

Missouri, Kansas & Texas Railway.

TIME TABLE No. 20.

(SUCCEEDING TIME TABLE No. 19.)

St. Louis, Hannibal, Sedalia and Kansas City Divisions.

— IN EFFECT —

SUNDAY, FEBRUARY 13, 1898,

AT 12:01 O'CLOCK A. M.

ALL PREVIOUS TIME TABLES ARE VOID AND MUST BE DESTROYED.

This Time Table is for the GOVERNMENT AND INFORMATION OF EMPLOYEES of this Railway Only.

The Management Reserves the Right to Vary from it at Pleasure.

M. SWEENEY,
General Superintendent.

W. B. LYONS,
Superintendent.

HOSPITAL DEPARTMENT.

E. F. YANCEY, Chief Surgeon,
SEDALIA, MO.

GEO. E. McNEIL, 1st House Surgeon,
SEDALIA, MO.

LOCAL SURGEONS.

TOWN.	NAME.	OFFICE.	RESIDENCE.
MISSOURI.			
ST. LOUIS.....	Dr. W. A. McCandless.....	St. Mary's Infirmary.....	1536 Papin Street.
ST. CHARLES.....	Dr. J. R. Mudd.....	112 North Main Street.....	Cor. 3rd and Decatur Sts.
MARTHASVILLE.....	Dr. W. J. Alexander.....	Main St., at Central Hotel.....	Main Street.
RHINELAND.....	Dr. S. J. Burch.....		
MOKANE.....	Dr. J. R. Davis.....		
HARTSBURG.....	Dr. J. N. Shippey.....	N. W. Cor. Main and 2d Sts.....	N. W. Cor. Main and 2d Streets.
ROCHEPORT.....	Dr. E. H. Chinn.....	Cor. 1st, Main and Central Sts.....	Cor. 2d, Main and Columbia Sts.
ROCHEPORT.....	Dr. P. J. Mitchell.....	Cor. 2d, and Central Sts.....	Cor. 2d and Lewis Sts.
NEW FRANKLIN.....	Dr. N. M. Bonham.....	91 South Broadway.....	130 Missouri Ave.
NEW FRANKLIN.....	Dr. R. V. Bonham.....	91 South Broadway.....	139 Missouri Ave.
HANNIBAL.....	Dr. C. H. Yancey.....	110 N. 6th Street.....	110 N. 6th Street.
PARIS.....	Dr. A. E. Gore.....	South side of Court House.....	S. W. cor. Caldwell and Washington Sts
MOBERLY.....	Dr. E. R. Hickerson.....	313 Reed Street.....	315 S. Williams Street.
MOBERLY.....	Dr. Thos. Irwin.....	Cor. Reed and Clark Streets.....	319 Grand Avenue.
HIGBEE.....	Dr. A. J. Brown.....	Under Randolph Hotel, Main St.....	Cor. Sedalia and Randolph Sts.
FAYETTE.....	Drs. Wright and Bramlett.....	Kilpatrick Bld'g. S. Side Pub. Square.....	Block E. of Public Square.
BOONVILLE.....	Dr. R. S. Holman.....	Cor. Main and Morgan Streets.....	Main Street.
BOONVILLE.....	Dr. W. H. Cooper.....	S. E. Cor. Main and Chestnut Sts.....	Vine bet. 4th and 5th, Streets.
CLIFTON.....	Dr. W. B. Levens.....		
WINDSOR.....	Dr. C. E. Griffith.....		
CLINTON.....	Dr. J. H. Britts.....	127 Washington Street.....	139 East Franklin Street.
CLINTON.....	Dr. G. W. Holcomb.....	108 S. Main Street.....	301 E. Jefferson St.
SCHELL CITY.....	Dr. R. D. Haire.....	Cor. Main and 2d. Sts.....	Cor. 2d and Oak Streets.
NEVADA.....	Dr. L. H. Callaway.....	105½ West Cherry Street.....	525 West Arch Street.
NEVADA.....	Dr. G. C. Willson.....	Rms. 5 and 6 Callaway & Willson Bld'g.....	220 South Adams Street.
HOLDEN.....	Dr. L. F. Murray.....	Olive, near Third Street.....	Olive, near Third Street.
HARRISONVILLE.....	Dr. A. R. Elder.....	North Side Square.....	East Pear Street.
HARRISONVILLE.....	Dr. W. H. Barrett.....	Public Square.....	Vall Street.
KANSAS.			
FT. SCOTT.....	Dr. R. Aikman.....	110 South Main Street.....	729 National Avenue.
PARSONS.....	Dr. J. M. Kleiser.....	115 Central Avenue.....	1728 Gandy Avenue.
PARSONS.....	Dr. A. Tenbrook.....	107 South Central Avenue.....	320 North Central Avenue
LOUISBURG.....	Dr. Geo. A. Boyle.....	Broadway, near Sinclair.....	Randolph and Peoria Streets.
PAOLA.....	Dr. J. H. Haldeman.....	Price Block.....	Peoria and Maple Streets.

Trains Going West.

ST. LOUIS DIVISION.

Trains Going East.

SECOND CLASS					FIRST CLASS		Distance from St. Louis.	TIME TABLE NO. 20. IN EFFECT FEBRUARY 13, 1898	Station Numbers.	FIRST CLASS		SECOND CLASS				
105 THROUGH FREIGHT	103 THROUGH FREIGHT	101 THROUGH FREIGHT	63 WAY FREIGHT	61 WAY FREIGHT	3 PASSENGER	1 PASSENGER				2 PASSENGER	4 PASSENGER	62 WAY FREIGHT	64 WAY FREIGHT	102 THROUGH FREIGHT	106 THROUGH FREIGHT	108 THROUGH FREIGHT
DAILY	DAILY	DAILY	Daily Ex Sun	Daily Ex Sun	DAILY	DAILY		Lv. ST. LOUIS Ar.	0	DAILY	DAILY	Daily Ex Sun	Daily Ex Sun	DAILY	DAILY	DAILY
A.M. 3.15	P.M. 6.13	P.M. 9.50		A.M. 7.00	P.M. 11.30	A.M. 9.15	0.0	26.9	27	P.M. 5.03	A.M. 6.30	P.M. 6.00		A.M. 5.35	P.M. 4.00	P.M. 1.00
4.25	7.18	11.00		s 8.10	s 12.30	s 10.15	26.9	N TEXAS JUNCTION	27	s 4.03	s 5.30	s 4.45		4.25	2.50	P.M. 11.45
4.35	7.28	11.07		f 8.20	f 12.38	f 10.22	29.9	BLACK WALNUT	30	f 3.55	f 5.23	f 4.30		4.14	2.40	11.30
4.40	7.35	11.14		f 8.30	f 12.44	f 10.28	32.2	MARAIS CROCHE	32	f 3.50	f 5.17	f 4.15		4.05	2.32	11.15
5.00	7.55	11.30		s 9.00 9.40	s 1.00	s 10.45	39.2	N ST. CHARLES	39	s 3.35	s 5.00	s 3.35 3.00		3.40	2.10	10.45
5.25	8.20	11.55		f 10.15	f 1.19	f 11.03	47.1	MILLERS	47	f 3.16	f 4.40	f 2.20		3.10	1.45	10.15
5.50	8.40	A.M. 12.18		f 10.45	f 1.37	f 11.18	54.6	D HAMBURG	55	f 3.00	f 4.22	f 1.40		2.45	1.23	9.45
6.10	9.00	12.37		f 11.05	f 1.50	f 11.32	60.7	D MATSON	61	f 2.47	f 4.06	f 1.03		2.22	1.03	9.20
6.30	9.15	12.55		s 11.25 P.M. 12.01 12.20	s 2.03	s 11.45	66.4	D AUGUSTA	66	s 2.35	s 3.52	s 12.30		2.03	12.45	9.00
6.55	9.35	1.18		f 12.01	f 2.20	s 12.01	73.9	D DUTZOW	74	s 2.20	f 3.33	s 12.01 P.M.		1.42	12.20	8.35
7.05	9.48	1.30		s 12.40	s 2.30	s 12.10	77.8	N MARTHASVILLE	78	s 2.12	s 3.22	s 11.35		1.30	12.10 P.M.	8.20
7.15	9.58	1.40		f 1.00	f 2.37	f 12.17	81.1	PEERS	81	f 2.03	f 3.15	f 11.15		1.20	11.59	8.10
7.25	10.06	1.50		s 1.15	f 2.43	s 12.23	84.7	D HOLSTEIN	85	s 1.58	f 3.08	f 11.00		1.10	11.52	8.00
7.40	10.20	2.05		f 1.47	f 2.55	f 12.35	88.9	BERNHEIMER	89	f 1.47	f 2.55	f 10.30		12.55	11.38	7.40
8.00	10.35	2.20		f 2.15	f 3.05	f 12.45	93.7	GORE	94	f 1.37	f 2.40	f 10.00		12.39	11.26	7.20
8.15	10.45	2.30		f 2.35	f 3.13	f 12.53	97.0	CASE	97	f 1.30	f 2.30	f 9.40		12.30	11.17	7.05
8.30	10.58	2.42		s 3.00	s 3.22	s 1.00	100.8	D McKITTRICK	101	s 1.20	s 2.18	s 9.15		12.15	11.07	6.50
8.50	11.12	2.55		s 3.25	f 3.32	s 1.11	104.8	D RHINELAND	105	s 1.11	f 2.05	s 8.50		A.M. 11.55	10.55	6.35
9.10	11.30	3.15		f 4.10	f 3.46	f 1.23	110.8	BLUFFTON	111	f 12.58	f 1.45	f 8.20		11.30	10.40	6.10
9.30	11.45	3.33		s 4.50	s 3.58	f 1.35 1.55	116.0	D PORTLAND	116	f 12.45 12.25	s 1.28	s 7.50		11.12	10.25	5.45
9.50	11.59	3.53		f 5.30	f 4.12	f 2.08	121.4	STEEDMAN	121	f 12.13	f 1.08	f 7.20		10.55	10.10	5.20
10.00	A.M. 12.15	4.05	A.M. 7.30	s 6.00	s 4.20	s 2.17	125.0	N MOKANE	125	s 12.05 P.M.	s 12.55 A.M. 11.30	s 7.00 A.M.	P.M. 6.00	10.43	10.00	5.05
10.30	12.37	4.35	f 8.00	f 4.35	f 2.30	f 2.30	131.2	D TEBBETS	131	f 11.51	f 11.14		f 5.30	10.22	9.45	4.35
11.00	1.05	5.05	f 8.30	f 4.50	f 2.45	f 2.45	137.6	WAINWRIGHT	138	f 11.37	f 10.58		f 5.03	10.02	9.25	4.05
11.23	1.30	5.35	s 9.00 9.40	s 5.03	s 2.58	s 2.58	143.3	N NORTH JEFFERSON C. & A. Crossing	143	s 11.23	f 10.43		s 4.35 4.00	9.45	9.10	3.40
11.45	2.00	6.07	f 10.15	f 5.19	f 3.13	f 3.13	149.9	CLAYSVILLE	150	f 11.09	f 10.28		f 3.35	9.22	8.53	3.10
11.59	2.15	6.25	s 10.30	s 5.28	s 3.22	s 3.22	153.5	D HARTSBURG	154	s 11.01	s 10.18		s 3.22	9.10	8.45	2.50
12.13	2.35	6.45	f 10.52	f 5.38	s 3.31	s 3.31	157.5	D WILTON	158	s 10.52	f 10.08		f 3.00	8.58	8.33	2.35
12.30	2.50	7.10	f 11.08	f 5.50	f 3.42	f 3.42	162.4	RUTLAND	162	f 10.41	f 9.55		f 2.40	8.40	8.20	2.15
12.53	3.15	7.45	f 11.32	f 6.05	f 3.58	f 3.58	169.6	KENNARD	170	f 10.26	f 9.38		f 2.05	8.18	8.03	1.50
1.00	3.25	7.55	f 11.40	f 6.10	s 4.03	s 4.03	171.7	D HUNTSDALE	172	s 10.21	s 9.32		f 1.55	8.10	7.55	1.45
1.23	3.50	8.25	s 11.59	s 6.25	s 4.18	s 4.18	178.4	D ROCHEPORT	178	s 10.08	s 9.15		s 1.23	7.50	7.35	1.20
1.35	4.00	8.45	f 12.15	f 6.35	f 4.25	f 4.25	181.9	LLOYDS	182	f 10.00	s 9.07		f 1.05	7.40	7.23	1.05
1.55	4.20	9.15	s 12.35	s 6.50	s 4.40	s 4.40	188.3	D NEW FRANKLIN	188	s 9.45	s 8.50		s 12.35	7.20	7.00	12.45
2.00	4.25	9.20	12.40	s 6.55	s 4.45	s 4.45	189.1	N Ar FRANKLIN JCT. Lv	189	s 9.40 A.M.	s 8.45 P.M.		s 12.25 P.M.	7.15 P.M.	6.55 A.M.	12.40 A.M.
105	103	101	63	61	3	1				2	4	62	64	102	106	108

Passenger trains will stop on flag at following stations: Jungs, Weldon Springs, Defiance, Tavern Rock, Providence and Pearson's.

Trains Going South.

HANNIBAL DIVISION.

Trains Going South.

SECOND CLASS							Distance from Hannibal.	TIME TABLE NO. 20. IN EFFECT FEB. 13, 1898	Station Numbers.	FIRST CLASS							
95 WABASH FREIGHT	111 THROUGH FREIGHT	105 THROUGH FREIGHT	103 THROUGH FREIGHT	101 THROUGH FREIGHT	63 WAY FREIGHT	51 WAY FREIGHT.				23 PASSENGER	21 PASSENGER	13 WABASH PASSENG'R	3 PASSENGER	1 PASSENGER			
DAILY P.M	DAILY P.M	DAILY	DAILY	DAILY	Daily Ex. Sun	Daily Ex. Sun A.M				DAILY A.M	DAILY	DAILY	DAILY	DAILY			
							0	N Lv HANNIBAL Lv	00	2-15 A.M	11-45 A.M	9-25 A.M					
<i>No 52</i>	7.05	6.00					7-00	N OUTER DEPOT	02	2.25	11.53 P.M	9.35					
	7-40	6.40					s 7-40	RENSALIER	012	f 2.45	s 12.12	9.52					
							s 7-50	HUNTINGTON	015	f 2.52	f 12.17	9.57					
	7-57	7.00					s 8.00	HASSARD	019	f 3.00	f 12.23	10.03					
	8-07	7.10					s 8.15	N MONROE	022	s 3.11	s 12.32	10.10					
	8-28	7-35					s 8-45	D CLAPPER	031	f 3-27	s 12.45	10.23					
	8-40	7-50					s 9-05	D STOUTSVILLE	034	s 3-37	s 12.52	10-30					
	9-00	8-10					s 9.30	GOSS	040	f 3.50	f 1.05	10-41					
<i>No 94</i>	9-18	8-25					s 9.50	N PARIS	044	s 4-05	s 1.17	10-50					
	9-52	8.55					s 10-25	D HOLLIDAY	052	f 4.23	s 1-33	11-05					
	10-15	9.15					s 10-50	D MADISON	056	s 4-34	s 1.43	11-14					
<i>24</i>	10-47	9-35					s 11.24 P.M	D EVANSVILLE	062	f 4.45	s 1.53	11-24					
	11-15 P.M	10.10 10.45					s 12.05 1.05	N MOBERLY Wabash Crossing,	070	s 5.05 5.15	f 2.10 2.50	11-40 A.M					
							70-9	LONG SIDING	071								
	11.10						s 1-30	D ELLIOTT	075	s 5.28	s 3.05						
	11-35						s 1-50 2-10	N HIGBEE C. & A. Crossing.	080	s 5.44	s 3-20						
							f 2-25	RUSSELL	083	f 5.54	f 3-30						
	A.M 12-15						s 2-50	D BURTON	088	f 6.08	s 3-45						
	12-40						s 3-35	D FAYETTE	095	s 6-27	s 4-05						
	12-55						f 3-50	TALBOT	098	f 6-36	f 4-17						
	1.15						s 4-05	D ESTILL	0102	f 6-47	s 4-30						
	1.25 1.45	P.M 3-00	A.M 5-05	A.M 10-10	P.M 1-00		4-20 P.M	N FRANKLIN JUNCT.	189	6-55 A.M	4-40 P.M	A.M 7-10	P.M 5-00				
	1-50	3-05	5-10	10-15	f 1-05			KINGSBURY	191			f 7-13	f 5-03				
	2-00	3-15	5-20	10-25	s 1-15 1-40			N BOONVILLE	192			s 7-20	s 5-15				
	2-30	3-40	5.50	10.50	s 2-10			PRAIRIE LICK	197			f 7-35	f 5-32				
	3-00	4-10	6-20	11-15	s 2-45			D PILOT GROVE	203			s 7-50	s 5.48				
	3.15	4-25	6-30	11-25	s 3-00			HARRISTON	206			f 7-56	f 5-57				
	3-30	4-40	6-40	11-35	s 3-15			D PLEASANT GREEN	209			s 8-02	s 6-04				
				P.M				SWEENEY	213								
	4-00	5.10	7-05	12-01	s 3-40			D CLIFTON	216			s 8.19	s 6-20				
	4.33	5-40	7-25	12-21	s 4-05			D BEAMAN	221			s 8.35	s 6-35				
	5-00	6-10	7.50	12-40	4.30 P.M			Mo. Pac l 6.0 Junction. N Ar SEDALIA Ar	227			f 8.50 A.M	f 6.50 P.M				
95	111	105	103	101	63	51				23	21	13	3	1			

READ RULES CAREFULLY AND NOTE CHANGES THEREIN.

No. 22 will take siding for No. 21.

J. A. DAVIS, Train Master.

Trains Going North.

HANNIBAL DIVISION.

Trains Going North.

FIRST CLASS					Distance from St. Louis.	TIME TABLE		Station Numbers.	SECOND CLASS								
2	4	12	22	24		No. 20.			52	64	102	106	108	112	94		
PASSENGER	PASSENGER	WABASH PASSENGER	PASSENGER	PASSENGER		IN EFFECT FEB. 13, 1898			WAY FREIGHT.	WAY FREIGHT	THROUGH FREIGHT	THROUGH FREIGHT	THROUGH FREIGHT	THROUGH FREIGHT.	WABASH FREIGHT.		
DAILY	DAILY	DAILY	DAILY	DAILY		STATIONS.			Daily Ex Sun	Daily Ex Sun	DAILY	DAILY	DAILY	DAILY	DAILY		
		P.M. 5-15	P.M. 2-55	A.M. 12-50		N Ar	HANNIBAL	Ar	00								
		5-05	2-45	12-42		N	OUTER DEPOT		02	7.05			11.53	11-30			
		4-47 s	2-29 f	12-25			RENSALIER		012	s 6.40			11.22	11.05			
		4-41 f	2-23 f	12-19			HUNTINGTON		015	s 6-30							
		4-35 f	2-16 f	12-13			HASSARD		019	s 6-20			11-02	10-47			
		4-27 s	2-08 s	12-07 A.M.		N	MONROE		022	s 6-10			10-50	10-37			
		4-13 s	1-53 f	11-52		D	CLAPPER		031	s 5-40			10-23	10-15			
		4-05 s	1-43 s	11-44		D	STOUTSVILLE		034	s 5-20			10-00	9-57			
		3-52 f	1-30 f	11-33			GOSS		040	s 4-55			9-30	9-38			
		3-40 s	1.17 s	11-23		N	PARIS		044	s 4-20			9-10	9.18			
		3-24 s	12-55 f	11-07		D	HOLLIDAY		052	s 3-45			8-40	8.55			
		3.14 s	12-40 s	10-57		D	MADISON		056	s 3.14			8-25	8-43			
		3-03 f	12-25 f	10.47			EVANSVILLE		062	s 2-40			8-05	8-25			
		2.40 P.M.	12.05 P.M.	10.30 A.M.		N	MOBERLY		070	s 2.10			7-35	8.00 P.M.			
			11.35	10.20			Wabash Crossing.			s 1.05			7.10				
							LONG SIDING		071								
			s 11-15	s 10-05		D	ELLIOTT		075	s 12-45			6-55				
			s 11-00	s 9-52		N	HIGBEE		080	s 12-25			6-40				
			f 10-47	f 9-40			C. & A. Crossing.			s 12-15							
			s 10-35	f 9-29			RUSSELL		083	f P.M. 11-59							
			s 10-17	s 9-13		D	BURTON		088	s 11-40			6.08				
			f 10-07	f 9-02		D	FAYETTE		095	s 11-05			5-35				
			s 9-57	f 8-52			TALBOT		098	f 10-40			5-20				
						D	ESTILL		0102	s 10-25			5-00				
	A.M.	P.M.				N	FRANKLIN JUNCT.		189	10-15 A.M.	A.M. 11-45	P.M. 6-45	A.M. 6-22	P.M. 11-59	4-50		
	s 9-25	s 8-30			189.1		KINGSBURY		191		s 11-40	6-40	6-18	11-55	4-25		
	f 9-22	f 8-25			190.7	N	BOONVILLE		192		s 11-30	6-30	6-10	11-45	4-15		
	s 9-15	s 8-15			191.7		PRAIRIE LICK		197		s 11-10	6-10	5.50	11-18	3-50		
	f 9-02	f 8-02			197.0	D	PILOT GROVE		203		s 10-50	5.48	5-27	10-55	3-25		
	s 8-47	s 7-45			203.4		HARRISTON		206		s 9-50	5-37	5-20	10-45	3.15		
	f 8-40	f 7-38			206.3	D	PLEASANT GREEN		209		s 9-35	5-30	5-13	10-35	3-00		
	s 8-33	s 7-32			212.8		SWEENEY		213								
	s 8.19	s 7-16			215.5	D	CLIFTON		216		s 9-05	5.10	4-52	10-10	2-30		
	s 8-04	s 7-03			221.1	D	BEAMAN		221		s 8.35	4-50	4.33	9-50	2-00		
	7.50 A.M.	6.50 P.M.			227.1	N Lv.	SEDALIA	Lv.	227		8-05 A.M.	4.30 P.M.	4-15 A.M.	9-30 P.M.	1-30 A.M.		
	2	4	12	22	24						52	64	102	106	108	112	94

95
111

READ RULES CAREFULLY AND NOTE CHANGES THEREIN.

No. 22 will take siding for No. 21.

J. A. DAVIS, Train Master.

Trains Going South.

SEDALIA DIVISION.

Trains Going South.

SECOND CLASS							DISTANCE FROM ST. LOUIS	TIME TABLE NO. 20. IN EFFECT FEB. 13, 1898	STATION NUMBERS.	FIRST CLASS	
117 THROUGH FREIGHT. DAILY	49 ACCOMMODATION. Daily Ex Sun	105 THROUGH FREIGHT. DAILY	103 THROUGH FREIGHT. DAILY	101 THROUGH FREIGHT. DAILY	55 WAY FREIGHT. Daily Ex.Sun	53 WAY FREIGHT. Daily Ex.Sun				3 PASSENGER DAILY	1 PASSENGER DAILY
P.M. 2-15	A.M. 8-30	P.M. 9.05	A.M. 9.30	P.M. 1.45		A.M. 7.30			A.M. 9-10	P.M. 7-15	
2.50	f 8-55	9.40	10.05	2.10		f 8.00	227.1	N Lv SEDALIA Lv	227	f 9-10	f 7-15
3.00	s 9.05	9.55	10.20	2.17		s 8.15	236.1	S. W. & S. J. 9.0 (Crossing) CAMP BRANCH	236	f 9-28	f 7-35
3.10 P.M.	9.20 A.M.	10.10	10.35	2.30		s 8.35	239.2	D GREEN RIDGE 3.1	239	s 9-36	s 7-44
		10.30	10.55	2.50		s 8.55	243.8	D KANSAS CITY JOT 4.6	244	s 9-45	s 7-55
		10.55	11.30	3.20		s 9.30	247.8	D WINDSOR 4.0	248	s 10-00	s 8.07
		11.10	11.45	3.35		s 9.50	255.5	D CALHOUN 7.7	256	s 10-18	s 8-25
						s 9.50	259.7	D LEWIS 4.2	260	s 10-28	s 8-35
							265.4	NORTH CLINTON 5.7	265	s 10-43	s 8-50
		11.45	P.M. 12.25	4.05		s 10.35	266.6	K. C. O. & S. Crossing. CLINTON 1.2	267	s 10-50	s 9-00
		A.M. 12.15	1.10	4.45		s 12-15	273.4	K. C. C. & S. Crossing. LADUE 0.6	273	f 11.07	s 9-17
		12.45	1-35	5.15		s 12.45	280.2	D MONTROSE 6.2	280	s 11.21	s 9-33
		1-10	1.55	5.40		s 1-20	285.7	D APPLETON CITY 5.5	286	s 11-35	s 9-48
		1-40	2.20	6.05		s 2.20	294.4	D ROCKVILLE 8.7	294	s 11.53 P.M.	s 10-08
		2.05	2.37	6.20		s 3.05	298.4	N SCHELL CITY 4.0	298	s 12-05	s 10-18
		2.25	3.00	6.37		s 3.40	303.5	D HARWOOD 5.1	304	s 12-17	s 10-30
		2.50	3.28	7.00		s 4.25	309.3	D WALKER'S 5.8	309	s 12-31	s 10.45
		3.20	4.00	7.25	A.M. 10.20	5.15 P.M.	317.1	L. & S. Junction. NEVADA 7.8	317	s 12-50	s 11-05
		3.50	4.25	7.50			323.4	N ELLIS 6.3	317	1-00	11-20
		4.30	4.55	8.13	s 10-45		326.9	D DEERFIELD 3.5	323	f 1-15	f 11-35
		4.45	5.10	8.25	s 11-00		331.2	D OLAYTON 4.3	327	f 1-24	f 11-44
		5.00	5.30	8.40	s 11-15		337.4	D SCOTT JUNCTION 6.2	331	f 1.34	f 11-55
							337.4	K. C., F. S. & M. Crossing. K. N. & D. Crossing. FORT SCOTT 0.8	337	s 1-47	s 12-10
		5.30	6.00	9.05	s 11.45		338.2	N RONALD 6.9 (Crossing) 6.0	338	s 1.55	s 12-15
		5.40	6.15	9.15	P.M. 1.00		345.1	Mo. Pac. HIATTVILLE 6.9	338	s 2.05	s 12-25
		6.05	6.50	9.38	f 1.50		351.1	D HEPLER 6.9	345	f 2-19	f 12-40
		6.30	7.20	9.58	s 2-15		358.0	A. T. & S. F. Crossing. WALNUT 7.2	351	s 2-32	f 12-55
		6.55	7.55	10.15	s 2.45		365.2	N ST. PAUL 7.7	358	s 2.45	s 1-08
		7.15	8.20	10.40	s 3.35		372.9	D SOUTH MOUND 6.6	365	s 2-59	s 1-23
		7.40	8.45	11.00	s 4.20		379.5	N PARSONS 7.1	373	s 3-14	s 1.40
		8.10	9.10	11.20	s 5.00		386.6	Ar	380	f 3-27	f 1-55
		8.35	9.35	11.40	P.M. 5.30				387	f 3-40	2-10
117	49	105	103	101	55	53				3	1

READ RULES CAREFULLY AND NOTE CHANGES THEREIN.

No. 4 will take siding at Ft. Scott for No. 3.

J. A. DAVIS, Train Master.

Trains Going North.

SEDALIA DIVISION.

Trains Going North.

FIRST CLASS				DISTANCE FROM ST. LOUIS	TIME TABLE.			STATION NUMBERS.	SECOND CLASS						
2 PASSENGER		4 PASSENGER			NO. 20. IN EFFECT FEB. 13, 1898.				54 WAY FREIGHT.	56 WAY FREIGHT.	102 THROUGH FREIGHT.	106 THROUGH FREIGHT.	108 THROUGH FREIGHT.	50 ACCOMMODATION.	118 THROUGH FREIGHT.
DAILY	DAILY	DAILY	DAILY		STATIONS.			Daily Ex. Sun	Daily Ex. Sun	DAILY	DAILY	DAILY	Daily Ex Sun	DAILY	
A.M.	P.M.	A.M.	P.M.		N Ar	SEDALIA	Ar	P.M.		P.M.	A.M.	P.M.	P.M.	A.M.	
7.30	6.30			227.1	N Ar	SEDALIA	Ar	3.45		4.00	4.00	9.05	3.25	3.45	
f 7.10	f 6.12			236.1	S. W. & S. Crossing	CAMP BRANCH		3.12		3.35	3.35	8.40	f 2.50	3.20	
s 7.03	s 6.05			239.2	D	GREEN RIDGE		3.00		3.25	3.25	8.30	s 2.40	3.10	
s 6.53	s 5.55			243.8	D	KANSAS CITY JCT.		2.30		3.10	3.15	8.20	2.30 P.M.	3.00 A.M.	
s 6.42	s 5.45			247.8	D	WINDSOR		2.05		2.50	3.00	8.07			
s 6.25	s 5.30			255.5	D	CALHOUN		1.30		2.20	2.30	7.35			
s 6.15	s 5.20			259.7	D	LEWIS		1.10		2.05	2.15	7.20			
s 5.59	s 5.07			265.4		NORTH OLINTON									
						K. C. O. & S. Crossing.									
s 5.52	s 5.00			266.6	N	OLINTON		12.40 P.M.		1.35	1.45	6.50			
						K. C. C. & S. Crossing.		11.45							
f 5.37	f 4.45			273.4	D	LADUE		11.07		1.10	1.15	6.25			
s 5.22	s 4.30			280.2	D	MONTROSE		10.25		12.45	12.45	6.00			
s 5.10	s 4.18			285.7	D	APPLETON CITY		9.55		12.25 P.M.	12.15 A.M.	5.40			
s 4.53	s 4.02			294.4	D	ROCKVILLE		9.15		11.53	11.45	5.15			
s 4.42	s 3.52			298.4	N	SCHELL CITY		8.45		11.35	11.25	5.00			
s 4.30	3.40			303.5	D	HARWOOD		8.10		11.20	11.05	4.45			
s 4.17	3.28			309.3	D	WALKER'S		7.35		11.00	10.45	4.25			
	4.00					L. & S. Junction.									
s 3.50	3.00			317.1	N	NEVADA		7.00 A.M.	P.M. 3.50	10.35	10.05	4.00			
f 3.34	f 2.48			323.4		ELLIS			f 3.25	10.00	9.10	2.15			
f 3.26	f 2.40			326.9	D	DEERFIELD			s 3.10	9.50	8.55	1.55			
f 3.18	f 2.32			331.2	D	CLAYTON			s 2.55	9.37	8.40	1.34			
s 3.05	s 2.19			337.4		SCOTT JUNCTION									
	3.00					K. C., F. S. & M. Crossing.									
s 2.50	2.14			338.2	N	FORT SCOTT			s 2.14	9.15	8.15	1.05			
f 2.35	1.50			345.1		Mo. Pac. Crossing			f 12.50	9.10	8.05	1.00			
f 2.22	s 1.37			351.1	D	HIATTVILLE			f 12.10	8.53	7.40	12.30			
s 2.08	s 1.22			358.0	D	HEPLER			s 11.45	8.37	7.20	12.05			
	1.54					A. T. & S. Crossing.			s 11.15	8.20	7.00	11.40			
s 1.40	s 12.52			365.2	D	WALNUT			s 10.40	8.00	6.40	11.15			
f 1.25	f 12.38			372.9	N	ST. PAUL			s 10.00	7.40	6.15	10.45			
	1.10								s 9.25	7.20	5.55	10.15			
A.M. 2	P.M. 4			379.5	D	SOUTH MOUND									
	12.25			386.6	N Lv	PARSONS	Lv			9.00	7.00	5.30	9.50		
									A.M. 54	A.M. 56	A.M. 102	A.M. 106	A.M. 108	50	118

No. 4 will take siding at Ft. Scott for No. 3.

READ RULES CAREFULLY AND NOTE CHANGES THEREIN.

J. A. DAVIS, Train Master.

Trains Going West.

KANSAS CITY DIVISION.

Trains Going East.

SECOND CLASS				Distance from St. Louis	TIME TABLE			Station Numbers	SECOND CLASS			
117 Through Freight		49 Accommo- dation			No. 20. IN EFFECT FEB. 13, 1898				50 Accommo- dation		118 Through Freight	
DAILY	Daily Ex Sun	DAILY	Daily Ex Sun		Lv	STATIONS.	Ar		Daily Ex Sun	DAILY	Daily Ex Sun	DAILY
P.M.		A.M.			D	KANSAS CITY JUNCT		P.M.	A.M.			
3.35	s	9.50		243.8		6.2	244	2.20	2.55			
4.00	f	10.10		250.0		SUTHERLAND	E-6	1.57	2.32			
4.25	s	10.30		255.7	D	LEETON	E-12	s	1.35	2.10		
4.40	f	10.45		258.8		3.1	E-15	f	1.12	1.58		
5.05	s	11.09		264.7	D	CHILHOWEE	E-21	s	12.42	1.31		
5.25	f	11.28		269.3		4.6	E-26	f	12.22	1.14		
5.50	s	11.55 P.M.		276.2	N	HOLDEN	E-32	s	11.40	12.52		
6.15	s	12.45		287.2		11.0	E-43	s	11.10	12.17		
6.30	s	1.00		291.7	D	GUNN CITY	E-48	s	10.55	12.05		
6.55	s	1.30		298.0		4.5				A.M.		
				298.4	N	EAST LYNNE	E-54	s	10.30	11.43		
				298.5		6.3 Mo. P. Crossing						
						HARRISONVILLE						
						0.4 K. C., O. & S. Crossing						
						0.1 K. C., C. & S. Crossing						
7.20	s	2.00		306.9	D	8.4 FREEMAN	E-63	s	10.00	11.10		
7.35	s	2.20		311.5	D	4.6 WEST LINE	E-68	s	9.30	10.55		
				315.0		3.5 OLDS	E-71					
8.05	s	2.50		316.7	D	1.7 LOUISBURG	E-73	s	9.00	10.30		
8.25	s	3.15		322.2		5.5 SOMERSET	E-78	s	8.25	10.09		
						7.9 S. W. Crossing						
8.50	P.M.	3.45	P.M.	330.2	N Ar	0.1 PAOLA	Lv A-43	8.00 A.M.	9.45 P.M.			
117		49						50	118			

J. A. DAVIS, Train Master.

Extracts from Ruling of the Kansas State Board of Railroad Commissioners.

Trains carrying passengers exclusively, or passenger, mail or express shall be designated as first-class trains. Mixed freight and passenger trains, and all other trains, switch engines and engines without trains, shall be designated as second-class trains.

All trains and engines without trains shall sound one long blast of the whistle, the same as for a station, at least two thousand six hundred (2,600) feet before reaching the crossing, except in the case of crossings within the limits of incorporated cities whose regulations forbid such whistling.

All trains and locomotives without trains shall come to a full stop at least two hundred (200) feet and not more than four hundred (400) feet from the crossing of other roads, and if the way is clear, shall sound one long blast of the whistle, in case of first-class trains, and two similar blasts in case of second-class trains, before starting forward.

First-class trains shall always have precedence over second-class trains of any company.

In case of trains of the same class approaching simultaneously, the one on the older road shall have the right to cross first, and the last train to cross shall not start forward until the first train has cleared the crossing.

NOTE.—In connection with this rule, it must be understood that the first road built over the crossing to be stopped for is the "older" road.

No train or locomotive without train, shall cross the track of another road at a greater rate of speed than eight (8) miles an hour.

In case where a railroad crosses the track of another within the yard limits of said other road, and the track of such

other road is not plainly visible for at least five hundred (500) feet either way from the point of crossing, the crossing train shall send a flagman ahead from the point of stopping before crossing, to see that the crossing is clear; and no train, or engine without train, shall move forward to cross until the track is clear, and the train has the right under its class to the right of way, and the flagman has given the signal in compliance with this order.

No cars shall be left standing on the side track of any yard through which there is a railroad crossing, nearer than sixty (60) feet of the center line of such crossing.

No train upon any road crossing the yard of another road shall stop on such crossing (after it has started forward to cross), nor until it has cleared such crossing by at least sixty (60) feet: *Provided*, This shall not apply where crossings are so near to depots, water tanks, or other places where stops are required to be made, as to render it impracticable.

Yard limits are defined as meaning not only the ground covered by side tracks, but so much beyond at each end, not exceeding three thousand (3,000) feet, as may be used at will by switch engines, and such limits shall be marked by posts with the words "Yard Limits" thereon. *3000*

Crossings protected by watchmen at all times, or by interlocking signals and derailing apparatus, not to be governed by foregoing rules, but engineers are required under any and all circumstances to approach crossings with their trains under full control.

Enginemen and Conductors will be governed by the foregoing at all Railroad Crossings in the State of Kansas.

RULES AND REGULATIONS.

GENERAL NOTICE.

It is of the utmost importance that proper rules for the government of the employees of a railroad company should be literally and absolutely enforced, in order to make such rules efficient. If they cannot or ought not to be enforced, they ought not to exist. Officers or employees whose duty it may be to make or enforce rules, however temporary or unimportant they may seem, should keep this clearly in mind. If in the judgment of anyone, whose duty it is to enforce a rule, such a rule cannot or ought not to be enforced, he should at once bring it to the attention of those in authority.

All employees are required to be polite and considerate in their intercourse with the public. The reputation and prosperity of these companies depend greatly upon the promptness with which their business is conducted and the manner in which their patrons are treated by their employees.

GENERAL RULES

1. The rules herein set forth apply to and govern all roads operated by the Missouri, Kansas & Texas Railway Co.

They shall take effect March 17, 1895, and supersede all prior rules and instructions, in whatsoever form issued, which are inconsistent therewith.

2. In addition to these rules, the Time-tables will contain special instructions, as the same may be found necessary. Special instructions, whether in conflict with these rules or not, which may be given by proper authority, whether upon the Time-tables or otherwise, shall be fully observed while in force.

3. The head of each department must be conversant with the rules, supply copies of them to his subordinates, see that they are understood, enforce obedience to them and report to the proper officer all violations and the action taken thereon.

4. Every employee of this company whose duties are in any way prescribed by these rules must always have a copy of them at hand when on duty, and must be conversant with every rule. He must render all the assistance in his power in carrying them out, and immediately report any infringement of them to his immediate superior officer.

5. The fact that any person enters, or remains in, the service of the company will be considered as an assurance of willingness to obey its rules. No one will be excused for the violation of any of them, even though not included in those applicable to his department.

6. If in doubt as to the meaning of any rule, or special instructions, application must be made at once to the proper authority for explanation. Ignorance is no excuse for neglect of duty.

7. All employees will be regarded as in the line of promotion, advancement depending upon the faithful discharge of duty, and capacity for increased responsibility.

8. If an employee should be disabled by sickness, or other cause, the right to claim compensation will not be recognized. An allowance, if made, will be a gratuity, justified by the circumstances of the case, and the employee's previous good conduct.

9. Every employee, while on duty connected with the trains on any division of the road, is under the authority, and must conform to the orders, of the Train Master of that division.

10. Employees must wear the prescribed badges or uniforms while on duty.

11. Mail agents, express messengers, parlor and sleeping car conductors and porters, news and transfer agents, and persons in charge of individual cars are subject, while on duty, to the rules governing employees of the company.

STANDARD TIME.

12. Observatory Standard Time is the only recognized standard, and will be transmitted to the designated offices.

13. The Standard Time will be telegraphed to all points from the designated offices at 10 a. m., Central time, daily.

14. Certain clocks will be designated on each division as Standard Clocks.

15. Where station clocks are provided, station agents must see that they show correct time; but trainmen and enginemen must not take time from such clocks unless they are also designated as Standard Clocks.

16. Each conductor and engineman must have a reliable watch which has been examined and certified to on the form prescribed below, by a responsible watchmaker, and must file such certificate with the proper designated officer before he is allowed to take charge of a train or engine. Watches must be examined and certificates renewed every three months.

WATCHMAKER'S CERTIFICATE.

This is to certify that on _____ 18____
the watch of _____
employed as _____
on the _____ R_____
has been examined and found to be a reliable and accurate time-piece, and in such repair as will, in my judgment, with proper usage, enable it to run within a variation not to exceed thirty seconds per week.

Name of maker _____
Brand _____
Number of movement _____
Gold or silver _____
Open or hunting case _____
Stem or key winding _____
Signed, _____
Watchmaker.

Address _____

17. Each conductor and engineman must regulate his watch by the designated Standard Clock before starting on each trip and register his name and the time at which he regulated his watch on a blank provided for that purpose.

18. Conductors and enginemen whose duties prevent them from having access to a Standard Clock must compare daily with, and regulate their watches by, those of conductors and enginemen who have Standard Time, and have registered their names as above provided.

TIME-TABLES.

19. A Time-table is the general law governing the arriving and leaving time of all regular trains at all stations. Time-tables will be issued from time to time, as may be necessary. The times given for each train on the Time-table is the Schedule of such train.

20. Each Time-table, from the moment it takes effect, supersedes the preceding Time-table, and all special instructions relating thereto; and trains shall be run as directed thereby, subject to the rules. All regular trains on the road running according to the preceding Time-table shall, unless otherwise directed, assume the times and rights of trains of the same numbers on the new Time-table.

Dispatchers on their respective divisions will require the acknowledgement, by all conductors and enginemen, of the receipt of a new Time-table after it has taken effect before they are permitted to start on their run with any train or engine.

21. Upon the Time-table not more than two sets of figures are shown for a train at any point. When two times are shown, the earlier is the arriving time and the later the leaving time. When one time is shown it is the leaving time unless otherwise indicated.

Regular meeting or passing points are indicated on the Time-table by figures in full-faced type.

Both the arriving and leaving time of a train are in full-faced type when both are meeting or passing times, or when one or more other trains are to meet or pass it between those times.

In all cases trains are required to clear and follow as per Rules 85 to 90 inclusive.

22. On the employees' Time-table the words "daily," "daily, except Sunday," etc., printed at the head and foot in connection with a train, indicate how it shall be run. The figures given at intermediate stations shall not be taken as indicating that a train will stop unless the rules require it. The following signs placed before the figures indicate:

"s"—regular stop.
"p"—stop on signal to receive or discharge passengers or freight.
"m"—stop for meals.

Trains are designated by numbers and their class indicated on Time-tables.

SIGNAL RULES.

SIGNALS.

23. Conductors, enginemen, firemen, brakemen, station agents, telegraph operators, switchmen, switch tenders, track foremen, road and bridge watchmen, and all other employees whose duties may require them to give signals, must provide themselves with the proper appliances, and keep them in good order and always ready for immediate use.

24. Flags of the proper color must be used by day, and lamps of the proper color by night or whenever from fog or other cause the day signals cannot be clearly seen.

25. Red signifies danger, and is a signal to stop.

26. Green signifies caution, and is a signal to go slowly.

27. White signifies safety, and is a signal to go on.

28. Green and white is a signal to be used to stop trains at flag stations for passengers or freight.

29. Blue is a signal to be placed on a car or an engine to forbid its being moved.

30. An explosive cap or torpedo, placed on top of the rail, is a signal to be used in addition to the regular signals.

The explosion of one torpedo is a signal to stop immediately; the explosion of two torpedoes is a signal to reduce speed immediately, and look out for a danger signal.

31. A fusee is an extra danger signal to be lighted and placed on the track at night in cases of accident or emergency.

A train finding a fusee burning upon the track must come to a stop and not proceed until it is burned out.

32. A flag or lamp swung across the track, a hat or any object waved violently by any person on the track signifies danger, and is a signal to stop.

TRAIN SIGNALS.

33. Each train, while running, must display two green flags by day and two green lights by night, one on each side of the rear of the train, as Markers, to indicate the rear of the train. Yard engines will not display Markers.

34. Each train running after sunset, or when obscured by fog or other cause, must display the headlight in front, and two or more red lights in the rear. Yard engines must display two green lights instead of red, except when provided with a headlight on both front and rear.

35. Each car on a passenger train while running must be in communication with the engine. In the absence of an equivalent appliance, a bell cord must be attached to the signal-bell of the engine, passing through or over the entire length of the train, and secured to the rear end of it.

36. Two green flags by day and night and, in addition, two green lights by night, displayed in places provided for that purpose on the front of an engine, denote that the train is followed by another train, running on the same schedule and entitled to the same Time-table rights as the train carrying the signals.

37. Two white flags by day and night and, in addition, two white lights by night, displayed in places provided for that purpose on the front of an engine, denote that all train is an extra. These signals must be displayed by all extra trains, but not by yard engines.

38. A blue flag by day and a blue light by night, placed on the end of a car, engine or train denote that workmen are at work under or about the car, engine or train. The car, engine or train thus protected must not be coupled to, or moved, until the blue signal is removed by the person who placed it.

When a car, engine or train is protected by a blue signal, other cars, engines or trains must not be placed in front of it so that the blue signal will be obscured, without first notifying the workman, that he may protect himself.

WHISTLE SIGNALS.

39. One **long** blast of the whistle (thus, —) is the signal for approaching stations, railroad crossings and junctions.

40. One **short** blast of the whistle (thus, -) is the signal to apply the brakes—stop.

41. Two **long** blasts of the whistle (thus, — —) is the signal to throw off the brakes.

42. Two **short** blasts of the whistle (thus, - -) is an answer to any signal, except "train parted."

43. Three **long** blasts of the whistle (thus, — — —), to be repeated until answered as provided in Rule No. 62, is a signal that the train has parted.

44. Three **short** blasts of the whistle (thus, - - -), when the train is **standing** (to be repeated until answered, as provided in Rule No. 61) is a signal that the train will back.

45. Four **long** blasts of the whistle (thus, — — — —) is a signal to call in the flagman from the west or south.

Four **long** followed by one **short** blast of the whistle (thus, — — — — -) is the signal to call in a flagman from the east or north.

46. Four **short** blasts of the whistle (thus, - - - -) is the engine-man's call for signals, from switch-tenders, watchmen, trainmen and others.

47. Five **short** blasts of the whistle (thus, - - - - -) is a signal to the flagman to go back and protect the rear of the train.

48. One **long** followed by two **short** blasts of the whistle (thus, — - -) is a signal to be given by trains on a single track, when displaying signals for a following train, to call the attention of trains of the same or inferior class to the signals displayed.

49. Two **long** followed by two **short** blasts of the whistle (thus, — — - - -) is the signal for approaching road crossings at grade.

50. A succession of **short** blasts of the whistle is an alarm for persons or cattle on the track, and calls the attention of trainmen to danger ahead.

BELL-CORD SIGNALS.

51. One tap of the signal-bell, when the train is **standing**, is the signal to start.

52. Two taps of the signal-bell, when the train is **running**, is the signal to stop at once.

53. Two taps of the signal-bell, when the train is **standing**, is the signal to call in the flagman.

54. Three taps of the signal-bell, when the train is **running**, is the signal to stop at the next station.

55. Three taps of the signal-bell, when the train is **standing**, is the signal to back the train.

56. Four taps of the signal-bell, when the train is **running**, is the signal to reduce speed.

57. When one tap of the signal-bell is heard while a train is **running**, the engineman must immediately ascertain if the train has parted, and, if so, be governed by Rule No. 103.

58. Signals of the same number of sounds shall have the same significance when given by other appliances than bell-cords and signal-bells.

LAMP SIGNALS.

59. A lamp swung across the track is the signal to stop.

60. A lamp raised and lowered vertically is the signal to move ahead.

61. A lamp swung vertically in a circle across the track, when the train is **standing**, is the signal to move back.

62. A lamp swung vertically in a circle at arm's length across the track, when the train is **running**, is the signal that the train has parted.

63. A flag, or the hand, moved in any of the directions given above, will indicate the same signal as given by a lamp.

FIXED SIGNALS.

64. Fixed signals are placed at junctions, railroad crossings, stations and other points that require special protection. Special instructions will be issued indicating their position and use.

RULES GOVERNING THE USE OF SIGNALS.

65. A signal imperfectly displayed, or the absence of a signal at a place where a signal is usually shown, must be regarded as a danger signal, and the fact reported to the Train Master.

66. The unnecessary use of the whistle is prohibited; when necessary in shifting at stations and in yards the engine-bell should be rung, and the whistle used only when required by rule or law, or when necessary to prevent accident.

67. The whistle must not be sounded while passing or being passed by a passenger train, except in cases of emergency or danger, or when required by the rules.

68. When a danger signal (except a fixed signal) is displayed to stop a train, it must be acknowledged as provided in Rule No. 42.

69. The engine-bell must be rung before starting a train, and when running through tunnels and the streets of towns or cities.

70. The engine-bell must be rung for a quarter of a mile before reaching every road crossing at grade, and until it is passed; and the whistle must be sounded at all whistling-posts.

71. When two or more engines are coupled to the head of a train, the leading engine only shall display the signals as provided in Rules Nos. 36 and 37.

72. One flag or light displayed as a classification signal will be regarded the same as if two were displayed; but conductors and enginemen will be held responsible for the proper display of all train signals.

73. When a train is being pushed by an engine (except when shifting and making up trains in yards) a white light must be displayed on the front of the leading car at night, or when the train is obscured by fog or other cause.

74. When a train turns out to meet or be passed by another train the red lights must be removed and green displayed as soon as the track is clear, but the red must again be displayed before returning to its own track.

Head lights on engines, when on side tracks, must be covered as soon as the track is clear and train has stopped, and also when standing at the end of double track.

75. The combined green and white signal is to be used to stop a train only at the flag stations designated by the schedule of that train. When it is necessary to stop a train at a point that is not a flag station, for that train, a red signal must be used.

76. White signals must be used by watchmen at public road and street crossings to prevent persons and teams from crossing when trains are approaching. Danger signals must be used only when necessary to stop trains.

77. Torpedoes must not be placed near stations or road crossings where persons are liable to be injured by them.

78. All signals must be used strictly in accordance with the rules, and trainmen and enginemen must keep a constant lookout for signals.

TRAIN RULES.

CLASSIFICATION OF TRAINS.

79. Whenever the word train is used it must be understood to include an engine in service with or without cars, equipped with signals as provided in Rules Nos. 33 and 34. Regular trains are those represented on the Time-table, and may consist of one or more sections. All sections of a train, except the last, must display signals as provided in Rule No. 36. Extra trains are those not represented on the Time-table.

80. All regular trains are classified on the Time-table, with regard to their priority of right to the track; trains of the first class being superior to those of the second and all succeeding classes, and trains of second-class being superior to those of the third and all succeeding classes; and so on indefinitely. The terms passenger, freight or mixed are descriptive and do not refer to class.

81. Extra trains may be distinguished as:

- Passenger Extra,
- Freight Extra,
- Work Train Extra.

82. All extra trains are of inferior class to all regular trains of whatever class.

MOVEMENT OF TRAINS.

83. A train of inferior class must in all cases keep out of the way of a train of superior class.

84. All north and east bound trains have the absolute right of track over all south and west bound trains of the same class.

85. When trains of the same class meet on single track, the train not having the right of track must take the siding and be clear of the main track before the leaving time of the opposing train; but such train must not pass the switch to back in on a siding until after the arrival of the opposing train, unless otherwise directed by special

instructions. When necessary to back in on the siding, before passing the switch, a flagman must be sent out in the direction of the opposing train as per Rules Nos. 99 to 99 (C), inclusive.

86. When a train of inferior class meets a train of superior class on single track, the train of inferior class must take the siding and clear the train of superior class five minutes. A train of inferior class must keep five minutes off the time of a train of superior class following it.

87. A train must not leave a station to follow a passenger train until five minutes after the departure of such passenger train, unless some form of block signal is used.

88. Passenger trains running in the same direction must keep not less than ten minutes apart, unless some form of block signal is used.

89. Freight trains following each other must keep not less than five minutes apart (except in closing up at stations or at meeting and passing points) unless some form of block signal is used.

89(A). Operators will set red signal immediately after the departure of a train, and will keep it set the required time in order to preserve the time between trains as per Rules Nos. 87, 88 and 89. Should a following section, or a train of any kind, arrive before the time has expired, the operator will hold them until that time is up, and then give them a clearance if there are no orders for them.

89(B). When one train overtakes another, and it becomes necessary for the second train to help the forward train, the engine of the second train will in every case uncouple from its train before proceeding to help the leading train.

90. A train must not leave a station expecting to meet or be passed at the next station by a train having the right of track, unless it has ample time to reach such station, and clear the track as per Rules Nos. 85 and 86.

91. A train not having right of track must be entirely clear of the main track by the time it is required by rule to clear an opposing train or a train running in the same direction; failing to do so, it must be immediately protected, as provided in Rules Nos. 99 to 99(C), inclusive.

92. Except at meeting or passing points, as provided in Rules Nos. 85 and 91, inclusive, a train must not arrive at a station in advance of its schedule arriving time, when shown.

A train must not leave a station in advance of its schedule leaving time.

93. All trains must stop at schedule meeting or passing points on a single track, if the train to be met or passed is of the same class, unless the switches are plainly seen to be right and the track clear. The point at which a train should stop is the switch used by the train to be met or passed in going on the siding.

When the expected train of the same class is not found at the schedule meeting or passing point, the train having the right of track must approach all sidings prepared to stop, until the expected train is met or passed.

94. All trains must approach the end of double track, junctions, railroad crossings at grade, and drawbridges, prepared to stop, and must not proceed until the switches or signals are seen to be right, or the track is plainly seen to be clear. Where required by law, all trains must stop.

94(A). Enginemen must test their brakes by applying the air lightly a sufficient distance from railroad crossings, drawbridges and junctions and know that they are in good working order. Should it be found that the brakes are not in good order, enginemen will signal trainmen to apply hand brakes in ample time to admit of the stop being made at the proper place. No excuse will be accepted for engines or trains running by stop boards.

95. A train must not leave a junction, a terminal, or other starting point, or pass from double to single track,

until it has ascertained that all trains due, which have the right of track over it, have arrived or left.

95(A). Freight and extra trains are required to approach and pass all water tanks, coal chutes and stations, completely under control. Speed must be reduced and the engineman and trainmen must commence to get their train "in hand" in ample time, so that under no circumstances whatever shall it be possible for it to strike any train, car or engine which may be occupying the track. The responsibility for safety rests with the approaching freight or extra train.

96. ———

97. ———

98. When it is necessary for the flagman to go back to protect the rear of his train, the next brakeman must immediately take the flagman's place on the train and remain there until relieved by the flagman; and on passenger trains the baggage master must take the place of the front brakeman whenever necessary.

99. When a train is detained by an accident or obstruction, or stops at any unusual point, the flagman must immediately go back with danger signals to stop any train moving in the same direction. At a point fifteen telegraph poles from the rear of his train he must place one torpedo on the rail on the engineman's side; he must then continue to go back at least twenty telegraph poles from the rear of his train, and place two torpedoes on the rail on the engineman's side, ten yards apart (one rail length), when he may return to a point fifteen telegraph poles from the rear of his train, where he must remain until an approaching train has been stopped, or he is recalled by the whistle of his engine. When he comes in he will remove the torpedo nearest to the train, but the two torpedoes must be left on the rail as a caution signal to any following train.

Should the flagman be recalled before reaching the required distance, he will place two torpedoes on the rail, on the engineman's side, ten yards apart (one rail length), and immediately return to his train, unless a train is within sight or hearing.

If, from any cause, the speed of the train is reduced, the conductor will be held responsible for fully protecting the rear of the train by the use of proper signals.

If the accident or obstruction occurs upon single track, and it becomes necessary to protect the front of the train, or if any other track is obstructed, the head brakeman must go forward and use the same precautions. If the head brakeman is unable to go the fireman must be sent in his place.

99(A). When on a curve or down grade, the flagman must go back a distance at least twenty telegraph poles farther than as above provided, and as many more as may be necessary, before placing torpedoes, to give approaching trains ample time to stop.

99(B). When a flagman goes back to protect his train, as per Rules Nos. 99 and 99(A), and is recalled before he has gone the required distance, he will place two torpedoes on the rail 30 feet apart and then return to his train, provided the track is straight for at least three-quarters of a mile in the rear of the train, the view unobstructed by fog or otherwise, no passenger train due within ten minutes and no following train in sight. If the conditions are otherwise he must be governed by Rules 99 and 99(A).

99(C). When it is necessary for a train to stop between stations for any cause, it will, if practicable, be stopped at a place where the view in the rear of the train is clear for at least half a mile, but not at the foot of a grade, and the train must be protected as per Rules 99 and 99(A).

100. Freight trains having work to do on any other track may cross over if no passenger train is due provided no approaching freight train is in sight; and also provided that a flagman has been sent with danger signals, as provided in Rules Nos. 99 to 99(C), inclusive.

101. When a freight train on double track turns out onto the opposite track to allow a passenger train running in the same direction to pass, and, while waiting, a passenger train from the opposite direction arrives, the freight train may cross back and allow it to pass, provided the other passenger train is not in sight; and also provided that a flagman has been sent with danger signals, as provided in Rules Nos. 99 to 99(C), inclusive.

102. When it is necessary for a freight train on double track to turn out on to the opposite track to allow a passenger train running in the same direction to pass, and a passenger train running in the opposite direction is due, a flagman must be sent back with danger signals, as provided in Rules Nos. 99 to 99(C), inclusive, and the freight train must not cross over until one of the passenger trains arrives. Should the following passenger train arrive first, a flagman must be sent forward on the opposite track with danger signals, as provided in Rules Nos. 99 to 99(C), inclusive, before crossing over. Great caution must be used, and good judgment is required to prevent detention to either passenger train.

103. If a train should part while in motion, trainmen must use great care to prevent the detached parts from coming in collision. Enginemen must give the signal as provided in Rule No. 43, and keep the front part of the train in motion until the detached portion is stopped.

The front portion will have the right to go back, regardless of all trains, to recover the detached portion, first sending a flagman with danger signals fifteen telegraph poles in the direction in which the train is to be backed, and running with great caution, at a speed not exceeding four miles per hour. On single track all the precautions required by the Rules must also be taken to protect the train against opposing trains. **The detached portion must not be moved or passed around until the front portion comes back.** This rule applies to trains of every class.

An exception will only be made to the above when it is known that the detached portion has been stopped, and when the whole occurrence is in plain view, no curves or other obstructions intervening, so that signals can be seen from both portions of the train. In that event the conductor and engineman may arrange for the re-coupling, using the greatest caution.

104. When a train is being pushed by an engine (except when shifting and making up trains in yards) a flagman must be stationed in a conspicuous position on the front of the leading car, so as to perceive the first sign of danger and immediately signal the engineman.

105. A train starting from its initial station on each division (or district), or leaving a junction, when a train of the same class running in the same direction is over-due, will proceed on its own time and rights, and the over-due train will run as provided in Rule No. 88 or 89.

105(A). In case of delay to any freight train of ten minutes or more, any following train overtaking it may pass and run ahead without orders, but where an extra train passes a section of a regular train, it must notify all opposing trains of having passed such train.

106. A train which is delayed, and falls back on the time of another train of the same class, does not thereby lose its rights.

107. Regular trains twelve hours or more behind their schedule time lose all their rights.

108. A train overtaking another train of the same or superior class, disabled so that it cannot move, will pass it, and will, if necessary to enable it to proceed, assume the rights, and take the orders of the disabled train to the first open telegraph office, where it will report to the Train Master. The disabled train will assume the rights of the last train passing it with which it exchanged rights or orders, until the first open telegraph office is reached.

109. All messages or orders respecting the movement of trains or the condition of track or bridges must be in writing.

110. Trains must not display signals for a following train without orders from the Train Master or other authority designated by the Superintendent.

111. Extra trains must not be run without an order from the Train Master.

112. Conductors of trains or engines carrying signals to points where there are no train registers, will stop and notify all trains and engines they meet between such points and place where next register is kept, and will there register signals carried to — giving the point.

113. Work trains will be run as extras under special orders, and will be assigned working limits.

114. Great care must be exercised by the trainmen of a train approaching a station where any train is receiving or discharging passengers.

115. Enginemen must observe trains on the opposite track and if they are running too closely together call attention to the fact.

116. No person will be permitted to ride on an engine except the engineman, fireman and other designated employees, in discharge of their duties, without a written order from the proper authority.

117. Conductors will be held responsible for the proper adjustment of switches used by them and their trainmen, except where switch tenders are stationed.

When there is more than one train to use a switch, it must not be left open unless one of the trainmen of the following train is at the switch and takes charge of it.

118. Accidents, detention of trains, failure in the supply of water, or fuel, or defects in the tracks or bridges, must be promptly reported by telegraph to the Train Master.

119. No train shall leave a station without a signal from its conductor.

119(A). Enginemen of freight trains must get "go ahead" signal from rear end of train before passing any station or side track that is designated on time table. Brakemen must not give "go ahead" signal without instructions from conductor.

120. Conductors and enginemen will be held equally responsible for the violation of any of the rules governing the safety of their trains, and they must take every precaution for the protection of their trains, even if not provided for by the rules.

120(A). At stations where a yard force is employed, trains, or engines without trains, will be under control of Yardmaster, and road crews of trains entering such stations will be responsible for their respective trains, or engines, until the same is taken charge of by the Yardmaster or his representative.

At such stations switching engines may work within yard limits without special orders, but must clear main line for all trains, as per Rule No. 83.

120(B). At stations where no yard force is employed, and where change is made in engine or train crews, the crew bringing train or engine in will be held responsible for the safety of same until delivered to the relieving crew.

121. In all cases of doubt or uncertainty take the safe course and run no risks.

RULES FOR THE MOVEMENT OF TRAINS BY TELEGRAPHIC ORDERS.

500. Special orders directing movements varying from or additional to the Time-table, will be issued by the authority and over the signature of the Train Master. They are not to be used for movements that can be provided for by rule or Time-table. They must not contain information or instructions not essentially a part of them.

They must be brief and clear, and the prescribed forms must be used when applicable; and there must be no erasures, alterations or interlineations.

501. Each order must be given in the same words to all persons or trains directly affected by it, so that each shall have a duplicate of what is given to the others. Preferably an order should include but one specified movement.

502. Orders will be numbered consecutively for each day as issued, beginning with No. 1 at midnight.

503. Orders must be addressed to those who are to execute them, naming the place at which each is to receive his copy. Those for a train must be addressed to the conductor and engineman, and also to a person acting as pilot. A copy for each person addressed must be supplied by the operator.

504. Each order must be written in full in a book provided for the purpose at the Train Master's office; and with it must be recorded the names of the trainmen and others who have signed for the order; the time and signals, showing when and from what offices the order and responses were transmitted, and the train dispatcher's initials. These records must be made at once on the original copy, and not afterwards, from memory or memoranda.

505. The terms "superior right" and "inferior right" in these rules, refer to the rights of trains under the Time-table and Train Rules, and not to rights under Special Orders.

506. When an order is to be transmitted, the signal "31" (as provided in Rule 509), or the signal "19" (as provided in Rule 511), meaning "Train Order," will be given to each office addressed, followed by the word "copy," and a figure indicating the number of copies to be made, if more or less than three—thus, "31 copy 5," or "19 copy 5."

507. An order to be sent to two or more offices must be transmitted simultaneously to as many as practicable. The several addresses must be in the order of superiority of rights of trains and each office will take only its proper address. When not sent simultaneously to all, the order must be sent first for the train having the superior right of track.

508. Operators receiving orders must write them out in manifold during transmission and make the requisite number of copies at one writing, or trace others from one of the copies first made.

509. When an order has been transmitted, preceded by the signal "31," operators receiving it must (unless otherwise directed) repeat it back at once from the manifold copy, and in the succession in which their several offices have been addressed. Each operator repeating must observe whether the others repeat correctly. After the order has been repeated correctly by the operators required at the time to repeat it, the response "O K," authorized by the train dispatcher, will be sent simultaneously to as many as practicable, naming each office. Each operator must write this on the order, with the time, and then reply "I O K," with his office signal.

Those to whom the order is addressed, except enginemen, must then sign their names to the copy of the order to be retained by the operator, and he will send their signatures to the Train Master. The response "complete," with the Train Master's initials, will then be given, when authorized by the train dispatcher. Each operator receiving this response will then write on each copy the word "complete"; the time; and his last name in full; and will then deliver a copy to each person included in the address, except enginemen and each must read his copy aloud to the operator. The copy for each engineman must be delivered to him personally by the conductor, and the engineman must read it aloud and understand it before acting upon it.

510. For an order preceded by the signal "31," "complete" must not be given to the order for delivery to a

train of inferior right until "O K" has been given to and acknowledged by the operator who receives the order for the train of superior right. Whenever practicable, the signature of the conductor of the train of superior right must be taken to the order and "complete" given before the train of inferior right is allowed to act on it.

After "O. K." has been given and acknowledged, and before "complete" has been given, the order must be treated as a holding order for the train addressed, but must not be otherwise acted on until "complete" has been given.

If the line fails before an office has received and acknowledged "O K" to an order preceded by the signal "31" the order at that office is of no effect, and must be there treated as if it had not been sent.

511. When an order has been transmitted, preceded by the signal "19," operators receiving it must (unless otherwise directed) repeat it back at once from the manifold copy, and in the succession in which the several offices have been addressed. Each operator repeating must observe whether the others repeat correctly. After the order has been repeated correctly, the response "complete," with Train Master's initials, will be given, when authorized by the train dispatcher. Each operator receiving this response must write on each copy the word "complete," the time and his last name in full, and reply "I complete" with his office signal, and will personally deliver the order to the persons addressed without taking their signatures.

512. For an order preceded by the signal "19" "complete" must be given and acknowledged for the train of superior right before it is given for the train of inferior right.

If the line fails before an office has received and acknowledged the "complete" to an order, preceded by the signal "19," the order at that office is of no effect, and must be treated as if it had not been sent.

513. The order, the "O K" and the "complete" must each, in transmitting, be preceded by "31" or "19," as the case may be, and the number of the order, thus "31 No. 10," or "19 No. 10." In transmitting the signature of a conductor it must be preceded by "31" the number of the order, the train number, thus, "31, No. 10, Train No. 5." After each transmission and response the sending operator must give his office signal.

514. The operator who receives and delivers an order must preserve the lowest copy. On this must appear the signatures of those who sign for the order, and on it he must record the time when he receives it; the responses; the time when they are received; his own name; the date and the train number, for which places are provided in the blanks. These copies must be sent to the Train Master.

515. Orders used by conductors must be sent by them daily to the Superintendent.

516. Enginemen will place their orders in the clip before them until executed.

516(A). Conductors are required to read to the rear brakemen and enginemen to the firemen all train orders upon receipt of same.

517. For orders delivered at the Train Master's office the requirements as to record and delivery will be the same as at other points.

517(A). When the train dispatcher on duty delivers in person to a conductor an order that has been sent to trains at other stations, the conductor will read the order aloud to the dispatcher, who will underscore it in his book in the same manner as when repeated over the wire. "Complete" must not be written on such order until this has been done.

518. Orders to persons in charge of work requiring the use of track in yards or at other points, authorizing such use when trains are late, must be delivered in the same way as to conductors of trains.

519. An order to be delivered to a train at a point not a telegraph station, or while the office is closed, must be addressed to

□ "C. and E., No.— Eng.— (at—), care of—" and forwarded and delivered by the conductor or other person in whose care it is addressed. "Complete" will be given upon the signature of the person by whom the order is to be delivered, who must be supplied with copies for the conductor and engine man addressed, and a copy upon which he shall take their signatures. This copy he must deliver to the first operator accessible, who must preserve it, and at once advise the train dispatcher of its having been received.

Orders so delivered to a train must be compared by those receiving them with the copy held by the person delivering and acted on as if "complete" had been given in the ordinary way.

Orders must not be sent in the manner herein provided to trains the rights of which are thereby restricted.

520. When a train is named in an order, all its sections are included unless particular sections are specified, and each section included must have copies addressed and delivered to it.

521. Meeting orders must not be sent for delivery to trains at the meeting point if it can be avoided. When it cannot be avoided, special precautions must be taken by the train dispatchers and operators to insure safety.

There should be, if possible, at least one telegraph office between those at which opposing trains receive meeting orders.

An operator must not acknowledge the receipt of an order for a train that is at his station, the engine of which has passed his train order signal, until he has personally notified the conductor and engine man that he has orders for them.

Orders should not be sent an unnecessarily long time before delivery, or to points unnecessarily distant from where they are to be executed. No orders (except those affecting the train at that point) should be delivered to a freight train at a station where it has much work, until after the work is done.

522. A train, or any section of a train, must be governed strictly by the terms of orders addressed to it and must not assume rights not conferred by such orders. In all other respects it must be governed by the Train Rules and Time-tables.

523. Orders once in effect continue so until fulfilled, superseded, or annulled. Where more than one movement is included in an order, any part of the order specifying a particular movement may be superseded or annulled. Orders held or issued for a regular train which has lost its rights as provided by Rules 20 and 107 are annulled, and other trains will be governed accordingly.

524 (B). A fixed signal must be used at each train order office, which shall display red when trains are to be stopped for orders. When there are no orders the signal must display white.

When an operator receives the signal "31," or "19," he must immediately display red, and then reply "red displayed." The signal must not be changed to white until the object for which red is displayed is accomplished.

While red is displayed, all trains must come to a full stop, and any train thus stopped must not proceed without receiving an order addressed to such train, or a clearance card on a specified form stating over the operator's signature that he has no orders for it. Operators must be prepared with other signals to use promptly if the fixed signal should fail to work properly. If a signal is not displayed at a night office, trains which have not been previously notified must stop and inquire the cause, and report the facts to the Train Master from the next open telegraph office.

When a semaphore is used, the arm means red when horizontal and white when in an inclined position.

524 (C). If an operator receives an order to hold a train, or receives an order addressed to a train which is at his station, he must not repeat the order until the conductor of such train has seen and signed the same, whether it be a "31" or "19" order.

525. Operators will promptly record and report to the Train Master the time of departure of all trains and the direction in which extra trains are moving. They will record the time of arrival of trains and report it when so directed.

526. Regular trains will be designated in orders by their schedule numbers, as "No. 10," or "2nd No. 10," adding engine numbers; extra trains by engine numbers, as "Extra 798"; and all other numbers by figures. The direction of the movement of the extras will be added, as "East," or "West." Time will be stated in figures only.

527. The following signs and abbreviations may be used: Initials for Train Master's signature.

Such office and other signals as are arranged by the Superintendent.

C & E—for Conductor and Engine man.

O K—as provided in these rules.

Min—for Minutes.

Junc—for Junction.

Frt—for Freight.

No—for Number.

Eng—for Engine.

Sec—for Section.

Opr—for Operator.

9—to clear the line for Train Orders, and for Operators to ask for Train Orders.

31 or 19—for Train Order as provided in the rules.

The usual abbreviations for the names of the months and stations.

FORMS OF TRAIN ORDERS.

Form A—Fixing Meeting Point for Opposing Trains.

— and — will meet at —

EXAMPLES.

No. 1, Eng. 200, and No. 2, Eng. 300, will meet at Bombay.

No. 3, Eng. 200, and 2d No. 4, Eng. 300, will meet at Siam.

No. 5, Eng. 200, and Extra North, Eng. 300, will meet at Hong Kong.

Extra North, Eng. 200, and Extra South, Eng. 300, will meet at Yokahama.

Trains receiving this order will, with respect to each other, run to the designated point, and having arrived there will pass in the manner provided by the Rules.

Form B—Authorizing a Train to Run Ahead of or Pass Another Train Running in the Same Direction.

(1.) — will pass — at —.
(2.) — will run ahead of —, — to —

EXAMPLES.

(1.)—No. 1, Eng. 59, will pass No. 3, Eng. 62 at Khartoum.

(2.)—No. 4, Eng. 100, will run ahead of No. 6, Eng. 120, Bengal to Madras.

When under this order a train is to pass another, both trains will run according to the rule to the designated point and there arrange for the rear train to pass promptly.

Form C—Giving a Train of Inferior Right the Right of Track Over an Opposing Train of Superior Right.

— has right of track over — to —.

EXAMPLES.

(1.)—No. 2, Eng. 307, has right of track over No. 1, Eng. 703, Mecca to Mirbat.

(2.)—Extra North, Eng. 37, has right of track over No. 3, Eng. 604, Natal to Rallam.

This order gives a train of inferior right the right of track over one of superior right, to a designated point.

If the trains meet at the designated point, the train of inferior right must take a siding, unless the rules or orders otherwise indicate.

Under this order, as illustrated by example (1), if the train of superior right reaches the designated point before the other arrives it may proceed, provided it keeps clear of the schedule time of the train of inferior right as many minutes as the inferior train was before required by the train rules to keep clear of the superior train.

If the train of superior right, before meeting, reaches a point beyond that named in the order, the conductor must stop the other train where it is met and inform it of his arrival.

Under example (2) the train of superior right cannot go beyond the designated point until the extra train arrives.

When the train of inferior right has reached the designated point, the order is fulfilled, and the train must then be governed by Time-table and Train rules or further orders.

The following modification of this form of order will be applicable for giving a work train the right of track over all other trains, in case of a wreck or break in the track.

EXAMPLE.

Work Train Extra North, Eng. 275 has right of track over all trains between Stockholm and Edinburgh from 7 p. m.

This gives the work train the exclusive right of the track between the points designated.

Form D—Giving All Regular Trains the Right of Track Over a Given Train.

All regular trains have right of track over — between — and —.

EXAMPLE.

All regular trains have right of track over No. 1, Eng. 509, between Moscow and Berlin.

This order gives to any regular train of inferior right receiving it the right of track over the train named in the order, and the latter must clear the schedule times of all regular trains, the same as if it were an extra.

Form E—Time Orders.

(1.) — will run — late from — to —.
(2.) — will wait at — until — for —.

EXAMPLES.

(1.) No. 1, Eng. 604, will run 20 min. late from Joppa to Mainz.

(2.) No. 1, Eng. 102, will wait at Muscat until 10 a. m. for No. 2, Eng. 611.

Form (1) makes the schedule time of the train named, between the points mentioned, as much later as the time stated in the order, and any other train receiving the order

is required to run (between the points mentioned) with respect to this later time, the same as before required to run with respect to the regular schedule time. The time in the order should be such as can be easily added to the schedule time.

Under Form (2) the train of superior right must not pass the designated point before the time given, unless the other train has arrived. The train of inferior right is required to run with respect to the time specified, the same as before required to run with respect to the regular schedule time of the train of superior right.

Form F—For Sections of Regular Trains.

— will carry signals — to — for —.

EXAMPLES.

No. 1, Eng. 50, will carry signals Astrakhan to Cabul for Eng. 85.

2d No. 1, Eng. 607, will carry signals London to Dover for Eng. 90.

This may be modified as follows:

Engines 70, 85 and 90 will run as 1st, 2d and 3d sections of No. 1, London to Dover.

For annulling a section:

Eng. 85 is annulled as 2d section of No. 1 from Dover.

If there are other sections following add:

Following sections will change numbers accordingly.

The character of a train for which signals are carried may be stated. Each section affected by the order must have copies, and must arrange signals accordingly.

Form G—For Arranging a Schedule for an Extra Train.

(1.) Eng. — will run extra, leaving — on —, on the following schedule, and will have the right of track over all trains:

Leave —.

—.

Arrive —.

EXAMPLES.

(1.) Eng. 77 will run extra, leaving Turin on Thursday, Feb. 17th, on the following schedule, and will have the right of track over all trains:

Leave Turin 11:30 p. m.

“ Pekin 12:25 a. m.

“ Canton 1:47 a. m.

Arrive Rome 2:22 a. m.

Example (1) may be varied by specifying particular trains over which the extra shall or shall not have right of track, and any train over which the extra is thus given the right of track must clear its time as many minutes as such train is required to clear the schedule time of a first-class train.

Form H.—Extra Trains.

— will run extra — to —.

EXAMPLE.

(a.) Eng. 99 will run extra Berba to Gaza.

A train receiving an order to run extra is not required to guard against opposing extras, unless directed by order to do so, but must keep clear of all regular trains, as required by rule.

A “work train” is an extra, for which the above form will be used for a direct run in one direction. The authority to occupy a specified portion of the track, as an extra while working, will be given in the following form:

(b.) Eng. 292 will work extra from 7 a. m. until 6 p. m., between Berne and Turin.

The working limits should be as short as practicable, to be changed as the progress of the work may require. The above may be combined thus:

(c.) Eng. 292 will run extra Berne to Turin and work extra from 7 a. m. until 6 p. m. between Turin and Rome.

When an order has been given to “work” between designated points, no other extra must be authorized to run over that part of the track without provision for passing the work train.

When it is anticipated that a work train may be where it cannot be reached for meeting or passing orders, it may be directed to report for orders at a given time and place, or an order may be given that it shall clear the track for (or protect itself after a certain hour against) a designated extra by adding to example (b) the following words:

(d.) And will keep clear of (or protect itself against) Extra South Eng. 223, between Antwerp and Brussels after 2:10 p. m.

In this case Extra 223, must not pass the northern-most station before 2:10 p. m., at which time the work train must be out of the way, (or protect itself as the order may require) between those points.

When the movement of an extra train over the working limits cannot be anticipated by these or other orders to the work train an order must be given to such extra, to protect itself against the work train, in the following form:

(e.) Extra 76 will protect itself against work train extra 95 between Lyons and Paris.

This may be added to the order to run extra.

A work train when met or overtaken by an extra must allow it to pass without unnecessary detention.

When the conditions are such that it may be considered desirable to require that work trains shall at all times protect themselves while on working limits, this may be done under the following arrangements: To example (b) add the following words:

(f.) protecting itself against all trains.

A train receiving this order must, whether standing or moving, protect itself within the working limits (and in both directions on single track) against all trains, in the manner provided in Rules 99 to 99 (C) inclusive.

When an extra receives orders to run over working limits it must be advised that the work train is within those limits by adding to example (a) the words:

(g.) Eng. 292 is working extra between Berne and Turin.

A train receiving this order must run expecting to find the work train protecting itself within the limits named.

Form J.—Holding Order.

Hold—at—

EXAMPLES.

(1.) Hold No. 2 at Berlin.

(2.) Hold all trains east at Berlin.

As any order for which “O. K.” has been given and acknowledged operates as a holding order for the train to which it is addressed, this form will only be used in special cases, to hold trains until orders can be given or for some other emergency. The reason for holding may be added, as “for orders.”

This order is not to be used for holding a train, while orders are given to other trains against it, which are not at the same time given to it in duplicate. It must be respected by conductors and enginemen of trains thereby directed to be held as if addressed to them. Conductors when informed of the order must sign for it, and their signatures must be sent and “complete” obtained.

When a train has been so held it must not go until the order to hold is annulled or an order is given in the form.

“— may go.”

This must be addressed to the person or persons to whom the order to hold was addressed and must be delivered in the same manner.

Form K—Annuling a Schedule Train.

— of — is annulled.

EXAMPLES.

(1.) No. 1 of Feb. 29th. is annulled.

(2.) No. 3, due to leave Naples Saturday, Feb. 29th. is annulled.

Adding “from Alaska,” or “between Alaska and Halifax.”

This order takes away all rights of the train annulled and authorizes any train or person receiving it to use the track as if the train annulled were not on the Time-table.

If a train is annulled to a point named, its rights beyond that point remain unaffected.

The train dispatcher may direct any operator to omit repeating back an order annulling a train until he has occasion to deliver it.

When a train has been annulled it must not be again restored under its original number by special order.

Form L.—Annuling or Superseding an Order.

“Order No. — is annulled.”

This will be numbered, transmitted and signed for as other orders.

If an order which is to be annulled has not been delivered to a train, the annulling order will be addressed to the operator, who will destroy all copies of the order annulled but his own, and write on that:

Annulled by Order No. —.

An order superseding another may be given adding “this supersedes Order No. —” or adding “instead of —.”

EXAMPLE.

No. 1 Eng. 13 and No. 2 Eng. 14, will meet at Sparta instead of at Thebes

An order that has been annulled or superseded must not be again restored by special order under its original number.

In the address of an order annulling or superseding another order, the train first named must be that to which rights were given by the order annulled or superseded, and when the order is not transmitted simultaneously to all concerned, it must be sent to the point at which that train is to receive it and the required response first given before the order is sent for other trains.

**Standard Train Order Blank for
"19" Order.**

BOUND HERE.

PERFORATED LINE.

London and Paris Railway Company.

TELEGRAPHIC TRAIN ORDER No. ¹⁰.....

TRAIN MASTER'S OFFICE, *March 27, 1885.*

FORM 19	For..... Station To <i>C & E</i> of No. <i>13.</i>	FORM 19
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Conductors and Enginemen must each have a copy of this order.

Time Received *2:15 A. M.* O. K. given at *2:15 A. M.*

Conductor.	Engineman.	Train.	Made	At	Received by
<i>Jones</i>	<i>Brown</i>	<i>13</i>	<i>Complete</i>	<i>2:20</i>	<i>Jno Smith</i>
	(Omit this column where Engineman is not required to sign.)				

Conductors and Enginemen must each have a copy of this order.

Rec'd *2:15 P. M.* Made *Complete* at *2:16 P. M.* Rec'd by
Jones Opr.

**Standard Train Order Blank for
"31" Order.**

BOUND HERE.

PERFORATED LINE.

London and Paris Railway Company.

TELEGRAPHIC TRAIN ORDER No. ¹⁰.....

TRAIN MASTER'S OFFICE. *March 27, 1885.*

FORM 31	For..... Station To <i>C & E</i> of No. <i>13.</i>	FORM 31
-------------------	--	-------------------

Conductors and Enginemen must each have a copy of this order.

Time Received *2:15 A. M.* O. K. given at *2:15 A. M.*

Conductor.	Engineman.	Train.	Made	At	Received by
<i>Jones</i>	<i>Brown</i>	<i>13</i>	<i>Complete</i>	<i>2:20</i>	<i>Jno Smith</i>
	(Omit this column where Engineman is not required to sign.)				

**LONDON AND PARIS RAILWAY CO.
CLEARANCE CARD.**

Dover, 9:15 A. M. March 25, 1887.

Conductor and Engineman No. 12.

I have no orders for your train. Signal is out for No. 16.

John Jones, Operator.

This does not interfere with or countermand any orders you may have received.
Conductor MUST SEE that the number of HIS TRAIN is entered in the above form correctly.
Conductor and Engineman must each have a copy.

SPECIAL INSTRUCTIONS.

SPECIAL INSTRUCTIONS.

200. Clocks regulated to standard time are located at Union Depot (Hannibal) Outer Depot, Moberly, Franklin Junction, Texas Junction, Mokane, Sedalia, Nevada, Parsons, Paola, Muskogee, McAlester, Atoka, Denison and Ray.

201. Train registers are kept at Texas Junction, Mokane, Hannibal, Outer Depot, Moberly, Franklin Junction, Sedalia, Nevada, Parsons, Paola, Coffeyville, Junction City, Muskogee, McAlester, Atoka, Coalgate, Warner Junction, Denison and Ray.

202. Passengers must not be permitted to ride in Baggage Cars, nor on platforms of cars.

203. "D" denotes Day, "N. O." denotes Night, and "N" denotes Day and Night Telegraph offices.

204. Enginemen of extra and special trains, and of Time-table trains when late, will, between sunrise and sunset, sound the Road Crossing whistle signal, on approaching curves and other obscure places, as a warning to track and bridge forces.

205. Conductors and enginemen must, before starting on their runs, examine the bulletin books in the Division offices to see if any new orders or instructions are written therein. They must also carefully observe all such orders and acknowledge receipt by signing each bulletin.

206. Conductors and enginemen must see that their engines, baggage cars and cabooses are properly supplied with all necessary chains, ropes, jacks, frogs and tools to use when needed, and all signals required by the rules of this Time-table.

207. Trains must not exceed the prescribed speed as shown by slow boards in passing over bridges and trestles.

208. Passenger conductors are required to be in attendance on their trains, in regulation uniform, half an hour before leaving time, and to remain in attendance in full uniform until they reach the end of their run, discharge their passengers, and turn their trains over in proper condition to their successors or yardmen. They will be held responsible for the cleanliness and proper condition of cars in their trains, and for the prompt action and general good conduct of their baggagemen, brakemen and porters, requiring them to be on duty, in regulation uniform, half an hour before the leaving time, and to remain so until the end of their runs and all their duties have been performed. They will see that Brakemen and Porters call out in a distinct voice twice, in each coach, immediately after leaving each station, the name of the next station at which train is to stop, and announce the station again just before train stops, and assist passengers on and off the cars.

Freight conductors and brakemen are required to be in attendance on their trains not less than half an hour before leaving time. Freight conductors will be held responsible for the faithful performance of duty required on the part of their brakemen and will see that they remain at their proper posts at all times.

Engines and enginemen must be ready to leave round house half an hour before leaving time of their trains.

209. No public road or street crossing must be obstructed by trains or engines for more than five minutes at any one time.

210. Station agents will be held responsible for the proper position of all switches in the main tracks at stations where no yard crews are employed. They must also see that the brakes are properly set on cars on sidings and when necessary see that the wheels are blocked.

211. All trains and engines without trains, under all circumstances must come to a full stop before reaching the Missouri River bridge at Boonville and will not proceed until the proper signals for advancing have been given by the bridge watchman. Enginemen must use not less than four minutes in crossing this bridge.

212. The Yard Masters at Hannibal, Moberly, Franklin Junction, Sedalia, Paola, Nevada, Parsons, Muskogee, McAlester, Denison and Ray will have control of and direct the movement of trains while at their respective stations.

They will also see that all trains are made up and are ready to leave on time.

213. All trains will be governed by St. Louis, Keokuk & North-western Time-table and Rules, between Texas Junction and St. Louis, by Merchants Terminal Time-table and rules when on that Company's tracks in St. Louis, and by Kansas City, Ft. Scott & Memphis Time-table and Rules between Paola and Kansas City.

214. Way freight trains will carry passengers. When there are two or more sections of these trains, the regular train only will be allowed to carry passengers. Conductors of way freight trains must know that all passengers on their trains are provided with tickets before leaving ticket stations.

215. All conductors and enginemen running on Hannibal Division will provide themselves with Hannibal Yard Time-table, and will govern themselves by it while running between Union Depot at Hannibal and Outer Depot.

216. All trains and engines must come to a full stop before reaching L. & S. Junction at north end of Nevada Yard.

217. All trains will be run under the directions of conductors, except when they conflict with rules or involve risk, in which case the enginemen will be held equally responsible.

218. Enginemen will be particular to have their ash pans closed while crossing all bridges and trestles and passing coal platforms and wood yards. They will not use steam while passing cotton on platforms or on flat cars, when possible to avoid it. They will not clean their fire on main track (except at designated points) near station buildings, nor on frogs and switches. Enginemen must extinguish fire before leaving points where fires are cleaned.

219. Enginemen will guard against accidents likely to occur from stock being on track, and when stock is killed or injured report the fact by wire to Superintendent, and at the end of the trip make report on proper form to the General Agent.

220. All trains will run slow during and immediately after heavy storms, keeping a close lookout for all places that are liable to wash out or slide.

221. Stock trains must not exceed 30 miles and other freight trains 25 miles per hour, without proper authority.

222. Running switches are prohibited except when absolutely necessary.

223. All persons are particularly cautioned against standing upright on top of covered cars while passing through bridges and tunnels.

224. Great care must be used in coupling and uncoupling cars. Do not go between cars unless they are moving at a slow and safe speed, nor attempt to make any coupling unless the draw-bars and other coupling appliances are known to be in good order. The greatest care must be observed in making couplings on inside of curves.

225. All persons are strictly forbidden to board engines or cars while they are in too rapid motion.

226. Smoking while on duty, and the use of intoxicating liquors are strictly prohibited.

227. Conductors of all trains will report for orders before leaving Union Depot (Hannibal) Outer Depot, Moberly, Texas Junction, Mokane, Franklin Junction, Sedalia, Nevada, Parsons, Paola, Coffeyville, Junction City, Muskogee, Krebs, Coalgate, Denison and all other terminal points. If no orders, operators will furnish a clearance.

228. Conductors and enginemen when they see the telegraph line down, must report the fact to the Train Master from first telegraph station, giving location near as possible.

229. Bridge and track foremen are required to have at all times a copy of the current Time-table of the Division on which they are at work, and avoid obstructing the passage of trains as much as possible. They must provide themselves with reliable watches and frequently compare time with conductors.

230. Bridge and track foremen must exercise great watchfulness in the use of hand and truck cars. Where by reason of fog, sharp curves or the like, risk is involved, they must be protected by flagmen against special and extra trains and engines that may be run at any time of the day or night without notice to them by signals or otherwise.

231. Bridge and track foremen must keep their bridges and sections of track in good repair, and at all times, except when protected by proper signals, perfectly safe for the passage of trains. They must notice passing engines to see whether signals are carried.

232. In cases of severe storms or violent winds, whether by day or night, section foremen are required to make thorough examination of their sections and see that all is safe. Bridge foremen will also be on hand, ascertain as far as possible the condition of bridges and trestles and report to proper officers.

233. Whenever the main track is obstructed, or rendered unsafe, from any cause, a flagman must be sent out in each direction, (whether any train is expected or not) to flag trains in accordance with Rules Nos. 99 to 99(C), inclusive.

234. When the telegraph wires are down the Section men are expected to have wire and connect them temporarily, and report the fact at nearest telegraph station to the Train Master giving locality and other particulars.

235. Passenger trains should not be backed without a man at air hose on rear end.

236. Conductors will see that the words "Bad Order" are written with chalk on both sides of disabled cars left at stations, and defect part marked with a cross.

237. Conductors of work and construction trains, when they lay up for the night, must notify Train Master by wire where they intend working and their movements during the following day.

238. Conductors of way freight trains will comply with instructions of Agents in placing cars and doing other switching. If necessary for any freight train to disturb cars that are loading or being unloaded, they must be replaced in same position as found. In case the Agents' orders are unreasonable, the fact must be reported to the Train Master.

239. Conductors will see that a red flag by day and a red light by night are kept on rear end of rear car of their trains. Three torpedoes must be attached to the staff of the flag, and three torpedoes to the wire guard of the lantern so as to be ready for immediate use. The Head Brakeman must have a red flag and a red lantern similarly equipped on engine.

240. Train order board means white when it is parallel with main track.

241. While it is the duty of Brakemen to ride on the top of freight trains during cold or stormy weather the rear Brakeman may ride in the caboose and the forward Brakeman on the engine, provided they take their positions at the brakes when descending heavy grades or when within a distance of not less than one mile from each station, railroad crossing or water tank, where they will remain until

the train comes to a full stop or has passed the station, crossing or tank.

212. All car doors of covered cars must be closed while in transit.

213. All loaded covered cars must be sealed on both sides and end doors secured. Refrigerator cars must have ice box covers sealed as well as doors.

214. Car loads of freight received at junction points, to be forwarded without transfer, which bear illegible or indistinct foreign seals, will not be received by this company without notice to the delivering line. If there is no agent of the delivering line at the junction point, M., K. & T. seals may be added over the foreign seals, leaving latter intact, and seal records of this company's agent and of the conductor receiving and handling such car will show both foreign and M., K. & T. seals. In no case must a foreign seal be disturbed, unless careful check of contents of car is made at receiving point. Junction agents are cautioned to use diligence and care in inspecting seals on transferred cars promptly on delivery of same. Conductors will refuse to receive cars with indistinct or illegible foreign seals, except as above.

215. Every engine running between sunset and sunrise will have a red light burning in signal box on rear end of tender, the light showing directly to the rear only.

216. All trains, and locomotives without trains, shall come to a full stop at a point not less than two hundred (200) feet and not more than four hundred (400) feet from the crossing of other railroads, and if the way is clear shall sound one long blast of the whistle in case of first class trains, and two similar blasts in case of second class trains, before starting forward, and Conductors and Enginemen will be required to take all other necessary precautions to guard against the possibility of accidents at railroad crossings.

AIR-BRAKES.

300. Employes whose duties are connected in any way with the operation of Air-brakes will be examined from time to time by the Inspector of Air-brakes or other person appointed by the proper authority, as to their qualifications for such duties and a record of such examinations preserved.

301. Enginemen, when starting Air-pump, must allow water of condensation to escape gradually and not force it out by running the pump with full steam pressure. They must start slowly and increase the speed gradually. Before coupling the engine to a train they must know that the Air-brake apparatus on both engine and tender is in good condition; that the Air-pump lubricator and pump governor work properly and with the engineman's brake-valve handle in running position maintain a maximum pressure of seventy (70) pounds in train pipe, and ninety (90) pounds in main reservoir. They must also see that the engineman's brake-valve works properly in each position of the handle. If engine is equipped with Cam driver-brakes, the piston travel must not be less than two nor more than three inches, and for other type of driver-brakes, not less than four nor more than six inches, and the tender brake piston travel must not be less than five nor more than eight inches. Air-pipes under tender must be thoroughly blown out through angle cock.

302. When engine has been coupled to train and air pressure equalized, (which will be shown by the pointers on the Air-gauge moving ahead) the engineman will notify the trainmen when ready to test the brakes, and upon receiving proper signal, will make a service application of twenty (20) pounds and leave brakes applied until signal of release is given. As soon as the brakes have been applied the trainmen will start from the engine and carefully examine the brake on each car, see that the piston travel is correct and that there are no leaks or other defects; after which, standing by the rear car, they will give a signal to release and will then go toward the engine, again examining for leaks and

see that all brakes are released. They will then notify the engineman of the number and the condition of brakes in the train. This test must be repeated after every change in the make up of trains.

For freight trains the signal to release is the regular "stop" signal and for passenger trains, four (4) blasts of the air signal whistle.

303. Should it be found necessary to make additional applications, by reason of defects discovered during the test, the engineman will be governed by the following signals: The hand or a lamp elevated above the head, indicating that the brakes should be applied.

304. Enginemen must not leave a station where test should be made without first being notified that the brakes are in proper working order.

305. With freight trains partially equipped with Air-brakes, the engineman after shutting off steam, must first allow the slack of train to run in against the engine and then apply the brakes gradually by a five (5) pound reduction, allowing ample time for any slack that may not yet be taken up to close in, before another reduction is made. This will avoid rough handling of that portion of the train not equipped with Air-brakes. In all cases the brakes must be applied carefully in order to prevent shocks, and damage to cars and lading.

306. If it is found that the brakes are sticking, the brake-valve handle should be moved to full release for a few seconds and then returned to running position. If from any cause the brakes are applied suddenly, the brake-valve handle should be placed on lap until signal to release is given.

307. In applying brakes to steady train upon descending grades, enginemen will use great care to keep the slack of train taken up—release the brakes where the grades or curves will keep train together and apply brakes where grade might allow slack to run out. No excuse will be accepted for rough handling of trains.

308. When brakes are released at foot of grades, ample time must be given for air to release and slack to run out before using steam.

309. When the number of Air-brake cars are insufficient to handle train with safety, enginemen will notify trainmen and they will assist with hand-brakes immediately behind the air cars. Caboose hand-brakes must not be used except when train is backing.

310. Enginemen on freight trains must know positively that train is not parted before attempting to make a stop.

311. In making service stop with a passenger train, Enginemen must always release brakes a short distance before coming to a full stop, to prevent shocks at the instant of stopping, but on freight trains the brakes must not be released until train has been brought to a full stop.

312. Brakes are fully applied when a service reduction of twenty-five (25) pounds has been made,—a further reduction is a waste of air.

313. Frequent application and release of the brakes reduces their efficiency and must be avoided.

314. Emergency applications of the brakes must not be made except in actual emergencies.

315. Engines must not be reversed with driver brakes set.

316. Brakes must be fully released on the entire train before detaching the engine.

317. Each engine must be provided with one extra Air-brake hose and coupling, and if equipped with Air-signal, one extra signal hose and coupling.

318. Trainmen must know, before coupling engine to trains, that all hose are coupled, all hand-brakes are released, retaining valve handles turned down and the handles of all angle and cut-out cocks placed in working position.

319. All defects in Air-brakes must be noted by conductors on defect cards furnished for that purpose and delivered to

Car Inspector immediately on arrival at end of trip. When there are no defects to report, note on card, "Brakes O. K."

320. The air should be fully released upon cars set out from trains on sidings and hand-brakes securely set.

321. When uncoupling cars or engines, the brakes must first be released, both angle cocks closed and the couplings parted by hand.

322. The Conductor's valve must be used only in cases of emergency. When used the valve should be held open until the train comes to a full stop.

323. To assist enginemen in recharging auxiliary reservoirs on heavy descending grades, trainmen will turn the handles of the pressure retaining valves up and see that they are turned down after bottom of grade is reached in which latter position they must always remain while on level track and when ascending grades. When the pressure retaining valves are used, the wheels must be watched closely to prevent heating or sliding. Special notices will be issued from time to time as to the grades on which these valves are to be used. Trainmen will be held responsible for the sliding of wheels.

324. Every Air-brake car in train which is or can be put in good order must be cut in and used. When it is necessary to cut out a car on account of defective brake apparatus, it must be done with the cut-out cock under the car and not with the angle cock. When brakes are cut out conductors will so notify enginemen.

325. When a train breaks in two, close angle cock on rear car of that part of the train attached to the engine, and then signal to the engineman to release brakes. When cars are again properly coupled see that the angle-cocks are opened.

326. When not coupled together, air hose and signal hose must be secured in the dummy coupling so that face of dummy will cover the opening of the hose couplings and prevent dust and dirt from entering the hose.

327. Passenger trains must not leave a terminal station with any brakes cut out without authority from proper officer.

328. When necessary to release brakes by bleeding, open the release valve on auxiliary reservoir until the brake begins to release, then close.

TRAIN AIR SIGNALS.

350. In making up passenger trains, all couplings and car discharge valves on cars must be examined to see that they are tight. Should the car discharge valve on any car be found defective while on the road, it must be cut out and reported on Air-brake defect card.

351. In using the Air-signal, open the valve for one full second for each intended blast of the signal whistle and allow two seconds to elapse between pulls.

STEAM HEATING.

360. Before coupling Engine to train, all steam hose must be coupled and the train pipe cocks open throughout the train.

361. After engine is attached to train and the steam hose, cocks and valves properly adjusted, trainmen will notify enginemen to turn on the steam and when steam issues from the rear hose, the rear angle cock must be closed. A pressure of fifteen (15) to twenty-five (25) pounds is sufficient for moderate weather and should be gradually increased according to the temperature. Forty-five (45) pounds is the maximum pressure allowed and must not be exceeded.

362. At a distance of one mile from terminal or other station where engine is to be detached, the rear steam train pipe cock must be opened and the engineman so notified by one blast of the air signal, after receiving which the engineman will allow time enough for the water to be blown out of pipes before shutting off the steam. Trainmen will leave the rear cock open until engines have been changed.

363. Engines equipped with steam heating appliances, must be provided with one extra steam hose and coupling for rear end of tender and one extra hose and coupling for use between engine and tender.

364. After rear cocks have been closed the direct steam radiators should be blown out and the drip valve (being the smaller one) should be adjusted so that but little steam escapes with the water.

365. With Standard system, the drip under cars should be opened wide and steam allowed to blow through for a few seconds and then closed until very little steam escapes at the end of the drip.

366. The temperature of cars using either system is regulated by the steam inlet valve which with the Standard system is near the Baker heater and is the top valve in baggage cars, and in coaches is the larger valve of the two under the seats on each side of the car.

367. When cars are to be laid up, both radiator valves in Direct steam system should be opened until all the water is blown out of radiator and the inlet valve then closed. With Standard system, both valves inside of car must be opened until all water is blown out, then close the inlet valve and start fire in Baker heater. This must be done before rear train pipe cock is opened.

BAKER HEATERS.

400. Start a slow fire and keep the fire-pot half full of hard coal at all times. The coal must never be allowed to get below the top of the worm. This will give about fifteen (15) inches of fire. Ashes must be kept from under the grate and stove and pipes must be kept clean and in good condition. The inside safety lid should never be opened except to build the fire or to put in coal. Never force the fire by opening the inside safety lid.

401. To increase the heat, open the inside lower damper and close the upper damper. To reduce the heat, close the lower damper and open the upper damper about two inches, or according to the amount of heat required. With both

dampers closed, the car will not be too warm at any time—never have both open at the same time.

402. In filling the heater pipes be sure that the water contains all the salt it will hold in solution and that no undissolved salt enters the drum. Open the combination cock on end of drum and pour in water until it runs freely from same. The water should always stand at height of combination cock which may be tried by opening the cock but only when the fire is very low and no pressure on. Pipes should be warm all around before passengers enter the cars.

403. Failure of the heater arises from neglect or mismanagement; generally from allowing fires to run too long without putting in coal, then filling them full and operating the drafts, producing a rapid fire which instead of warming the car, stops the circulation which may cause trouble.

404. With the large amount of piping in the cars, the circulation (which is principally caused by the weight of the column of water falling from the drum into the pipes, and the difference in the weight of a column of cold and hot water) must necessarily be slow, and a forced fire will do no good, and may cause trouble. A small fire should be kept up in the heater at all times.

405. Passenger cars having Baker heaters must be turned, when practicable, so that the heater will be in the forward end.

PINTSCH GAS.

410. In lighting the lamps turn the main cock (in the pipe leading from the floor of the car to the ceiling) so that the revolving pin comes into view at "A." To light each lamp, open each globe and turn lamp cock full open, then light the gas and close the globe. After all the lamps are lighted turn the main cock full open. In lighting for a tunnel, the main cock can be left at "A" until the full light is required.

411. To extinguish the light, partially closing the main cock, and then close the main cock.

412. The reflectors, glasses and burners should be kept clean. In cleaning the mica glass use a soft brush used so as not to damage it. Dust and dirt on the inside surface of the pipes is liable to be blown off by the flow of gas to the burner tips and clog them, which causes badly shaped and smoky flames which may be temporarily corrected by brushing the tips with a small, stiff bristle brush, or by tapping them lightly. Such irregularities should be reported to the proper person and the trouble permanently corrected by taking off the burner cluster, removing the dirt and substituting new tips if necessary.

413. Leaks will generally be discovered by the smell of escaping gas. The exact location may be ascertained by covering the suspected pipes or fittings with a little soap suds.

414. All repairs to lamps, burners and other apparatus and regulation of the flames must have prompt attention and be reported to proper officer.

415. In filling car Receivers clean all the bearing surfaces of the unions before applying hose couplings to valves so as to prevent leakage through imperfect joints. If doubtful as to the dryness or cleanliness of the inside of the hose, allow the gas to blow through it for a second before attaching to car. After the hose is connected, open the valve on the car, read and record the indication of the gauge, then open the valve on the pipe line and allow the gas to flow into the receivers. When the gauge indicates ten (10) atmospheres shut both valves, closing the one on the car last.

416. The strictest economy in the use of gas must be exercised by all employes concerned.

M. SWEENEY,

General Superintendent.

the train comes to a
crossing or tank.

242. All car doors
in transit.

243. All load
sides and end
ice box co

THE

Missouri, Kansas & Texas Railway.

St. Louis, Hannibal, Sedalia and
Kansas City Divisions.

TIME TABLE

No. 20.

(SUCCEEDING TIME TABLE No. 19.)

IN EFFECT

Sunday, Feb. 13, 1898.

AT 12:01 O'CLOCK A. M.

Clayton

cc
ias
Eng
eca

111 I-111

2000
6000