92.06	Swan River	261	W A	s	3 25	9 15 AM De	s 11 55			
					97.06	Feeley's Spur	28								
f 1 20	2 55		11 22		98.06	Verna	69			3 15		s 11 22	Mt 13		
f 1 40	3 15		11 31		104.12	Blackberry	69			3 06		f 10 40			
s 2 51	3 45		s 11 44	D N	111.57	Grand Rapids	138	G R	s	2 51	Mt 253	s 10 10			
f 3 15	4 05		f 11 53	D	116.38	Cohasset	33	C H	f	2 41		f 9 05			
f 3 25	4 10		11 58		118.76	Hull	70			2 37		f 8 50			
					120.83	Weller's Spur	13								
s 4 20	4 35		s 12 09	D N	125.67	Deer River	106	R I	s	2 25		s 8 20			
					130.37	Stark's Spur	17								
f 5 00	5 05		f 12 20		132.50	Ball Club	90			f 2 13		f 7 35			
f 5 25	5 30		12 30		139.13	Nushka	70			2 02		f 7 15			
s 6 00	5 55		s 12 40	D N	145.76	Bena	112	B A	s	1 51		s 6 55			
f 6 35	6 25	Mt 254	12 53		152.96	Schley	68			1 37		f 6 25	Mt 219		
f 7 05	6 45		1 05		159.97	Cuba	69			1 25		f 5 55			
7 40 PM Ar	7 00 AM Ar		1 15	D N	164.85	Cass Lake	0	T Y		1 15	Mt 13 PM De	5 35 AM De			
										Daily	Except Sunday	Except Sunday			
No. 253	No. 219	No. 15	No. 13							No. 14	No. 16	No. 254			

SPECIAL RULES.

WEST BOUND TRAINS HAVE RIGHT OF TRACK OVER EAST BOUND TRAINS OF SAME OR INFERIOR CLASS. See Rule 43.

Yard limits, Cloquet, extend from ¼ mile west of North End to one and one-half mile east of Cloquet passenger depot. Yard limits Brookston extend one mile each direction from depot. Yard limits Cass Lake, extend one mile east of depot.

All trains and engines must approach Boylston, Cloquet, Brookston, Swan River, Cass Lake under full control, expecting to find switch engines using main track. See rules 53, 56, 226, 229 and 230. Double track extends from Boylston to State Line Tower, and from Carlton to North End. Switches at North End, Carlton and State Line Tower will be set for east-bound trains. On double track all trains will take left hand track, except as provided for in Special Rules, or orders; or when necessary to cross over to do work at stations. See Rules 45, 48, 49, 57 and 59. Trains 13 and 15 will use east-bound track between State Line and State Line Tower.

Extra trains have running rights on double track between Boylston and State Line Tower without train orders. Work trains doing work within said limits must procure proper orders.

All East-bound Trains will register at Cass Lake, Swan River, Brookston, North End, State Line Tower and Boylston.

All West-bound Trains will register at State Line Tower, Carlton, North End, Brookston, Swan River and Cass Lake.

Numbers 13, 14, 15 and 16 will register by time ticket (form 1115) at Boylston, State Line Tower, Carlton and North End, and all west-bound schedule freight and extra trains will register by time ticket (form 1115) at Boylston and Carlton.

West bound extras will take siding for east bound extras at meeting points: No. 15 will take Siding for No. 14 at meeting point.

Drawbridges over Ball Club River, west of Stark's Spur, and Mississippi River, west of Ball Club. See Rule 56. **Passenger trains** will reduce speed to 25 miles per hour and freight trains to 6 miles per hour when crossing Bridge No. 8, one mile east of Wrenshall. Air must be released before reaching bridge and not used while passing over same.

D. McNAB, Chief Train Dispatcher.

MISSABE LINE.

TRAINS GOING WEST										TRAINS GOING EAST									
		Third Class	First Class	Telegraph Offices	Distance from DULUTH	Coal and Water Stations	STATIONS	T'nscales, t'n tables wyes & RR crossings	Car Capacity of Sidings	Telegraph Call	First Class	Third Class							
		No. 255	No. 23								No. 24	No. 256							
		Local Freight	Passenger								Passenger	Local Freight							
		Except Sunday	Except Sunday																
				D N	57.71	CW	Brookston		44	X									
				D N	63.11		Arlberg		44	R B									
					68.90		Baden		44	B N									
				D N	73.72	W	Ceylon		44	C Y									
				D N	78.80		Dumblane		44	M B									
					83.82		Fermoy		44	F Y									
				D N	89.42	W	Para		44	P A									
					94.78		Malden		44	M A									
					99.21		Saxe		44	S X									
	s 11 00 AM De		7 20 AM De	D N	103.79	CW	Ellis	Y	100	A D	s 7 43 PM Ar		9 30 PM Ar						
	s 11 10		f 7 27		107.53	W	Lucknow		30	K O	f 7 36		s 9 15						
	s 11 35		s 7 34	D N	108.90		Buhl		95	B U	s 7 33		s 9 10						
	s 11 55		f 7 43		113.34		Exmore		31		f 7 22		s 8 45						
	s 12 01 PM		s 7 47	D N	114.32		Barclay Jct.	None	U N	s 7 20			s 8 35						
	s 12 40		s 8 05	D N	117.83		Hibbing	X	78	H D	s 7 08		{ 8 20						
	s 12 45		s 8.08	D N	119.59		Agnew Junction	Y		A G	s 7.00		{ 7 17						
			s 8.14								s 6.54		7 07						
			s 8 12	D	120.19		Mahoning		175	M N	s 6 56								
	s 12 55		f 8 19	D	121.68	CW	Kelly Lake		110	Ky	f 6 48		s 6 57						
	s 1 25		f 8 29		126.58		Leighton	Y	76	W	f 6 35	Pass 256	s 6 35 24 Pass						
	s 1 45		f 8 35		130.02		Stuart		35		f 6 25		s 6 10						
	s 2 05		f 8 42	D	132.90	W	Bengal		69	S K	f 6 18		s 6 00						
	s 2 30		f 8 53		138.48		Acropolis		33		f 6 04		s 5 35						
	s 2 45		f 9 00		141.26		Gardner		88	G	f 5 56		s 5 20						
	s 3 15 PM Ar		9 15 AM Ar	D N	147.45	CW	Swan River	X Y	261	W A	5 42 PM De		5 00 PM De						
				D	154.45	CW	Mississippi	T	225	G O									
											Except Sunday		Except Sunday						
											No. 24		No. 256						

VIRGINIA BRANCH

TRAINS GOING WEST										TRAINS GOING EAST									
		Third Class	First Class	Telegraph Offices	Distance from DULUTH	Coal and Water Stations	STATIONS	T'nscales, t'n tables wyes & RR crossings	Car Capacity of Sidings	Telegraph Call	First Class	Third Class							
		No. 257	No. 15								No. 16	No. 258							
		Local Freight	Passenger								Passenger	Local Freight							
		Except Sunday	Except Sunday																
		9.30 PM De	s 7 48 PM De	D N	103.79	CW	Ellis	Y	100	A D	s 7 15 AM Ar		s 11.00 AM Ar						
		s 9.35	f 7 52		104.73		Kinross	None			f 7 12		s 10.45						
		s 9.40	f 7 53		105.07		Cardiff		30		f 7 10		s 10.43						
		10.00 PM Ar	8 05 PM Ar	D	110.48	W	Virginia	Y	136	V a	7 00 AM De		10.30 AM De						
											Except Sunday		No. 258	Except Sunday					

SPECIAL RULES.

WEST BOUND TRAINS HAVE RIGHT OF TRACK OVER EAST BOUND TRAINS OF THE SAME OR INFERIOR CLASS. See Rule 43.

Yard Limits, Swan River, extend 1 mile from R R. crossing in each direction. See rule 69.

All trains will register at Mississippi, Swan River, Stevenson, Agnew Jct, Mahoning, Hibbing, Ellis, Virginia and Brookston.

Switches on Wye at Ellis will be kept set for Missabe Line, except one on north leg which will be kept set for Virginia-Brookston Line.

All trains and engines must approach Mississippi, Swan River, Agnew Junction, Hibbing Barclay Junction, Exmore, Buhl and Virginia and all mining spurs under full control, expecting to find switch engines using main track.

Switch at Agnew Junction will be kept set for Hibbing Line.

West-bound extras will take passing track for east-bound extras at meeting points.

D MONAB, CHIEF TRAIN DISPATCHER

SPECIAL RULES—Important Changes Have Been Made.

Empty Flat and Coal Cars must be hauled behind all loaded cars and empty box, stock and refrigerator cars.

Cars must not be left on Passing Tracks without special authority from the Superintendent. See Rule 170.

Trestles must be well looked to. No precise rule can be made for the regulation of speed over them. See Rule 109.

Clocks regulated to Standard Time located at Train Dispatcher's Office, West Superior, at Cass Lake, Sandstone, and at Ellis. See Rules 3, 161, 224.

Conductors must not allow passengers to ride on any freight trains, except numbers 25, 26, 27, 28, 53, 54, 55, 56, 57 and 58 without special permit from Superintendent or President. See Rule 180.

Enginemen will keep dampers of ash pans closed while crossing long bridges and trestles. See Rule 233.

When engines of freight trains having 20 or more cars are obliged to take water, train will stop before reaching tank. Head Brakeman will cut train between 1st car and engine, allowing engine to go to tank. See Rules 52, 53, and 230.

Yard Limits must not be entered by trains except under full control, and within limits passenger trains or light engines will not exceed a speed of fifteen miles an hour, and freight or work trains a speed of ten, *except per schedule*. See Rules 53, 69 and 229.

Although not provided for by the book of rules, operators must block trains five minutes apart by turning train order board immediately after caboose or rear of train has passed same 300 feet.

Station siding and spur track car capacity figured at 40 ft. to car. No allowance for engine and caboose.

Railroad Crossings not protected by interlocking apparatus located at:

- 1.40 miles west of Barclay Junction (D. M. & N. Ry.) 0.70 mile east of Cardiff (M. S. Ry.)
- Swan River. Deer River (I. L. Co.). 200 feet east of Hibbing (D. M. & N. Ry.)
- 1 3/4 miles east of Malden (M. S. Ry.)

Conductors and enginemen must report to Division Superintendent absence of switch lights where usually shown. See Rules 30, 226, 244.

In crossing N. P. Ry. at South Superior, State Line, Carlton and Coon Creek Junction; the C. St. P. M. & O. Ry., at Allouez, the Northern Pacific R. R. at Carlton and Hinckley, trains will be governed by home and distant signals of interlocking apparatus.

When distant signal is in horizontal position or shows red & green lights trains may pass it but must be prepared to stop before passing home signal. When home signal is in a horizontal position or shows a red light no train must pass it. When both distant and home signals are in an inclined position or show green light, trains may proceed without stopping. Speed limit over crossings will be twenty miles per hour for passenger trains and ten miles per hour for freight trains. See book of rules governing interlocking crossings issued by Eastern Railway of Minnesota. See Rules 53, 56, 226, 229 and 233.

- S. Regular Stop. W. Water Station. F. Stop only on Signal or to leave Passengers.
- C. Coaling Station. O. Track Scales. T. Turn Table.
- X. Railroad Crossing. D. Day Telegraph Office. DN. Day and Night Telegraph Office. Y. Wye.

See Rule 7.

CAREFULLY EXAMINE BULLETIN BOARDS DAILY. Rules 150, 161, and 224.

CONTENTS OF MEDICAL CASE.

Conductors Must Study and Familiarize Themselves with the List of Articles in the Case And Their Uses.

- No. 1. Rubber Bandage and Tourniquet for stopping hemorrhage; apply on sound flesh above the wound, draw tightly each time, and encircle the limb until the whole bandage is used. Fasten securely in slot.
- No. 2. Twelve Assorted Muslin Bandages, to hold dressings in place, assist in stopping hemorrhages, and hold splints upon fractured limbs; wind around the injured part from below upward.
- No. 3. Six packages of Borated Gauze, a prepared dressing for open wounds, always used to cover large wounds; apply wet (by dipping in solution, see No. 7) directly to the wound.
- No. 4. Four packages Absorbent Cotton This is for making compresses, and to assist in covering a large wound. Do not apply directly to the wound.
- No. 5. One ounce Styptic Cotton. This Cotton is permeated with a substance which stops small hemorrhages; apply directly to small wounds and hold in place with muslin bandages.
- No. 6. Two ounces Bicarbonate Soda, for burns and scalds, one teaspoonful to a quart of water; saturate a piece of the gauze and apply over a burn or scald, and fasten with bandage.
- No. 7. One bottle Corrosive Sub. Tablets. These small tablets are to be dissolved in clean water, preferably warm, in the proportion of one tablet to a pint of water; with this solution you disinfect a wound and keep it free from infection. **THEY ARE POISONOUS** if swallowed or the solution be drunk.
- No. 8. Four Surgical Needles, to be used for closing small cuts or jagged wounds after thoroughly cleansing with the sublimate solution.
- No. 9. One pair Scissors, used in cutting dressings, bandages, clothing, etc.
- No. 10. One Pair Forceps, used for removing bits of gravel, and to seize a bleeding artery while it is being tied.
- No. 11. One Dozen Envelopes Catgut (two sizes) to be used in tying an artery when it is seen free and bleeding in a wound, also for closing small wounds. Never save any catgut once the envelope is open. Note directions on envelopes.
- No. 12. One Roll Adhesive Plaster, for closing small torn or cut wounds, after they are cleansed with the sublimate solution. It needs no heat; apply directly to the skin, which must be perfectly dry.
- No. 13. One Cake Red Cross Soap, used in cleansing an injured part around a wound.
- No. 14. One can Chloroform, for anaesthesia.
- No. 15. One Ounce Antifebrine, an antiseptic powder for dusting on fresh wounds.
- No. 16. One Hand Brush, for brushing the hands and nails with Red Cross Soap before handling an open wound.
- No. 17. One Enamel Tray, for corrosive sublimate solution (see No. 7).
- No. 18. One Yard Wire Gauze, for making splints (see directions under fractures, No. 5).
- No. 19. One Dozen Safety Pins.
- No. 20. One Pyramid of Pins.

RULES FOR TREATMENT OF THE INJURED IMMEDIATELY AFTER AN ACCIDENT.

1. Shock. This condition usually follows every severe injury. The chief point is to restore heat to the body as soon as the injured person is put in a comfortable position. Do this by covering with heavy coats, previously warmed, if practicable. Cut off the shoes or boots and wrap the feet in a warmed coat or blanket. Give only small dose whiskey in hot water.
2. Hemorrhage (bleeding). This follows shock, and is rarely severe until reaction takes place. Too much stimulation increases hemorrhage and for this reason it is best to give only a little stimulant, well warmed, and repeat the dose if reaction is delayed.
Bleeding of two kinds: First, arterial, when the blood comes out bright and red and spurts. Second, venous, when the blood is dark and flows in an even stream.
A. To stop hemorrhage when the wound is large and the blood comes out in spurts. Apply the rubber band tightly just above the wound, previously rinsing the wounded part, especially if it be a limb. Be careful to put the band on **UNINJURED FLESH** if the limb be badly crushed and about three inches above the crushed tissues, else it would slip down and increase the hemorrhage. Be very careful to see that the band be firmly fixed before leaving it. Small wounds, even though the hemorrhage be arterial, require only a firm compress of the sublimate gauze placed immediately over the wound and bandaged tightly in place with one of the muslin bandages. It is best after this to bandage firmly from the extremity (hand or foot) upward to beyond the wound with muslin bandages.
B. Venous bleeding, which occurs when the wound is shallow (does not go deeper than the skin), as a rule requires firm pressure over the wound and especially below it. If the wound be quite small, put a wad of styptic cotton into and over it and bandage tightly in place, and then apply a bandage from below upwards over and beyond the wound. If the wound be extensive, fill it full of sublimate gauze and then put a thick wad of absorbent cotton over it and bandage tightly from below upward.
C. Bleeding from the head, if only the scalp is involved, may be controlled by bringing the wounded or torn surfaces together and applying along the wound a thick layer of styptic cotton, and over this another layer of absorbent cotton and a tight bandage. It is well to pass the bandage under the chin if the wound be on top of the head, as this holds it firmer and tighter.
3. Remove the clothing from the wounded part by cutting it away. Do not attempt to tear or draw clothing off, as this may further injure the wounded part. Always see the wound and know by your eye just what the nature of it is.
4. After Hemorrhage has been stopped. The next point is to prevent the wound from being infected and thus prevent blood poisoning. To accomplish this the wound should be cleaned if badly soiled. If soiled by oil or soot or dirt, bathe it gently with a small quantity of antiseptic soap and warm water. After it is apparently clean, wash it out carefully with a pint of warm water in which one of the corrosive sublimate tablets has been dissolved, using a piece of gauze to do this. Then wet several layers of the borated gauze in a fresh solution of the same strength used in washing the wound and lay them over the wound and bandage in place with a muslin bandage. Always cover all open wounds with a piece of gauze wet in the solution of corrosive sublimate (one tablet to a pint of water) before transporting the wounded man. Never allow an open wound to remain unprotected longer than the time employed in stopping hemorrhage. Remember a soiled covering is worse than none at all, however.

5. Fractures. If a bone be broken in any of the limbs the member should be firmly fixed before the injured individual be moved. If this be not done, great injury may result by the movements of the sharp fragments of the bone while the individual is being transported. Use flat piece of wire gauze, broken or cut into strips long enough to reach beyond the two nearest joints, will do. A bundle of twigs or stout straws may also serve when nothing else is to be had. Always put one of the improvised splints on either side of the limb, then tie a bandage over the splints at either extremity and in the middle. If there be a wound treat it according to the foregoing rules and then apply the splints, using some clean gauze as padding or some strips torn from clothing. If there be no wound, apply the splints over the trousers or sleeve. If nothing of any kind can be obtained to make a splint, tie the fractured leg or thigh to the sound one, or the fractured arm firmly to the side of the body, by a muslin bandage.

6. Compound fractures are fractures accompanied by a wound of the soft tissues at the point of fracture, so that the bone is exposed to the air. In these cases treat hemorrhage and the wound according to the foregoing rules and then apply splints. If the bones project beyond the skin, remember to bring them back into place by pulling the extremity in the direction of the displacement, never in the direction the bone normally should be, until the ends of the fragments are quite free from any over-riding. Be very careful always to cover these WOUNDS with the wet sublimate GAUZE and bandage it on.

7. Burns. Carefully remove the clothing by cutting it off, if the part be clothed, and apply immediately three or four thicknesses of the borated gauze wet in warm water, in which one tablespoonful of the bicarbonate of soda to the quart has been dissolved. As a rule never attempt to clean burns immediately after they occur. Cover the wounded part immediately as directed above and leave the cleaning to the surgeon afterward.

Extensive burns are attended by great shock as a rule, and require free stimulation. As burns are very rarely followed by hemorrhage, stimulants may be and should be given in considerable quantities.

8. Prostration from Excessive Heat. In these cases (not sunstroke) the face is pale, lips colorless or blue, breathing slow and quiet, pulse slow and very weak. Place the patient on his back, with his head level with his body, and loosen clothing. Apply heat to the surface of the body and extremities. Bathe the face with warm water into which a little alcohol or whiskey has been poured, and if he can swallow, give the patient an ounce of whiskey in as much warm water.

B. Prostration from Drinking too much Ice Water when Overheated. The face is red or even purple, the breathing heavy and irregular and pulse irregular. Loosen clothing, place on back with head slightly elevated. Give hot drinks, apply heat to the spine and the extremities.

9. Position in which a Patient should be Placed after Injury. Injuries to the head require that the head be raised higher than the level of the body. In all cases, if practical, lay the patient on his back with the limbs stretched out in their natural positions; loosen the collar and waistbands, and unless the head be injured, remember to have the head on the same level as the body. Do not bolster it up with anything.

INSTRUCTION FOR STRETCHERS.

The equipment includes—

- 1 Stretcher,
- 1 Pair of Blankets,
- 1 Pillow,
- 1 Pillow Case,
- 1 Rubber Pillow Case,
- 1 Water-proof Cover,
- 1 Pair Wall Brackets.

The bedding and side pieces are to be kept strapped on the stretcher, and the latter placed on the wall bracket.

When about to use the stretcher, unbuckle the straps from the side pieces which hold down the bedding, and buckle them tightly underneath, to guard against the breaking of a spring; place the side pieces properly on the sides, place the rubber cover over the stretcher for protection against blood and discharges. The blanket is to be used double, as a cover for the patient.

Whenever necessary to do so, the patient may be lifted on the inner portion of the stretcher, resting on the springs, without lifting the whole stretcher. In cramped positions, and for purposes of examination, this will be found convenient.

When storing the stretcher away, fold the blanket and pillow neatly into a narrow, even and compact parcel, and envelop this in the rubber cover, folding in the ends first. Place this on the stretcher with the side pieces on top, to assist in holding it in position, then pass the straps through the keepers on the side pieces, and fasten all snugly in place. This will protect the bedding, if properly done, from moths and wet. The whole stretcher should then be placed on the brackets.

The blankets should be taken out occasionally and shaken, to prevent damage from moths, as well as to keep it cleanly at all times. Replace at once, so that the stretcher is ready for immediate use whenever required.

The stretcher and bedding must not be used for any other purpose than in transporting injured persons. Agents will be personally responsible for the care of property, and will be particular to take proper receipts whenever it is allowed to go out of his possession, and will notify his Division Superintendent when sent out and by whom.

Stations where stretchers are kept are as follows:

Cass Lake Depot, West Superior Shops, Sandstone Depot, Brookston.

Company's Surgeons.

W. E. GROUND, Chief Surgeon, West Superior, Wis.
GEO. C. GILBERT, Grand Rapids, Minn. D. W. COWAN, Sandstone, Minn.
C. D. HARRINGTON, Cloquet, Minn. H. B. ALLEN, Cloquet, Minn. D. C. ROOD, Hibbing, Minn.
O. S. WATKINS, Carlton, Minn. R. B. HIXSON, Cambridge, Minn.
C. B. LENONT, Virginia. R. F. WHETSTONE, Cass Lake.
J. W. CHAMBERLAIN, Oculist and Aurist,
Office 220 Lowry Arcade Building, St. Paul, Minn.

Time Inspectors. Rules 2 and 3.

A. L. HAMAN, Gen'l Time Inspector, St. Paul, Minn. C. A. SWANSON & CO., Time Inspector, West Superior, Wis.
F. A. KLASS, Hibbing.

**HAULING CAPACITY OF DIFFERENT CLASSES OF ENGINES IN NET TONS,
IN ADDITION TO WEIGHT OF ENGINE, TENDER AND CABOOSE.**

DISTRICT.	CLASSES OF ENGINES																											
	1100 Class				19x32—210 lbs. Nos. 700 to 779.				19x26 Cyl.—180 lbs. Nos. 500 to 599				19x26 Cyl.—180 lbs. Nos. 450 to 476				19x24 Cyl.—180 lbs. Nos. 400 to 426				19x24 Cyl.—150 lbs. Nos. 300 to 359 and 297				18x24 Cyl.—145 lbs. Nos. 197 to 230			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
West Superior to Sandstone.....	2225	1975	1850	1725	1775	1575	1475	1375	1425	1300	1150	1050	1400	1275	1125	1025	1300	1175	1025	925	1150	1025	900	800	950	850	775	700
“ “ “ “ Local Freight									1275	1150	1025	950	1250	1125	1000	925	1150	1025	900	800	1000	875	750	675	800	700	650	575
“ “ “ “ Time Freight					1600	1400	1300	1200	1200	1075	975	900	1175	1050	950	875	1175	950	875	800	950	850	750	675	750	700	650	575
Sandstone to Minneapolis Jct.....	3125	2900	2750	2500	2500	2325	2200	2000	1725	1575	1425	1325	1700	1575	1425	1325	1650	1525	1375	1275	1450	1325	1175	1075	1100	1000	875	800
“ “ “ “ Time Freight					2300	2125	2000	1800	1475	1325	1225	1175	1450	1350	1225	1175	1425	1325	1200	1125	1225	1125	1000	950	925	825	775	675
Minneapolis Jct. to Sandstone.....	3125	2900	2750	2500	2500	2325	2200	2000	1725	1575	1425	1325	1700	1575	1425	1325	1650	1525	1375	1275	1450	1325	1175	1075	1100	1000	875	800
“ “ “ “ Time Freight					2300	2125	2000	1800	1325	1225	1125	1075	1300	1225	1125	1075	1250	1175	1075	1050	1050	975	875	850	800	750	700	650
Sandstone to West Superior.....	2875	2625	2375	2225	2300	2100	1900	1775	1725	1575	1425	1325	1650	1525	1375	1275	1550	1425	1300	1200	1300	1200	1075	950	1025	925	850	750
“ “ “ “ Local Freight									1625	1475	1325	1225	1550	1425	1275	1175	1450	1325	1200	1100	1200	1100	975	850	925	825	775	675
“ “ “ “ Time Freight					2125	1925	1725	1600	1325	1225	1125	1075	1300	1225	1125	1075	1250	1175	1075	1050	1050	975	875	850	800	750	700	650
West Superior to Cloquet.....	2125	1875	1750	1625	1700	1500	1400	1300	1350	1225	1075	975	1325	1200	1050	950	1225	1100	975	875	1075	975	900	800	850	775	700	625
“ “ “ “ Local Freight									1200	1075	925	825	1175	1050	925	850	1075	950	875	800	925	825	775	725	700	625	575	525
“ “ “ “ Time Freight									1200	1075	975	925	1175	1050	925	875	1100	1000	900	875	975	900	825	800	775	700	625	600
Cloquet to Cass Lake.....	2875	2625	2500	2300	2300	2100	2000	1850	1725	1575	1425	1325	1700	1575	1425	1325	1650	1525	1375	1275	1450	1325	1175	1075	1100	1000	925	825
“ “ “ “ Local Freight									1575	1425	1300	1200	1550	1425	1300	1200	1500	1375	1250	1150	1300	1200	1050	975	950	850	800	725
“ “ “ “ Time Freight					2125	1925	1825	1675	1475	1350	1300	1200	1450	1350	1250	1200	1425	1350	1250	1175	1300	1200	1075	1025	950	900	850	800
Cass Lake to West Superior.....	3125	2900	2750	2500	2500	2325	2200	2000	1925	1800	1625	1525	1850	1725	1575	1475	1800	1675	1525	1425	1550	1450	1325	1200	1200	1100	1000	875
Mines to Brookston.....	3225	3100	2975	2850	2525	2400	2275	2150	2150	2025	1875	1750	2075	1950	1825	1700	1950	1825	1700	1550	1700	1550	1425	1300	1225	1100	975	850
Brookston to Mines.....	1400	1300	1200	1100	1200	1100	1000	900	1000	900	800	700	1000	900	800	700	800	700	600	500	700	600	500	400	600	500	400	300
Swan River to Virginia.....					900	800	700	500	700	600	500	400	700	600	500	400	600	500	400	350	500	400	350	300	400	300	200	150
Virginia to Swan River.....					1500	1400	1300	1200	1200	1100	1000	900	1200	1100	1000	900	1000	900	800	700	800	700	600	500	600	500	400	300

Chief Train Dispatcher may increase or decrease above rating as it may be found necessary.

When engines are pronounced incapable of hauling their allowed rating, written explanation from Engineer will be secured and transmitted by wire to Chief Train Dispatcher.

Conductors and Engineers will not refuse to take the assigned tonnage in their trains, but will use their best efforts to handle it. Should Engineers think that the capacity of their engines is over-estimated, their proper course is to report the matter to the Master Mechanic for such action as he may think necessary.

Engines unable to haul the above rating on account of poor condition, will be bulletined in the various yards and round-houses, stating what reduction will be made for their trains.

Wheel friction: With 10 or less empty cars in a train no allowance will be made for wheel friction; with 10 to 20 empty cars in a train, add to actual weight 4 tons for each empty car for wheel friction; with more than 20 empty cars in a train, add 5 tons per car.

- Weather Rating**
1. When temperature is 20 degrees above zero, or over.
 2. Very frosty or wet.
 3. Twenty degrees above zero to zero.
 4. Zero and below.

Average Weights of Empty Cars will be estimated as follows when not marked:

Box Cars, 28 to 30 foot.. 11 Tons	Flat Cars, 28 to 30 foot.... 9 Tons	Small Mogul Engine and Tank 102 Tons
Box Cars, 33 foot..... 12 Tons	Flat Cars, 33 and 34 foot... 11 Tons	Large Mogul Engine and Tank 108 Tons
Box Cars, 34 foot..... 13 Tons	Flat Cars, 40 foot..... 12 Tons	Consolidation Engine and Tank 111 Tons
Box Cars, 36-foot..... 16 Tons	Coal Cars..... 12 Tons	Mail..... 25 Tons
Box Cars, 40 foot..... 15 Tons	Gondola Cars..... 13 Tons	Baggage..... 30 Tons
Refrigerators..... 20 Tons	Oil Tanks..... 15 Tons	Coaches, 8 wheel..... 30 Tons
Furniture, 30 to 40 foot.. 17 Tons	Ballast Cars..... 12 Tons	Coaches, 12 wheel..... 35 Tons
Furniture, 40 to 50 foot.. 19 Tons	Steam Wreckers..... 75 Tons	Dining Cars..... 40 Tons
Caboose, 8 wheel... 17 Tons	Engine Tank (empty)..... 30 Tons	Sleeping Cars..... 41 Tons
Caboose, 4 wheel..... 10 Tons	Standard Engine and Tank 81 Tons	Ore Cars—Wood 12—Steel..... 15 Tons

Yardmasters will at all times make up trains in accordance with the above instructions.