

BALDWIN LOCOMOTIVE WORKS

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LOCOMOTIVE DETAILS

AND

TELEGRAPHIC CODE

FOR

DUPLICATE PARTS

1907



Class TJ625

Book B4

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BALDWIN LOCOMOTIVE WORKS

ILLUSTRATED CATALOGUE

DETAILS

OF

LOCOMOTIVES

AND

CABLE CODE

FOR DUPLICATE PARTS

BURNHAM, WILLIAMS & CO.

PHILADELPHIA



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## Introductory

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**I**T is intended in this publication to place before customers a work that may be found useful for ready reference in ordering duplicate parts of locomotives for renewals and repairs, and at the same time furnish such a complete record of names of the various parts comprising a locomotive and tender as will avoid the possibility of error in ordering supplies, from a misinterpretation of these names.

It is intended that the illustrations and their descriptions shall be so clear that no difficulty will be experienced in following the catalogue of names for any pieces that it may be found necessary to order. Instructions for cabling are also given so that the expense of ordering duplicate parts from a distance will be reduced as much as possible.

The system of manufacture employed in connection with the large number of machines at all times in process of construction, embracing the principal classes, insures unusual and especial facilities for filling orders at once, or with the least possible delay.

All work is accurately fitted to gauges which are made from a system of standards kept exclusively for the purpose, thus providing for like parts fitting accurately in all locomotives of the same class. This plan of interchangeability enables the customer to secure the maximum amount of service at the minimum cost for repairs.

The advantages resulting from these methods are apparent in the expense of maintenance and repairs and in the saving of expensive patterns, drawings, special tools, and shop room. Repairs can be made with the utmost promptness, and engines thus be kept in almost continuous service.





## Class Designations

**E**ACH locomotive has the builder's number plate attached to sides of smokebox directly over steam chests, except in small engines of special designs, when it is placed on smokebox door, or in some other conspicuous position. This plate contains the name of the manufacturers, the consecutive construction number of the engine, and the year in which constructed.

In ordering parts, in all cases where it is possible to do so, this construction number should be given, and when this cannot be obtained, the original road number or name should be supplied. This information will assist in ready reference to original records of construction and facilitate the work of renewals.

The different classes of locomotives are designated by a combination of figures with one of the letters A, B, C, D, E, or F, to indicate both the plan and sizes, as follows:

The letter A indicates that there are no traction driving wheels, and that the locomotive is driven by gear wheels engaging in a rack-rail or rails.

The letter B indicates that two wheels are connected as driving wheels.

The letter C indicates that four wheels are connected as driving wheels.

The letter D indicates that six wheels are connected as driving wheels.

The letter E indicates that eight wheels are connected as driving wheels.

The letter F indicates that ten wheels are connected as driving wheels.

A figure (4, 6, 8, 10, 12, or 14) is used to denote the whole number of wheels under the locomotive.

A figure or figures, following the figures indicating the whole number of wheels, indicates the diameter of cylinders, viz. :

	8 indicates cylinders	7 inches in diameter.			
10	“	“	8	“	“
12	“	“	9	“	“
14	“	“	10	“	“
16	“	“	11	“	“
18	“	“	12	“	“
20	“	“	13	“	“
22	“	“	14	“	“
24	“	“	15	“	“
26	“	“	16	“	“
28	“	“	17	“	“
30	“	“	18	“	“
32	“	“	19	“	“
34	“	“	20	“	“
36	“	“	21	“	“
38	“	“	22	“	“
40	“	“	23	“	“
42	“	“	24	“	“

Thus 8-26 C indicates an eight-wheeled locomotive, having four wheels coupled, and cylinders sixteen inches in diameter; 8-26 D indicates an eight-wheeled locomotive, having six wheels coupled, and cylinders of the same diameter; and 10-34 E, a ten-wheeled locomotive having eight wheels coupled, and cylinders twenty inches in diameter.

The same rule applies to Baldwin four-cylinder compound locomotives (Vauclain System). Thus 10- $\frac{22}{4}$  D indicates a ten-wheeled locomotive, having six wheels coupled, a fourteen inch high-pressure cylinder on each side, and a twenty-four inch low-pressure cylinder on each side. (For arrangement of cylinders, see Plate 6.)

The addition of the fraction  $\frac{1}{4}$  indicates that there is a truck at each end of the locomotive. Thus 8-26 $\frac{1}{4}$  C indicates an eight-wheeled loco-

motive, having four wheels coupled, cylinders sixteen inches in diameter, and a two-wheeled truck at each end.

The addition of the fraction  $\frac{1}{3}$  indicates that the engine is on the "Forney" plan, having the truck back of the firebox. Thus 8-26 $\frac{1}{3}$  C indicates an eight-wheeled locomotive, having four wheels coupled, cylinders sixteen inches in diameter, and a four-wheeled truck back of the firebox. 6-26 $\frac{1}{3}$  C indicates a six-wheeled locomotive, having four wheels coupled, cylinders sixteen inches in diameter, and a two-wheeled truck back of the firebox.

The figures following the class designation, as found on every locomotive, give the class number for that locomotive, and supply an individual designation for it, in addition to the construction number. Thus 8-26 C 500 means the five-hundredth locomotive of the 8-26 C class.



## Instructions for Cabling

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The cable address of these Works is, "**Baldwin, Philadelphia.**" All code words relating to duplicate parts begin with the letter "E."

Each of the tables accompanying the plates in this book has in large heavy letters opposite the plate number a code word, the use of which indicates that all the parts shown on the plate are required; and each of the items has opposite it a code word in small heavy letters indicating that only that particular piece is needed.

In all cases it is understood that a set or enough for one locomotive will be sent unless specific instructions to the contrary are given.

On pages, 33-41 a list will be found of duplicate parts in groups, such as are generally ordered, with a code word corresponding to each group.

In answering inquiries for prices, the cost is made for delivery f.o.b. vessel in Philadelphia or New York unless otherwise indicated.

**The construction or consecutive number of the locomotive should be used in cabling and in writing orders.** This is shown on the builder's plates, which are generally on the smokebox above the cylinders. Code words corresponding to construction numbers will be found in the tables herewith (pages 15-23), which range from 1 to 45,000 (from 1 to 1,000 inclusive proceeding by units, and from 1000 to 45,000 proceeding by thousands).

Words consisting of more than ten letters are counted as two words. When the name of a railway or firm embraces two or more words containing ten letters or less in all, they can be cabled as one: for instance, "**Costarica** Railway" (two words), meaning Costa Rica Railway.

It is a rule of all telegraph companies that in cabling, three figures count as one word. Therefore, any construction number can be cabled in two words: for instance, 13 975 (13975), which would be counted two words. Inasmuch, however, as figures are more apt to be improperly transmitted than words, a table has been prepared (see page 15) by the use of which construction numbers can still be given in two words and some of them in one, these words being less liable to misconstruction than the figures.

Messages should be written very plainly, so that there can be no doubt as to the word used, and no possibility of the division of one word into two.

Upon application a code word will be assigned, representing the name of any railroad company or firm desiring to do business by cable with the Baldwin Locomotive Works.

Example: The construction number 6000 would be one word, "Eenlobbig;" while 6020 would be "Eenlobbig Earthworms," and 12540 "Eensgezind Ecofora" ("Eensgezind" standing for 12,000 and "Ecofora" for 540). 6020 could also be 6 020, and 12540 be 12 540; but the word method is preferable.

Example: if it be desired to cable for a boiler complete, as shown on Plate 1, for engine 13978, to be shipped by steamer to Havana, Cuba, the message would read as follows (the signature should be the name of the company ordering or its code word).

HAVANA, January 10, 1905.

BALDWIN, Philadelphia.

Eerekrans  
Encotyle  
Eerewoord  
Eensklaps  
Eenbladig

(Signed) (Code name or actual name of Company)

Translation :

HAVANA, January 10, 1905.

BALDWIN, Philadelphia.

Eerekrans . . Please ship by steamer as soon as possible duplicate parts covered by code word.

Encotyle . . Boiler and all parts on Plate 1.

Eerewoord . . For one locomotive, construction number.

Eensklaps . }  
Eenbladig . } 13978.

(Name of Company)

But if a set of tubes were wanted, the message would read:

HAVANA, January 10, 1905.

BALDWIN, Philadelphia.

**Eerekrans**  
**Encravacao**  
**Eerewoord**  
**Eensklaps**  
**Eenbladig**

(Signed) (Code name or actual name of Company)

Translation:

HAVANA, January 10, 1905.

BALDWIN, Philadelphia.

**Eerekrans** . . Please ship by steamer as soon as possible duplicate parts covered by code word.

**Encravacao** . Boiler tubes.

**Eerewoord** . . For one locomotive, construction number.

**Eensklaps** . }  
**Eenbladig** . } 13978.

(Name of Company)

If three sets of tubes were wanted for the same locomotive, or for locomotives of the same dimensions, the message would read:

HAVANA, January 10, 1905.

BALDWIN, Philadelphia.

**Eerekrans**  
**Encravacao**  
**Eergierig**  
**Eensklaps**  
**Eenbladig**

(Signed) (Code name or actual name of Company)

Translation:

HAVANA, January 10, 1905.

BALDWIN, Philadelphia.

**Eerekrans** . . Please ship by steamer as soon as possible duplicate parts covered by code word.

**Encravacao** . Boiler tubes.

**Eergierig** . . For three locomotives, construction number.

**Eensklaps** . }  
**Eenbladig** . } 13978.

(Name of Company)

To order a pair of cylinders from Rio de Janeiro, Brazil, with parts attached, a message would read:

RIO, March 1, 1905.

BALDWIN, Philadelphia:

**Eerekroon**

**Effricatum** (See page 33.)

**Eensdeels**

**Eddaic**

(Signed) Code name or actual name of Company)

Translation:

RIO, March 1, 1905.

BALDWIN, Philadelphia.

**Eerekroon** . . Please ship by steamer as soon as possible duplicate parts covered by code word (see\*) for locomotive, construction number (see\*\*).

**Effricatum** . . \* 1 pair cylinders with heads, covers, chests, caps, casings, glands, valves, yokes and pistons, painted and varnished.

**Eensdeels** . }  
**Eddaic** . . } \*\* 11743.

(Name of Company)



A cable message from Yokohama, Japan, for a crosshead for left side of locomotive 14126, would read as follows :

YOKOHAMA, March 22, 1905.

BALDWIN, Philadelphia.

Eeredienst  
Endosmic  
Eeretomben  
Eensnarig  
Eboueuses

(Signed) (Code name or actual name of Company)

Translation :

YOKOHAMA, March 22, 1905.

BALDWIN, Philadelphia.

Eeredienst . . Please ship by quickest freight route as soon as possible duplicate parts covered by code word.

Endosmic . . Crosshead.

Eeretomben . For left hand side of one locomotive, construction number.

Eensnarig . }  
Eboueuses . } 14126.

(Name of Company)

To order an eccentric strap from Rio de Janeiro, Brazil, for locomotive 10055, a message would read :

RIO, March 1, 1905.

BALDWIN, Philadelphia.

Eerekrans  
Endrudge  
Eeresabels  
Eenschalig  
Ebaucheras  
Eerstdaags

(Signed) (Code name or actual name of Company)

Translation :

RIO, March 1, 1905.

BALDWIN, Philadelphia.

Eerekrans . . Please ship by steamer as soon as possible duplicate parts covered by code word.

Endrudge . . Eccentric Strap.

Eeresabels . . For right hand side of one locomotive, construction number.

Eenschalig }  
Ebaucheras } 10055.

Eerstdaags . . Backward motion.

(Name of Company)

## Cable Code Numbers

1 Eachwhere	35 Ebahi	69 Ebdomada
2 Eactarius	36 Ebalacon	70 Ebelians
3 Eadbert	37 Ebalette	71 Ebenaceo
4 Eadburge	38 Ebanacee	72 Ebenastre
5 Eadwin	39 Ebanista	73 Ebenbild
6 Eager	40 Ebanizar	74 Ebeneous
7 Eagerly	41 Ebankers	75 Ebenezer
8 Eagerness	42 Ebano	76 Ebenfalls
9 Eagrass	43 Ebanoyer	77 Ebenheit
10 Eanred	44 Ebaque	78 Ebeni
11 Eapse	45 Ebarbement	79 Ebenier
12 Earinus	46 Ebarbeuse	80 Ebenistes
13 Earshrift	47 Ebarboir	81 Ebenmass
14 Earthiness	48 Ebaroui	82 Ebenoxyle
15 Earthling	49 Ebattons	83 Ebenrecht
16 Earthly	50 Ebattriez	84 Ebensohle
17 Earthquake	51 Ebattront	85 Ebenspiel
18 Earthward	52 Ebattu	86 Ebenuz
19 Earthwork	53 Ebaubi	87 Ebenwage
20 Earthworms	54 Ebauchage	88 Eberesche
21 Earwig	55 Ebaucheras	89 Ebergement
22 Earwort	56 Ebauchiez	90 Eberhard
23 Easeful	57 Ebauchoir	91 Eberhirsch
24 Esels	58 Ebbeanker	92 Eberlue
25 Easily	59 Ebbeboom	93 Eberulf
26 Easiness	60 Ebbene	94 Ebetazione
27 Easium	61 Ebbenhout	95 Ebetement
28 Easterling	62 Ebbero	96 Ebeto
29 Easterly	63 Ebbestrom	97 Ebeurrer
30 Eastward	64 Ebbezeit	98 Ebeylieres
31 Eatable	65 Ebbing	99 Ebiasaph
32 Eatage	66 Ebbrezza	100 Ebionisme
33 Eauzan	67 Ebbrieta	101 Ebiscum
34 Eavagier	68 Ebbrioso	102 Ebisele

103 Eblana	145 Ebraizzare	187 Ebruitiez
104 Eblandior	146 Ebraizzava	188 Ebruitons
105 Eblanditus	147 Ebraizzo	189 Ebrulpho
106 Eblanine	148 Ebrancadas	190 Ebucheter
107 Eblouimes	149 Ebrancado	191 Ebudae
108 Eblouir	150 Ebranchait	192 Ebulinus
109 Eblouiras	151 Ebranchiez	193 Ebulliate
110 Eblouired	152 Ebranchons	194 Ebullicao
111 Eblouiront	153 Ebranlait	195 Ebulliciency
112 Eblouisses	154 Ebranler	196 Ebullition
113 Eboda	155 Ebranliez	197 Ebulo
114 Ebonist	156 Ebranliions	198 Eburacum
115 Ebonite	157 Ebrasure	199 Eburatus
116 Ebonized	158 Ebreche	200 Eburinorum
117 Eboraci	159 Ebreneur	201 Eburiphore
118 Eboracum	160 Ebria	202 Eburnation
119 Eborarios	161 Ebriacus	203 Eburnean
120 Eborense	162 Ebriation	204 Eburneos
121 Eborgnage	163 Ebriativo	205 Eburninae
122 Eboribus	164 Ebriato	206 Eburobriga
123 Ebosia	165 Ebriavisti	207 Eburodunum
124 Ebouage	166 Ebriedad	208 Eburon
125 Eboueur	167 Ebrietas	209 Eburones
126 Eboueuses	168 Ebriety	210 Eburovices
127 Ebouffer	169 Ebrieux	211 Ebusus
128 Ebouiger	170 Ebrillade	212 Ecabochage
129 Ebouilli	171 Ebriosa	213 Ecabochoer
130 Eboulait	172 Ebriosidad	214 Ecachement
131 Eboulee	173 Ebriositas	215 Ecaffer
132 Eboulement	174 Ebriosos	216 Ecafignon
133 Ebouleront	175 Ebrious	217 Ecaflote
134 Ebouleux	176 Ebriulatus	218 Ecagne
135 Ebouqueter	177 Ebrodunum	219 Ecaillage
136 Ebouriffe	178 Ebroin	220 Ecaillaire
137 Ebouisine	179 Ebromagi	221 Ecaille
138 Ebouter	180 Ebromagus	222 Ecaillette
139 Ebouture	181 Ebrondeur	223 Ecalcarate
140 Ebraiche	182 Ebrosser	224 Ecaler
141 Ebraico	183 Ebrouait	225 Ecalisseur
142 Ebraismo	184 Ebrouement	226 Ecalyptre
143 Ebraisoir	185 Ebruiteur	227 Ecangage
144 Ebraizzano	186 Ebruiteiras	228 Ecanguer

229 Ecaqueur  
 230 Ecarasse  
 231 Ecarquille  
 232 Ecarrure  
 233 Ecart  
 234 Ecartais  
 235 Ecartasses  
 236 Ecartelait  
 237 Ecarteler  
 238 Ecartement  
 239 Ecarterais  
 240 Ecarteriez  
 241 Ecarteur  
 242 Ecartons  
 243 Ecatisage  
 244 Ecaude  
 245 Ecauvage  
 246 Ecbalion  
 247 Ecballium  
 248 Ecbasis  
 249 Ecbatic  
 250 Ecbibi  
 251 Ecbibitum  
 252 Ecbirsoma  
 253 Ecbolade  
 254 Ecbolique  
 255 Ecbysome  
 256 Eccanthis  
 257 Eccedemmo  
 258 Eccedendo  
 259 Eccedenza  
 260 Eccederai  
 261 Eccedero  
 262 Eccedessi  
 263 Eccedeiamo  
 264 Eccedevate  
 265 Eccediate  
 266 Eccedo  
 267 Eccehomo  
 268 Ecceite  
 269 Eccentric  
 270 Eccentros

271 Eccessivo  
 272 Eccettuano  
 273 Eccettuare  
 274 Eccettuava  
 275 Eccheuma  
 276 Ecchymose  
 277 Ecchymosis  
 278 Eccillum  
 279 Eccitammo  
 280 Eccitando  
 281 Eccitarla  
 282 Eccitarono  
 283 Eccitassi  
 284 Eccitata  
 285 Eccitativo  
 286 Eccitatore  
 287 Eccitavamo  
 288 Eccitavate  
 289 Ecciterai  
 290 Eccitero  
 291 Eccitolla  
 292 Ecclesia  
 293 Ecclesiens  
 294 Ecclesiola  
 295 Ecclinuse  
 296 Eccopeur  
 297 Eccrisis  
 298 Eccycleme  
 299 Ecderon  
 300 Ecdicus  
 301 Ecdippa  
 302 Ecdique  
 303 Ecdore  
 304 Ecdurorum  
 305 Ecdysies  
 306 Ecelenore  
 307 Ecepper  
 308 Ecerner  
 309 Ecerveler  
 310 Ecetera  
 311 Ecfsa  
 312 Ecfsesi

313 Ecfonesi  
 314 Ecfraffi  
 315 Ecgonine  
 316 Echacantos  
 317 Echacorvos  
 318 Echadico  
 319 Echadores  
 320 Echaduras  
 321 Echafaud  
 322 Echafauder  
 323 Echaillon  
 324 Echalas  
 325 Echalasser  
 326 Echamiento  
 327 Echampeau  
 328 Echampi  
 329 Echamplure  
 330 Echanrais  
 331 Echançant  
 332 Echancreur  
 333 Echando  
 334 Echandole  
 335 Echanges  
 336 Echangiez  
 337 Echangions  
 338 Echangiste  
 339 Echapellas  
 340 Echapoter  
 341 Echappade  
 342 Echappiez  
 343 Echappons  
 344 Echarbon  
 345 Echarnoir  
 346 Echarpes  
 347 Echarseter  
 348 Echauboule  
 349 Echaudoir  
 350 Echauffer  
 351 Echauffure  
 352 Echaulant  
 353 Echaux  
 354 Echazones

- |                |                |                |
|----------------|----------------|----------------|
| 355 Echeable   | 397 Echinome   | 439 Echtbreuk  |
| 356 Echeancier | 398 Echinomys  | 440 Echteband  |
| 357 Echebulus  | 399 Echinopo   | 441 Echtebed   |
| 358 Echecllea  | 400 Echinopode | 442 Echtelijk  |
| 359 Echebrates | 401 Echinorhin | 443 Echtgareel |
| 360 Echechs    | 402 Echinozoa  | 444 Echtgenoot |
| 361 Echedamia  | 403 Echinulate | 445 Echttheit  |
| 362 Echeggia   | 404 Echinus    | 446 Echtthre   |
| 363 Echeggiano | 405 Echinussa  | 447 Echtting   |
| 364 Echeggiare | 406 Echionides | 448 Echtkoets  |
| 365 Echeggiava | 407 Echiopsis  | 449 Echtwort   |
| 366 Echelades  | 408 Echiquete  | 450 Echura     |
| 367 Echelaos   | 409 Echite     | 451 Ecidine    |
| 368 Echelidae  | 410 Echiuride  | 452 Ecimable   |
| 369 Echelonner | 411 Echkendji  | 453 Eckard     |
| 370 Echeneide  | 412 Echmagoras | 454 Eckband    |
| 371 Echeneidis | 413 Echnomos   | 455 Eckbert    |
| 372 Echeniller | 414 Echoes     | 456 Eckehard   |
| 373 Echephron  | 415 Echoicus   | 457 Eckelhaft  |
| 374 Echepolis  | 416 Echoing    | 458 Eckeln     |
| 375 Echeveria  | 417 Echome     | 459 Eckenhalm  |
| 376 Echevinage | 418 Echometer  | 460 Eckenzahl  |
| 377 Echidna    | 419 Echometria | 461 Eckerganz  |
| 378 Echidnine  | 420 Echometro  | 462 Eckermast  |
| 379 Echidorus  | 421 Echonele   | 463 Eckhaus    |
| 380 Echignole  | 422 Echopolus  | 464 Eckkegel   |
| 381 Echimyde   | 423 Echoppage  | 465 Ecklade    |
| 382 Echimyside | 424 Echoppe    | 466 Ecklonie   |
| 383 Echinacee  | 425 Echoton    | 467 Eckplatz   |
| 384 Echinaria  | 426 Echouage   | 468 Ecksaal    |
| 385 Echinated  | 427 Echouais   | 469 Ecksaeulen |
| 386 Echinidae  | 428 Echouasses | 470 Eckschuh   |
| 387 Echinidans | 429 Echouer    | 471 Eckstamm   |
| 388 Echinipede | 430 Echouerais | 472 Eckstein   |
| 389 Echinital  | 431 Echoueriez | 473 Eckthor    |
| 390 Echinite   | 432 Echoueront | 474 Ecktisch   |
| 391 Echinocere | 433 Echouiez   | 475 Eckzahn    |
| 392 Echinoderm | 434 Echouons   | 476 Eclactisme |
| 393 Echinodore | 435 Echrefite  | 477 Eclaffer   |
| 394 Echinogale | 436 Echsenbrut | 478 Eclair     |
| 395 Echinogyne | 437 Echsenei   | 479 Eclairage  |
| 396 Echinoide  | 438 Echtbreken | 480 Eclairais  |

481	Eclairci	523	Eclogarius	565	Ecorchant
482	Eclaircise	524	Eclogarum	566	Ecorchasse
483	Eclairons	525	Eclopper	567	Ecorcheler
484	Eclampsy	526	Eclore	568	Ecorchiez
485	Eclanche	527	Ecloses	569	Ecorcons
486	Eclandre	528	Eclosion	570	Ecornifle
487	Eclapsia	529	Eclusa	571	Ecossain
488	Eclapside	530	Eclusement	572	Ecossaises
489	Eclatable	531	Ecmatyrie	573	Ecossoneux
490	Eclatais	532	Ecmelia	574	Ecotado
491	Eclateriez	533	Ecnephias	575	Ecotant
492	Eclatons	534	Ecnomus	576	Ecotard
493	Ecleche	535	Ecobuer	577	Ecouailles
494	Eclecticos	536	Ecochelage	578	Ecouanette
495	Eclectique	537	Ecocheler	579	Ecouchures
496	Eclectiser	538	Ecoeurant	580	Ecoulard
497	Eclectisme	539	Ecoeurer	581	Ecoulera
498	Eclectizar	540	Ecofora	582	Ecoulerait
499	Eclegma	541	Ecofrai	583	Ecourgee
500	Eclepsis	542	Ecoica	584	Ecourgeon
501	Eclesiarca	543	Ecoicos	585	Ecourtant
502	Eclettismo	544	Ecoincon	586	Ecoussage
503	Eclidon	545	Ecolage	587	Ecoutames
504	Ecligmata	546	Ecole	588	Ecoutasses
505	Ecligmatis	547	Ecolerer	589	Ecouterais
506	Ecligmatum	548	Ecoliers	590	Ecouterons
507	Eclingure	549	Ecometria	591	Ecouteur
508	Eclipsable	550	Ecometro	592	Ecoutille
509	Eclipsais	551	Econduirai	593	Ecoutillon
510	Eclipsar	552	Economat	594	Ecoutoir
511	Eclipsaron	553	Economicas	595	Ecouvette
512	Eclipse	554	Economico	596	Ecphasis
513	Eclipsons	555	Economique	597	Ecphlysis
514	Eclipticus	556	Economist	598	Ecphoneme
515	Eclissage	557	Economizar	599	Ecphonesis
516	Eclissammo	558	Economize	600	Ecphora
517	Eclissando	559	Econtrario	601	Ecphorarum
518	Eclissassi	560	Econverso	602	Ecphoris
519	Eclissava	561	Ecoper	603	Ecphorome
520	Eclisser	562	Ecoperche	604	Ecphractic
521	Eclisso	563	Ecoquer	605	Ecphraste
522	Eclittica	564	Ecorcage	606	Ecphyma

607 Ecphymote	649 Escriturer	691 Ectopogono
608 Ecphyse	650 Ecrivaille	692 Ectopones
609 Ecphysese	651 Ecrivimes	693 Ectosarc
610 Ecpiema	652 Ecroe	694 Ectosmie
611 Ecpiesme	653 Ecroistre	695 Ectoza
612 Ecpleope	654 Ecrouellet	696 Ectrogenie
613 Ecplerome	655 Ecrouir	697 Ectromata
614 Ecplessia	656 Ecroutage	698 Ectromatis
615 Ecplexie	657 Ecrysie	699 Ectrome
616 Ecpnoe	658 Ecsarcome	700 Ectroparum
617 Ecpyeme	659 Ecstacy	701 Ectropical
618 Ecpyesis	660 Ecstasize	702 Ectropio
619 Ecpyetique	661 Ecstatic	703 Ectrotico
620 Ecpyrosis	662 Ecstatal	704 Ectrotique
621 Ecqui	663 Ectadion	705 Ectylotic
622 Ecquod	664 Ectatique	706 Ectypal
623 Ecrabourir	665 Ectatops	707 Ectype
624 Ecrache	666 Ectenes	708 Ectyrique
625 Ecraigne	667 Ecthesse	709 Ectyporum
626 Ecraïnier	668 Ecthesien	710 Ecuable
627 Ecrapette	669 Ecthimme	711 Ecuacion
628 Ecrasable	670 Ecthlipse	712 Ecuanteur
629 Ecrasais	671 Ecthlipsis	713 Ecubier
630 Ecraser	672 Ecthyrna	714 Ecueil
631 Ecraserais	673 Ecthymose	715 Ecuïage
632 Ecraseriez	674 Ecthymosis	716 Eculeo
633 Ecrasiez	675 Ectilotici	717 Ecumais
634 Ecrasure	676 Ectimosi	718 Ecumant
635 Ecremaison	677 Ectipo	719 Ecumenical
636 Ecremer	678 Ectobie	720 Ecumenico
637 Ecremillon	679 Ectoblast	721 Ecumeresse
638 Ecremoire	680 Ectocarpe	722 Ecumeront
639 Ecrevisse	681 Ectocyste	723 Ecumeux
640 Ecrhexis	682 Ectoderme	724 Ecumions
641 Ecriames	683 Ectogramma	725 Ecumoire
642 Ecrieront	684 Ectolitro	726 Ecunemica
643 Ecrille	685 Ectometro	727 Ecunemicos
644 Ecrivons	686 Ectonstero	728 Ecuorea
645 Ecrise	687 Ectopage	729 Ecuoreos
646 Ecrîteau	688 Ectopagia	730 Ecureuil
647 Ecritmo	689 Ectophyte	731 Ecusson
648 Ecritoire	690 Ectopia	732 Ecussonne



733	Ecolorum	775	Edelmuth	817	Edetanos
734	Ecolvus	776	Edelopal	818	Edgar
735	Eczematous	777	Edelraut	819	Edgeless
736	Edacidade	778	Edelreis	820	Edgewise
737	Edacious	779	Edelrose	821	Edgythe
738	Edaciously	780	Edelschoen	822	Edharz
739	Edacissimo	781	Edelsinn	823	Edhemite
740	Edacitatis	782	Edelsinnig	824	Edibility
741	Edacite	783	Edelstahl	825	Edible
742	Edaphodont	784	Edelstolz	826	Edibleness
743	Eddaic	785	Edelthat	827	Edicaria
744	Eddas	786	Edelthier	828	Edicendum
745	Eddered	787	Edelvrouw	829	Edichio
746	Eddering	788	Edelweiss	830	Edicola
747	Eddoes	789	Edematico	831	Edictabam
748	Edealogia	790	Edematoso	832	Edictabis
749	Edeatros	791	Edematous	833	Edictalium
750	Edecan	792	Edemera	834	Edictamus
751	Edecanes	793	Edenique	835	Edictarem
752	Edecimamus	794	Edenisch	836	Edictavi
753	Edecimatum	795	Edenize	837	Edictione
754	Edecimavi	796	Edenizing	838	Edictionis
755	Edelaardig	797	Edenruine	839	Edictorum
756	Edeldame	798	Edental	840	Edicule
757	Edelerde	799	Edentalous	841	Ediderunt
758	Edelfest	800	Edentamus	842	Edidici
759	Edelfink	801	Edentation	843	Edidicimus
760	Edelfisch	802	Edento	844	Edidisti
761	Edelfrau	803	Edentula	845	Edifiant
762	Edelfuchs	804	Edentulus	846	Edificaban
763	Edelgarbe	805	Edeopalmo	847	Edificacao
764	Edelhengst	806	Edepoe	848	Edificada
765	Edelhof	807	Edera	849	Edificados
766	Edelknabe	808	Ederaceo	850	Edificao
767	Edelknecht	809	Ederaceus	851	Edifice
768	Edelkrebs	810	Ederato	852	Edificios
769	Edellehen	811	Ederoso	853	Edifement
770	Edelmann	812	Edesio	854	Ediferas
771	Edelmarder	813	Edesseno	855	Edifieriez
772	Edelmass	814	Edessenus	856	Ediferont
773	Edelmoedig	815	Edesside	857	Edifiques
774	Edelmogend	816	Edetana	858	Edifizio

859	Edify	901	Edoctrum	943	Educeret
860	Edifying	902	Edocuerunt	944	Educeretis
861	Edifyingly	903	Edocui	945	Educhiamo
862	Edikt	904	Edocuisti	946	Eductor
863	Edilberto	905	Edolandi	947	Edulcare
864	Edileship	906	Edolandos	948	Edulcorado
865	Edilicio	907	Edolandum	949	Edulcorant
866	Edilidade	908	Edolatorum	950	Edulcoreis
867	Edilita	909	Edolatum	951	Edulica
868	Edilitaire	910	Edolavisti	952	Eduhous
869	Ediografia	911	Edolien	953	Eduhis
870	Ediologia	912	Edomitas	954	Eduhia
871	Ediosmo	913	Edomitavi	955	Eduquant
872	Ediotide	914	Edomiter	956	Eduquemos
873	Ediotomia	915	Edoner	957	Eduques
874	Edisaro	916	Edonio	958	Edurescis
875	Edisma	917	Edonismo	959	Eduorum
876	Edisseris	918	Edonorum	960	Edwardsie
877	Edisserto	919	Edormisco	961	Edwarsite
878	Editeur	920	Edossage	962	Edwig
879	Editicia	921	Edostome	963	Edyllum
880	Editioned	922	Edredon	964	Edzard
881	Editioning	923	Edredones	965	Eedbrekers
882	Editor	924	Edris	966	Eedbreuk
883	Editores	925	Edrisiden	967	Eedgespan
884	Editorial	926	Edrum	968	Eegaas
885	Editoribus	927	Educaao	969	Eekhakker
886	Editorship	928	Educaores	970	Eekhandel
887	Editress	929	Educados	971	Eekhoren
888	Editresses	930	Educaremus	972	Eelbuck
889	Edituate	931	Educate	973	Eelpot
890	Edituating	932	Educateur	974	Eelspear
891	Edixerimus	933	Educatie	975	Eeltachtig
892	Edixi	934	Educatore	976	Eelterig
893	Ediximus	935	Educatrix	977	Eeltzweer
894	Edixissem	936	Educatum	978	Eenbladig
895	Edizione	937	Educaturi	979	Eenbloemig
896	Edmondie	938	Educaturos	980	Eendebout
897	Edmundo	939	Educaturum	981	Eendenei
898	Edoardo	940	Educavano	982	Eendenhok
899	Edocenter	941	Educavisti	983	Eendenkom
900	Edocephale	942	Educavit	984	Eendenkooi

985 Eendennest	8,000 Eenoogig	30,000 Eenzal
986 Eendenroer	9,000 Eenrijm	31,000 Eenzalums
987 Eender	10,000 Eenschalig	32,000 Eenzarium
988 Eevededer	11,000 Eensdeels	33,000 Eenzatu
989 Eendjes	12,000 Eensgezind	34,000 Eenzbacite
990 Eendracht	13,000 Eensklaps	35,000 Eenzbacon
991 Eendvogels	14,000 Eensnarig	36,000 Eenzbacpar
992 Eengrepig	15,000 Eenspan	37,000 Eenzbdaic
993 Eenhandig	16,000 Eenstemmig	38,000 Eenzbdas
994 Eenheid	17,000 Eenstijlig	39,000 Eenzbdered
995 Eenhelmig	18,000 Eenvakkig	40,000 Eenzbdoes
996 Eenhoekig	19,000 Eenvervig	41,000 Eenzbecan
997 Eenhoofdig	20,000 Eenvinnig	42,000 Eenzcatum
998 Eenhoorn	21,000 Eenvoetig	43,000 Eenzcole
999 Eenhoornig	22,000 Eenvoud	44,000 Eenzdake
1,000 Eenhuizig	23,000 Eenvoudig	45,000 Eenzdime
2,000 Eenigerlei	24,000 Eenwijvig	46,000 Eenzdurium
3,000 Eeniglijk	25,000 Eenzaam	47,000 Eenzeear
4,000 Eenkennig	26,000 Eenzabing	48,000 Eenzeabat
5,000 Eenkleurig	27,000 Eenzabors	49,000 Eenzeatum
6,000 Eenlobbig	28,000 Eenzaceom	50,000 Eenzedite
7,000 Eenoog	29,000 Eenzadare	



## Useful Sentences for Cabling for Parts of Locomotives

- Eenzelvig** . . At what price and how soon can you ship duplicate parts covered by code word . . . . . ?
- Eenzijdig** . . How soon can you ship duplicate parts covered by code word . . . . . ?
- Eeotomous** . . Please ship by express as soon as possible duplicate parts covered by code word . . . . .
- Eerambt** . . Please ship by express as soon as possible duplicate parts covered by code word . . . . . for locomotive, construction number . . . . .
- Eerbetoon** . . Please ship by freight as soon as possible duplicate parts covered by code word . . . . .
- Eereblijk** . . Please ship by freight as soon as possible duplicate parts covered by code word . . . . . for locomotive, construction number . . . . .
- Eereboog** . . Please ship overland as soon as possible duplicate parts covered by code word . . . . .
- Eeredegen** . . Please ship overland as soon as possible duplicate parts covered by code word . . . . . for locomotive, construction number . . . . .
- Eeredienst** . . Please ship by quickest freight route as soon as possible duplicate parts covered by code word . . . . .
- Eeregraf** . . Please ship by quickest freight route as soon as possible duplicate parts covered by code word . . . . . for locomotive, construction number . . . . .
- Eerekrans** . . Please ship by steamer as soon as possible duplicate parts covered by code word . . . . .
- Eerekroon** . . Please ship by steamer as soon as possible duplicate parts covered by code word . . . . . for locomotive, construction number . . . . .
- Eeremantel** . . Please ship by sailing vessel as soon as possible duplicate parts covered by code word . . . . .

- Eereplaats** . . Please ship by sailing vessel as soon as possible duplicate parts covered by code word . . . . . for locomotive, construction number . . . . .
- Eerepoort** . . Please ship by steamer as soon as possible duplicate parts to the value of \$ . . . . .
- Eerepost** . . Please ship by steamer as soon as possible duplicate parts to the value of \$ . . . . . for locomotive, construction number . . . . .
- Eereposten** . . Please ship by sailing vessel as soon as possible duplicate parts to the value of \$ . . . . .
- Eereprijs** . . . . Please ship by sailing vessel as soon as possible duplicate parts to the value of \$ . . . . . for locomotive, construction number . . . . .
- Eeresabels** . . For right hand side of one locomotive, construction number . . . . .
- Eereschot** . . For right hand side of two locomotives, construction number . . . . .
- Eerestoel** . . For right hand side of three locomotives, construction number . . . . .
- Eeretempel** . . For right hand side of four locomotives, construction number . . . . .
- Eeretitels** . . For right hand side of five locomotives, construction number . . . . .
- Eeretomben** . . For left hand side of one locomotive, construction number . . . . .
- Eeretrapp** . . . . For left hand side of two locomotives, construction number . . . . .
- Eerewacht** . . For left hand side of three locomotives, construction number . . . . .
- Eerewapen** . . For left hand side of four locomotives, construction number . . . . .
- Eerewijn** . . . . For left hand side of five locomotives, construction number . . . . .
- Eerewoord** . . For one locomotive, construction number . . . . .
- Eergevoel** . . For two locomotives, construction number . . . . .
- Eergierig** . . . . For three locomotives, construction number . . . . .
- Eerlijk** . . . . . For four locomotives, construction number . . . . .
- Eerlijker** . . . . For five locomotives, construction number . . . . .
- Eerloozers** . . . . For six locomotives, construction number . . . . .
- Eermetaal** . . . . For seven locomotives, construction number . . . . .
- Eernamen** . . . . For eight locomotives, construction number . . . . .
- Eerpenning** . . . . For nine locomotives, construction number . . . . .

Eerroof . . .	For ten locomotives, construction number . . . . .
Eerroovend . . .	Hold order of . . . . . until you receive further instructions.
Eershalve . . .	Forward motion.
Eerstdaags . . .	Backward motion.
Eertijds . . .	
Eervol . . . . .	
Eervoller . . .	
Eerwaarde . . .	
Eerwaardig . . .	
Eerzamer . . .	
Eerzucht . . .	
Eerzuchtig . . .	
Eesting . . . . .	
Eestmout . . .	
Eetbak . . . . .	
Eethuis . . . . .	
Eethuizen . . .	
Eetion . . . . .	
Eetionem . . .	
Eetkamers . . .	
Eetlepels . . .	
Eetlust . . . . .	
Eetmalen . . .	
Eetplaats . . .	
Eetregel . . . . .	
Eetsters . . . . .	
Eettafel . . . . .	
Eetwaar . . . . .	
Eetzaal . . . . .	
Euwen . . . . .	
Euwenoud . . .	
Euwfeest . . . . .	
Euwjaar . . . . .	
Euwspel . . . . .	
Euwzang . . . . .	
Euwzangen . . .	
Efantel . . . . .	
Efaufle . . . . .	
Efectuado . . . . .	
Efectuamos . . .	
Efectuaron . . .	

Efectuases . . .  
Efectueis . . .  
Efedra . . .  
Efemerides . . .  
Efemerie . . .  
Efesias . . .  
Efesio . . .  
Efestite . . .  
Efetico . . .  
Effable . . .  
Effacable . . .  
Effacage . . .  
Effacais . . .  
Effacasses . . .  
Effacerais . . .  
Effaceriez . . .  
Effacerons . . .  
Effacest . . .  
Effacing . . .  
Effacons . . .  
Effaecata . . .  
Effaecatus . . .  
Effaner . . .  
Effanures . . .  
Effarcimus . . .  
Effarcio . . .  
Effarciunt . . .  
Effarement . . .  
Effarvatte . . .  
Effatio . . .  
Effatione . . .  
Effatorum . . .  
Effauce . . .  
Effaumer . . .  
Effeccao . . .  
Effecerim . . .  
Effecissem . . .  
Effectible . . .  
Effectif . . .  
Effectione . . .  
Effectivo . . .  
Effectivus . . .



Effectless . . .  
 Effectrix . . .  
 Effectuais . . .  
 Effectuar . . .  
 Effectuose . . .  
 Efecundo . . .  
 Effeiance . . .  
 Efeito . . .  
 Efeitooso . . .  
 Effelure . . .  
 Effeminar . . .  
 Effeminava . . .  
 Effeminize . . .  
 Effendi . . .  
 Effenende . . .  
 Effenheid . . .  
 Effening . . .  
 Efferascis . . .  
 Efferasco . . .  
 Efferatio . . .  
 Efferatus . . .  
 Efferous . . .  
 Efferismus . . .  
 Efferisisti . . .  
 Effervens . . .  
 Efferveo . . .  
 Effervesce . . .  
 Effestria . . .  
 Effestuer . . .  
 Effete . . .  
 Effettore . . .  
 Effettrice . . .  
 Effettuato . . .  
 Effettuavi . . .  
 Effeuiller . . .  
 Effezione . . .  
 Efficacia . . .  
 Efficaz . . .  
 Efficiency . . .  
 Efficient . . .  
 Efficienza . . .  
 Efficta . . .

Effictorum . . .  
Effictum . . .  
Effierced . . .  
Effiercing . . .  
Effigiado . . .  
Effigiar . . .  
Effigiassi . . .  
Effigiava . . .  
Effigie . . .  
Effigierai . . .  
Effiloche . . .  
Effiloquer . . .  
Effimero . . .  
Effindere . . .  
Efflagitas . . .  
Efflagito . . .  
Efflammans . . .  
Efflanque . . .  
Efflation . . .  
Efflatos . . .  
Effleurais . . .  
Effleure . . .  
Efflevisti . . .  
Efflictim . . .  
Effloreo . . .  
Effloremus . . .  
Effloresce . . .  
Efflorui . . .  
Efflower . . .  
Effluencia . . .  
Effluente . . .  
Effluescis . . .  
Effluvial . . .  
Effluvio . . .  
Effluvioso . . .  
Effluxed . . .  
Effluxing . . .  
Effluxorum . . .  
Effocare . . .  
Effoderunt . . .  
Effodimus . . .  
Effodisti . . .

Effoedis . . .  
Effoedo . . .  
Effondrait . . .  
Effondront . . .  
Effor . . .  
Efforcais . . .  
Efforcant . . .  
Efforcing . . .  
Efforcions . . .  
Efforeria . . .  
Efformed . . .  
Efformier . . .  
Effortless . . .  
Effossioni . . .  
Effossum . . .



## Groups of Duplicate Parts with Code Words

[In some cases it will be more convenient to order parts by using these group words; in others by a reference to the plates. To find part needed, see index at the back of the book.]

- 
- Effouage . . . I Boiler with Tubes, Double Cone, Dry Pipe, Throttle work complete, including Stuffing Box and Gland, Dome Cap and Safety Valves, Smokebox Front and Door, Fire Door with Liner and Frame and Cleaning Plugs, tested and primed.
- Effoueil . . . I Boiler with Tubes and Cleaning Plugs only, tested and primed.
- Effractor . . . I Firebox.
- Effracture . . . I Set Boiler Tubes.
- Effrange . . . I Set Boiler Tube Ferrules.
- Effrayable . . . I Double Cone.
- Effrayer . . . I Set Steam Pipes.
- Effrayeras . . . I Throttle Valve, Box, Pipe, Elbow, Crank, and Rod.
- Effrayiez . . . I Smokebox Front and Door.
- Effrayons . . . I Fire Door with Frame and Liner.
- Effreement . . . I Set Cleaning Plugs.
- Effrenatio . . . I Set Fusible Plugs.
- Effrenatus . . . I Set Boiler Lagging.
- Effrenibus . . . I Set Boiler Jacket.
- Effrenis . . . I Set Boiler Jacket Bands.
- Effricare . . . I Set Safety Valves, complete.
- Effricatum . . . I Pair Cylinders with Heads, Covers, Chests, Caps, Casings, Glands, Valves, Yokes and Pistons, painted and varnished.
- Effrico . . . I Pair Finished Cylinders, bolted together, without any fittings.
- Effrique . . . I Set Front Cylinder Heads.
- Effriter . . . I Set Back Cylinder Heads.
- Effrixisti . . . I Set Front Cylinder Covers.
- Effroisser . . . I Set Back Cylinder Covers.
- Effruitant . . . I Set Cylinder Glands and Bottom Rings.

- Effrutico . . . I Set Metallic Packing complete, for Piston Rods and Valve Stems.
- Effugio . . . I Set Composition Rings for Metallic Packing of Piston Rods and Valve Stems.
- Effugisti . . . I Set Cylinder Casings.
- Effugitos . . . I Set Steam Chests.
- Effugiunt . . . I Set Steam Chest Caps or Lids.
- Effulcrate . . . I Set Steam Chest Glands and Bottom Rings.
- Effulge . . . I Set Steam Chest Casings.
- Effulgence . . . I Set Steam Chest Casing Covers.
- Effulent . . . I Set Steam Chest Valves.
- Effulgetis . . . I Set Steam Chest Valve Yokes.
- Effulsio . . . I Set Steam Chest Relief Valves.
- Effulsioni . . . I Set Pistons with Rods and Packing.
- Effultorum . . . I Set Piston Rods.
- Effultus . . . I Set Piston Packing.
- Effumable . . . I Pair Cylinders with Heads, Covers, Casings, Valves, Stems, Pistons, Metallic Piston Rod and Valve Stem Packing, complete (Vauclain Compound System).
- Effumant. . . I Pair Finished Cylinders with Bushings, bolted together, but without other fittings (Vauclain Compound System).
- Effumigare. . . I Set Front Cylinder Heads, High Pressure (Vauclain Compound System).
- Effuming. . . I Set Back Cylinder Heads, High Pressure (Vauclain Compound System).
- Effundica . . . I Set Front Cylinder Head Casing Covers, High Pressure (Vauclain Compound System).
- Effundir . . . I Set Back Cylinder Head Casing Covers, High Pressure (Vauclain Compound System).
- Effundo . . . I Set Front Cylinder Heads, Low Pressure (Vauclain Compound System).
- Effusion . . . I Set Back Cylinder Heads, Low Pressure (Vauclain Compound System).
- Effusive . . . I Set Front Cylinder Head Casing Covers, Low Pressure (Vauclain Compound System).
- Effusively . . . I Set Back Cylinder Head Casing Covers, Low Pressure (Vauclain Compound System).
- Effusoris . . . I Set Front Valve Chamber Heads (Vauclain Compound System).

- Effusorum . . . 1 Set Back Valve Chamber Heads (Vauclain Compound System).
- Effuticius . . . 1 Set Front Valve Chamber Head Casing Covers (Vauclain Compound System).
- Effutile . . . 1 Set Back Valve Chamber Head Casing Covers (Vauclain Compound System).
- Effutillis . . . 1 Set Valve Chamber Bushings (Vauclain Compound System).
- Effutilium . . . 1 Set Main Piston Valves with Rings (Vauclain Compound System).
- Efialte . . . 1 Set Main Piston Valves with Rings and Stems (Vauclain Compound System).
- Eficiencia . . . 1 Set Main Piston Valve Rings (Vauclain Compound System).
- Efigies . . . 1 Set Pistons with Rods and Packing, High Pressure (Vauclain Compound System).
- Eflagelle . . . 1 Set Pistons with Rods and Packing, Low Pressure (Vauclain Compound System).
- Efourceau . . . 1 Set Piston Packing Rings, High Pressure (Vauclain Compound System).
- Efraimo . . . 1 Set Piston Packing Rings, Low Pressure (Vauclain Compound System).
- Efusal . . . 1 Set Piston Rods (Vauclain Compound System).
- Egagre . . . 2 Starting Valves (Vauclain Compound System).
- Egagropilo . . . 4 Cylinder Cocks (Vauclain Compound System).
- Egailler . . . 1 Set Cylinder Relief Valves (Vauclain Compound System).
- Egalement . . . 1 Set Frames without Fittings.
- Egalisage . . . 1 Set Frame Front Rails.
- Egaliser . . . 1 Set Frame Pedestal Caps.
- Egaliseras . . . 1 Set Pedestal Wedges.
- Egalisons . . . 1 Set Pedestal Wedge Bolts.
- Egalitaire . . . 1 Set Pedestal Gibs.
- Egalite . . . 1 Set Driving Wheels complete, on Axles with Eccentrics, Eccentric Straps, and Boxes, painted and varnished.
- Egancette . . . 1 Set Driving Tires.
- Egarerais . . . 1 Set Wrist Pins.
- Egareriez . . . 1 Set Driving Axles.
- Egareront . . . 1 Set Eccentrics.
- Egariez . . . 1 Set Eccentric Straps.
- Egarons . . . 1 Set Guides with Filling Pieces.

- Egarrotte . . . 1 Set Crossheads.  
 Egauler . . . 1 Set Crosshead Gibs.  
 Egayantes . . . 1 Set Crosshead Filling Pieces.  
 Egayasses . . . 1 Set Crosshead Pins.  
 Egayer . . . 1 Set Rods complete, except Oil Cups.  
 Egayeras . . . 1 Set Rod Brasses.  
 Egayions . . . 1 Set Rod Straps.  
 Egberto . . . 1 Set Rod Keys.  
 Egdauama . . . 1 Set Rod Straps with Brasses, Keys, Bolts and Set  
 Screws.  
 Egeenne . . . 1 Set Links complete, with Blocks, Lifters, Eccentric  
 Rods and all Pins.  
 Egeirino . . . 1 Reverse Shaft.  
 Egelamus . . . 1 Set Reverse Shaft Bearings.  
 Egelantier . . . 1 Set Rock Shafts.  
 Egelbeere . . . 1 Set Rocker Boxes.  
 Egelgras . . . 1 Set Valve Rods.  
 Egelidamus . . . 1 Counterbalance Spring.  
 Egelidas . . . 1 Pump complete.  
 Egelkruid . . . 1 Pump Plunger.  
 Egelochus . . . 1 Pump Feed Cock.  
 Egentium . . . 1 Pump Check complete.  
 Egenulorum . . . 1 Complete Set of Springs.  
 Egerane . . . 1 Set Driving Springs.  
 Egermage . . . 1 Set Driving Spring Links.  
 Egersimon . . . 1 Set Engine Truck Springs.  
 Egesaretus . . . 1 Set Tender Springs.  
 Egesippe . . . 1 Forward Equalizing Beam.  
 Egestas . . . 1 Forward Equalizing Beam Fulcrum.  
 Egestionie . . . 1 Set Equalizing Beams.  
 Egestionis . . . 1 Set Equalizing Beam Fulcrums.  
 Egestorum . . . 1 Bell with Clapper and Tongue.  
 Egestosi . . . 1 Bell with Clapper and Tongue, Frame, Yoke and  
 Crank.  
 Egestosus . . . 1 Sand Box complete.  
 Egestuum . . . 1 Smoke Stack complete with Base.  
 Eggaree . . . 1 Smoke Stack Base complete.  
 Eggebalken . . . 1 Smoke Stack Cone.  
 Eggehaken . . . 1 Smoke Stack Netting.  
 Eggement . . . 1 Set Grate Bars.  
 Eggen . . . 1 Set Grate Frames or Holders.  
 Eggerigst . . . 1 Set Rocking Grates, with all Fixtures.



Eggerling . . .	1	Set Engine Truck Boxes with Brasses and Cellars.
Eggiger . . .	1	Set Engine Truck Box Brasses.
Eggigheid . . .	1	Set Engine Truck Box Cellars.
Eghiazar . . .	1	Set Driving Boxes with Brasses and Cellars.
Egialus . . .	1	Set Driving Box Brasses.
Egidarmato . . .	1	Set Driving Box Cellars.
Egidio . . .	1	Set Tender Boxes with Lids, Wedges and Brasses.
Egifila . . .	1	Set Tender Boxes with Lids.
Egignere . . .	1	Set Tender Box Wedges.
Egipolical . . .	1	Set Tender Box Brasses.
Eginetique . . .	1	Engine Truck complete, with Wheels, Boxes, etc., painted and varnished.
Eginopside . . .	1	Engine Truck complete, except Wheels and Boxes.
Egiochus . . .	1	Engine Truck Center Pin.
Egipciana . . .	1	Engine Truck Swing Bolster.
Egipcios . . .	1	Engine Truck Frame.
Egipiro . . .	2	Engine Truck Wheels without Axles, bored.
Egiptologo . . .	1	Pair Engine Truck Wheels on Axles, painted and varnished.
Egirine . . .	1	Pilot.
Egissent . . .	1	Pilot Bull Nose.
Egiziache . . .	1	Pilot Draw Bar.
Egiziaco . . .	1	Engine Front Draw Casting.
Eglecopala . . .	1	Water Gauge, complete.
Egloga . . .	12	Water Gauge Glasses.
Eglogiste . . .	1	Water Gauge Lamp.
Egloguista . . .	1	Injector.
Eglon . . .	1	Injector Steam Valve.
Egmond . . .	1	Injector Feed Cock.
Egnatia . . .	1	Injector Check.
Egnatius . . .	1	Steam Gauge.
Egoarico . . .	1	Steam Gauge Stand.
Egoasinha . . .	1	Steam Gauge Lamp.
Egobole . . .	12	Steam Gauge Lamp Globes.
Egobuer . . .	1	Steam Gauge Lamp Stand.
Egofonia . . .	1	Blower Valve.
Egoger . . .	1	Heater Valve.
Egohine . . .	1	Steam Brake Valve for Engineer.
Egoical . . .	1	Steam Brake Stop Valve.
Egoismar . . .	1	Blow-off Cock.
Egoismo . . .	1	Set Gauge Cocks.
Egoistical . . .	1	Set Cylinder Cocks.

- Egoistique . . . 1 Sight Feed Cylinder Lubricator.  
 Egoity . . . . 1 Set Cab Cylinder Oilers, B. L. W. Style.  
 Egoletro . . . . 1 Set Condensing Steam Chest Oil Cups.  
 Egologie . . . . 1 Set Rod Oil Cups.  
 Egologique . . . 1 Set Guide Oil Cups.  
 Egomet . . . . 1 Set Rock Shaft Oil Cups.  
 Egomiste . . . . 1 Set Eccentric Strap Oil Cups.  
 Egophone . . . . 1 Whistle.  
 Egopodio . . . . 1 Headlight.  
 Egopogono . . . 1 Throttle Lever complete, with Quadrant, Latch  
                   Link, Stud, Handle and Spring.  
 Egoprico . . . . 1 Reverse Lever complete.  
 Egoprosope . . . 1 Reverse Lever Rod, or Reach Rod.  
 Egorgement . . . 1 Set Cab Brackets.  
 Egorgeoir . . . . 1 Set Cab Bracket Plates.  
 Egorgeront . . . 1 Foot Plate.  
 Egorgille . . . . 1 Tender Wedge.  
 Egosiller . . . . 1 Tender Wedge Box.  
 Egotheism . . . . 1 Engine Back Draw Bar.  
 Egothele . . . . 1 Exhaust Nozzle and Thimbles.  
 Egotism . . . . . 1 Set Exhaust Nozzle Thimbles.  
 Egotistic . . . . 1 Set Smokebox Netting.  
 Egotize . . . . . 1 Spark Ejector.  
 Egotizing . . . . 1 Spark Ejector Valve.  
 Egout . . . . . 1 Set Smokebox Cleaning Holes and Caps.  
 Egoutier . . . . . 1 Set Driving Brake Shoes.  
 Egouttage . . . . 1 Set Driving Brake Heads.  
 Egraffigne . . . 1 Set Brake Cylinders complete, with Pistons and  
                   Rods.  
 Egrageure . . . . 1 Set Driving Brake Cams.  
 Egrainage . . . . 1 Tank with Funnel and Lid, Valves, Lugs and  
                   Handles, painted and varnished.  
 Egrainoir . . . . 1 Tank Funnel and Lid.  
 Egramente . . . . 1 Tank Cock.  
 Egraminer . . . . 1 Tender, complete on Wheels, painted and varnished.  
 Egrappage . . . . 1 Tender Chafing Casting.  
 Egrapper . . . . . 1 Tender Front Draw Casting.  
 Egratigner . . . . 1 Tender Back Draw Casting.  
 Egravoir . . . . . 1 Set Tender Frame Center Pins.  
 Egregiat . . . . . 1 Set Tender Pedestals.  
 Egregiorum . . . 1 Set Tender Trucks complete, with Wheels, painted  
                   and varnished.

Egregious . . .	1	Tender Truck complete, with Wheels, painted and varnished.
Egregores . . .	1	Set Tender Trucks complete, without Wheels and Boxes.
Egrenement . . .	1	Tender Truck complete, without Wheels and Boxes.
Egressao . . .	1	Set Tender Truck Center Plates.
Egressed . . .	1	Set Tender Wheels on Axles, painted and varnished.
Egressing . . .	1	Pair Tender Wheels on Axle, painted and varnished.
Egribos . . .	1	Set Tender Wheels without Axles.
Egrillard . . .	1	Set Tender Brake Shoes.
Egriot . . .	1	Set Tender Brake Heads.
Egrisage . . .	1	Cab.
Egritude . . .		
Egrotant . . .		
Egsmeden . . .		
Egsmederij . . .		
Egsmid . . .		
Egtand . . .		
Egtanden . . .		
Egualendo . . .		
Egualezza . . .		
Egualimmo . . .		
Egualirai . . .		
Egualisco . . .		
Egualissi . . .		
Egualito . . .		
Egueille . . .		
Eguerunt . . .		
Eguilles . . .		
Eguimus . . .		
Eguisier . . .		
Eguisti . . .		
Egularum . . .		
Egurgito . . .		
Egypciaco . . .		
Egyptius . . .		
Egyptiaque . . .		
Egyptien . . .		
Egyptology . . .		
Ehamote . . .		
Ehebett . . .		
Ehebruch . . .		

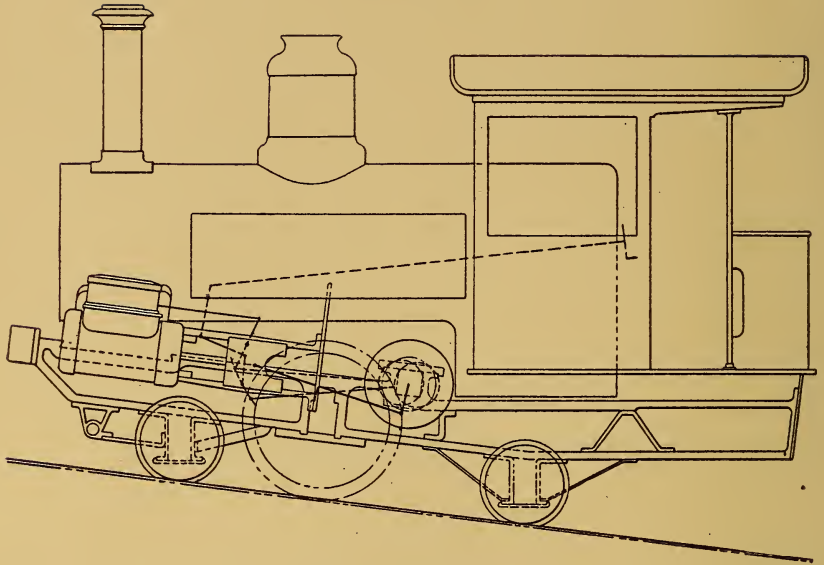
Ehebund . . .  
Ehefrau . . .  
Ehegatte . . .  
Ehegeld . . .  
Ehegemahl . . .  
Ehegenosse . . .  
Ehegericht . . .  
Ehegespons . . .  
Ehegestern . . .  
Ehehaelfte . . .  
Ehejoch . . .  
Eheklage . . .  
Eheleben. . .  
Eheleute . . .  
Eheliebe . . .  
Ehelos . . .  
Ehemals . . .  
Ehemann . . .  
Eheordnung . . .  
Ehepaar . . .  
Ehepfand . . .  
Eherecht . . .  
Ehering . . .  
Eheringen . . .  
Ehern . . .  
Eheschatz . . .  
Eheschmied . . .  
Eheschuld . . .  
Ehesegen . . .  
Ehestifter . . .  
Ehestunde . . .  
Ehevater . . .  
Ehevogt . . .  
Eheweib . . .  
Ehewunsch . . .  
Ehodum . . .  
Ehontement . . .  
Ehoupper . . .  
Ehrbarer . . .  
Ehrenamt . . .  
Ehrenbahn. . .  
Ehrenbett . . .

Ehrenbild . .  
Ehrenbogen . .  
Ehrengabe . .  
Ehrengift . .  
Ehrengrab . .  
Ehrengruss . .  
Ehrenhaft . .  
Ehrenkampf . .  
Ehrenkerze . .  
Ehrenkette . .  
Ehrenkranz . .  
Ehrenkreuz . .  
Ehrenkrone . .  
Ehrenlied . .  
Ehrenlohn . .  
Ehrenluege . .  
Ehrenmahl . .  
Ehrenmann . .  
Ehrenmusik . .  
Ehrenpaar . .  
Ehrenplatz . .  
Ehrenpreis . .  
Ehrenpunkt . .  
Ehrenrauch . .  
Ehrenrecht . .  
Ehrenreim . .  
Ehrenrock . .

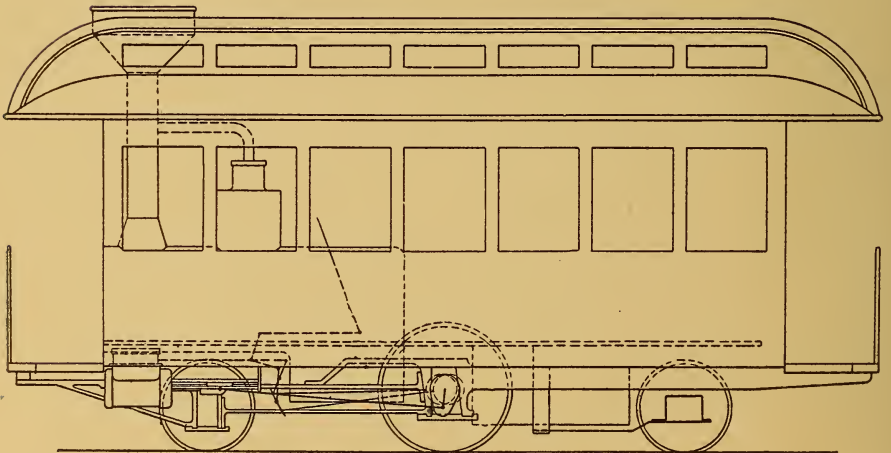


## Types of Locomotives

**I**N order to aid in understanding the class designations more readily, the different types of engines manufactured at these Works, with the class designations of each type, and the kind of service for which they are specially designed or adapted, are shown by line illustrations, in the following pages.

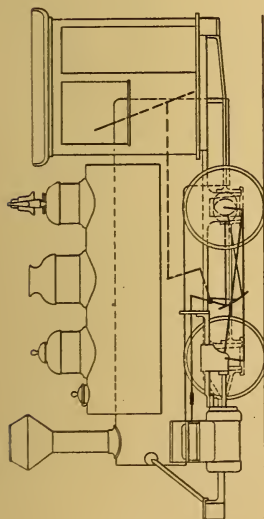


5 A (RACK RAIL TYPE)  
MOUNTAIN SERVICE

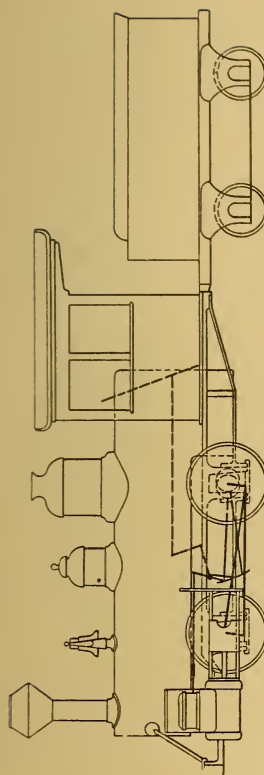


6 B  
INSPECTION SERVICE



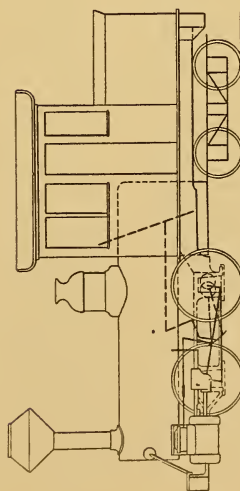


4 C TANK ON BOILER

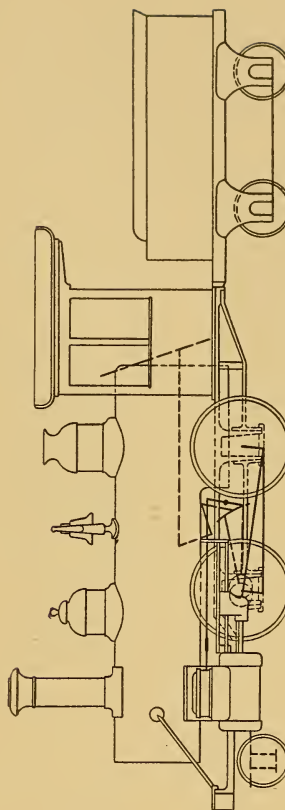


4 C WITH TENDER

SWITCHING SERVICE

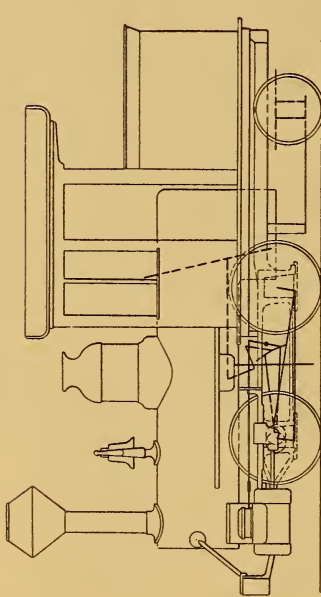


8 1/3 C TANK BACK



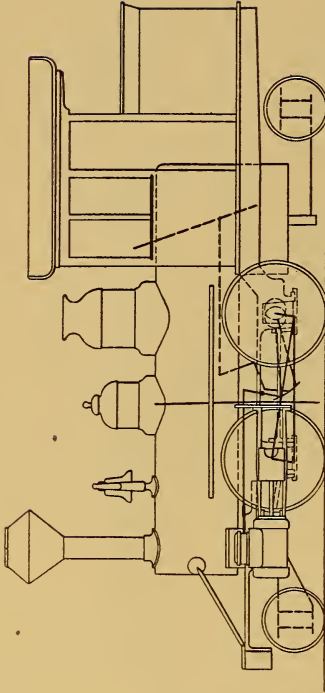
6 C WITH TENDER

SWITCHING AND LOCAL SERVICE



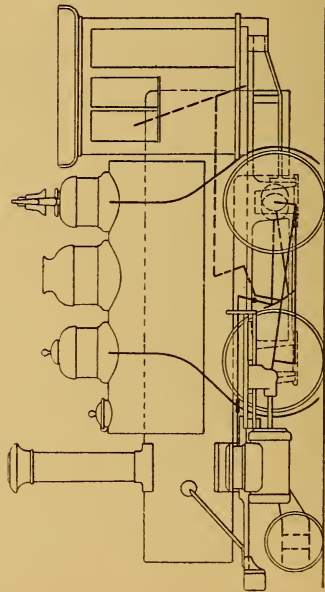
6 1/2 C TANK BACK

SWITCHING AND LOCAL SERVICE



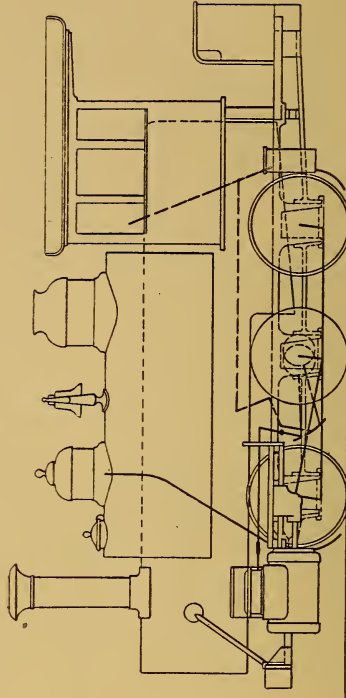
8 1/4 C TANK BACK

LCCAL PASSENGER SERVICE



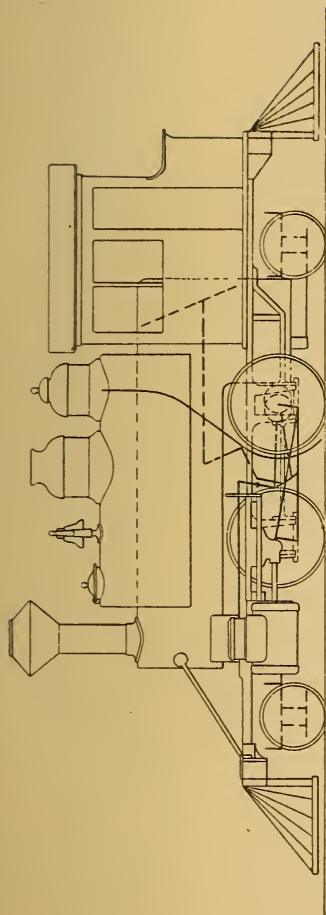
6 C TANK ON BOILER

SWITCHING AND LOCAL SERVICE

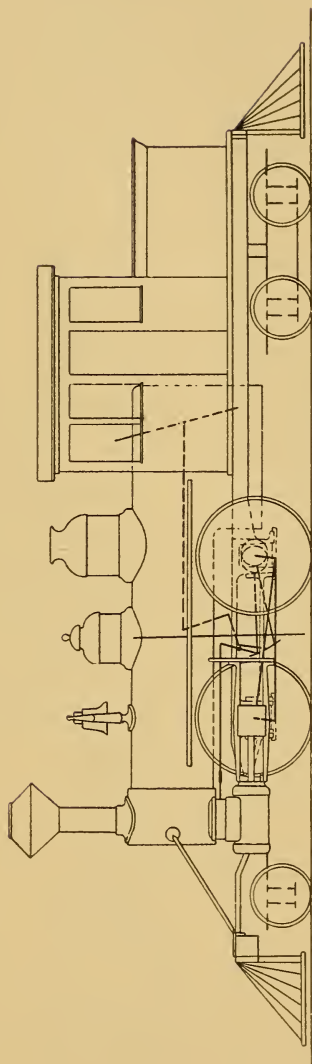


6 D TANK ON BOILER

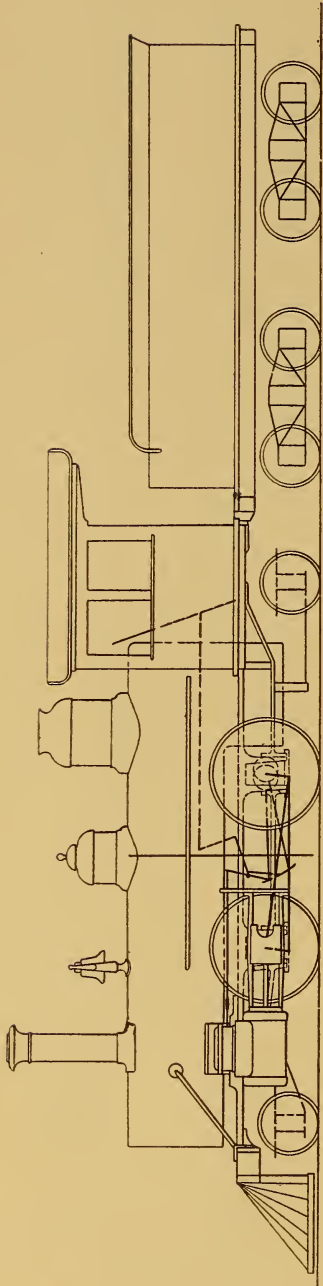
HEAVY SWITCHING



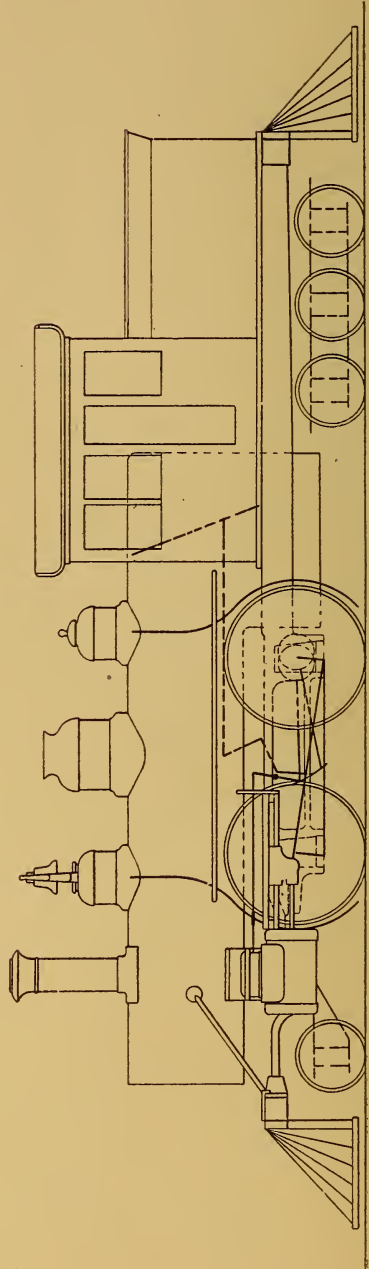
8 1/4 C TANK ON BOILER  
LOCAL PASSENGER SERVICE



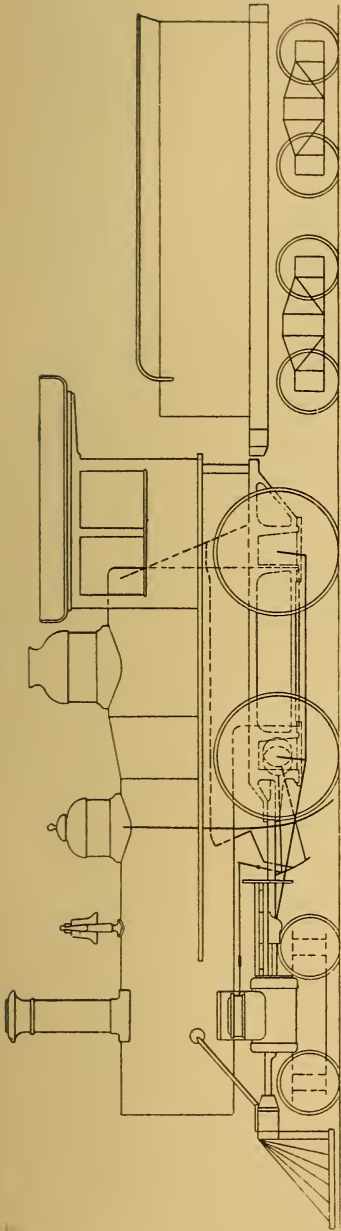
10 1/4 C TANK BACK  
LOCAL PASSENGER SERVICE



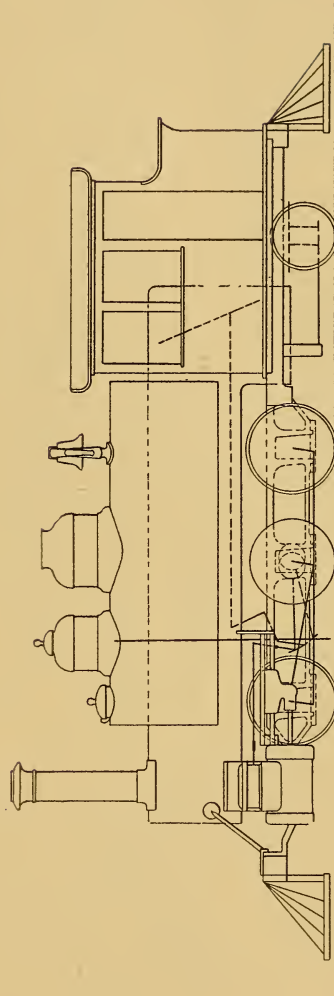
8 1/4 C WITH TENDER  
EXPRESS PASSENGER SERVICE



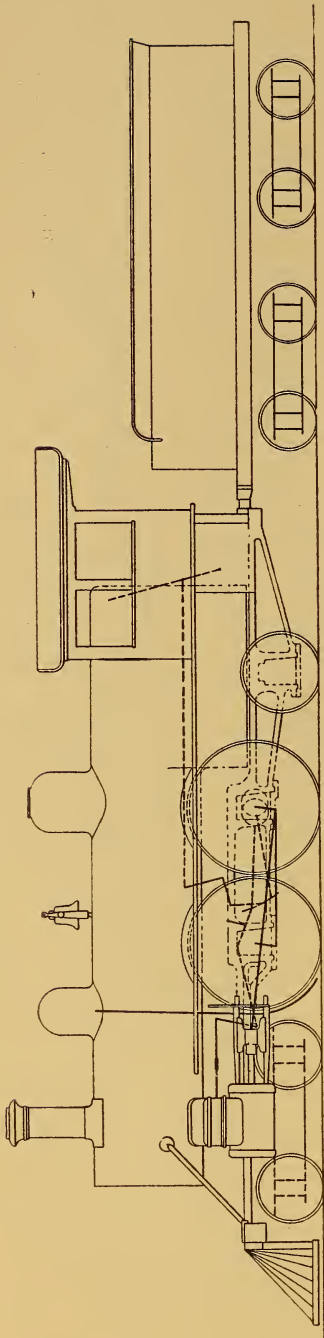
12 1/4 C TANK BACK  
LOCAL PASSENGER SERVICE



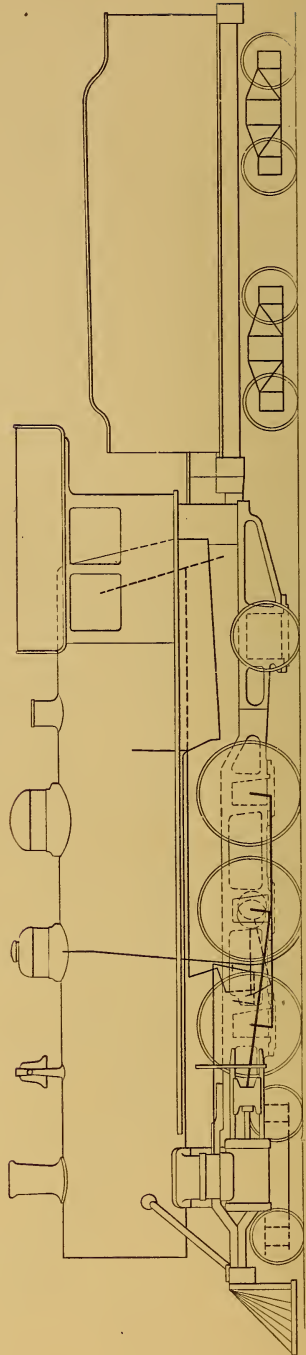
8 C AMERICAN TYPE  
EXPRESS PASSENGER SERVICE



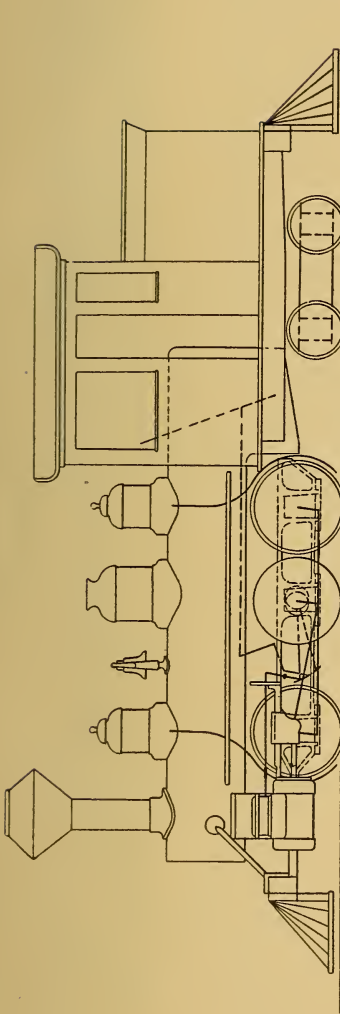
8 1/2 D TANK ON BOILER  
HEAVY SWITCHING AND LOCAL FREIGHT SERVICE



10 1/4 C (ATLANTIC TYPE)  
HIGH SPEED PASSENGER SERVICE

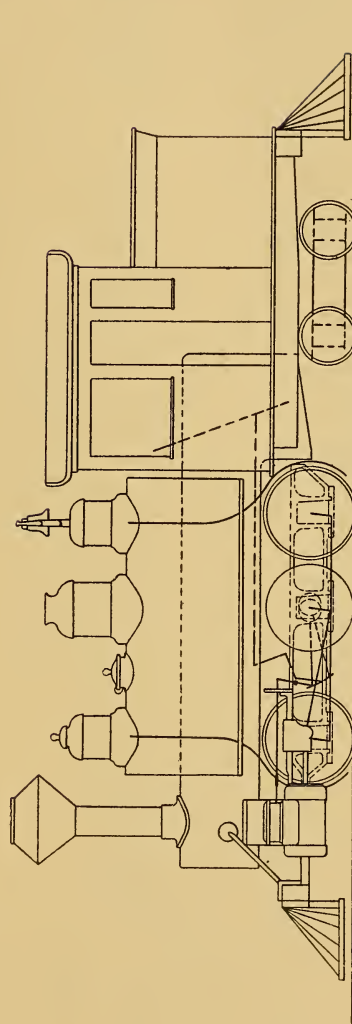


12 1/4 D (PACIFIC TYPE)  
HEAVY PASSENGER SERVICE



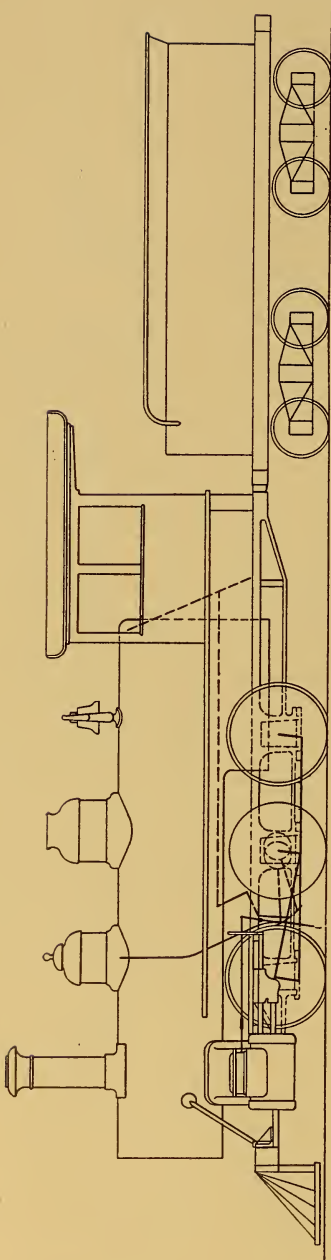
10 1/3 D TANK BACK

HEAVY SWITCHING AND LOCAL FREIGHT SERVICE

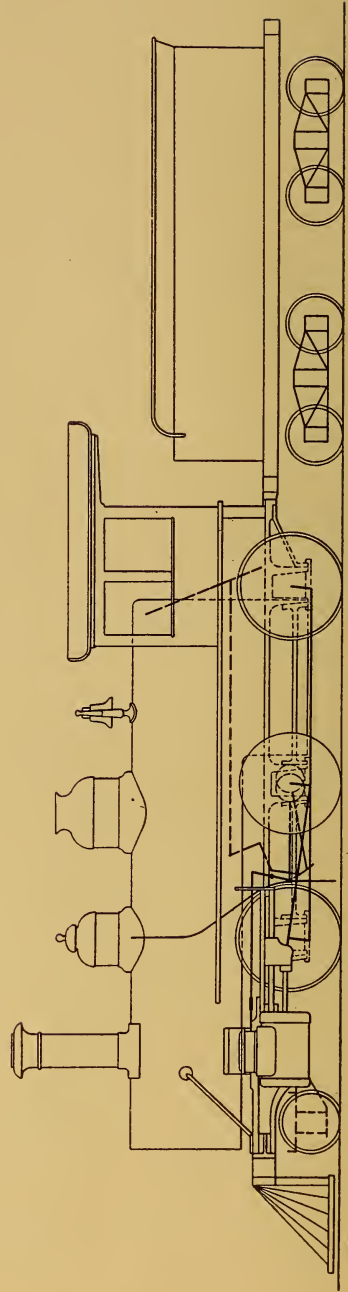


10 1/3 D TANK BACK AND ON BOILER

HEAVY SWITCHING AND LOCAL FREIGHT SERVICE

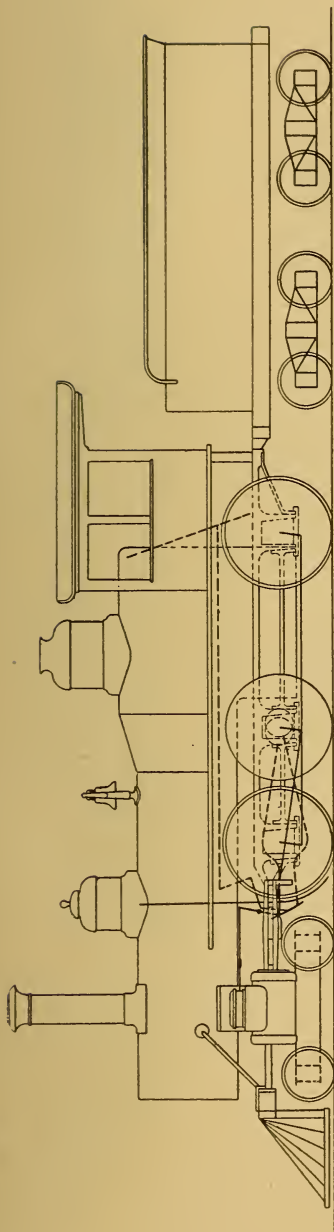


6 D WITH TENDER  
HEAVY SWITCHING SERVICE

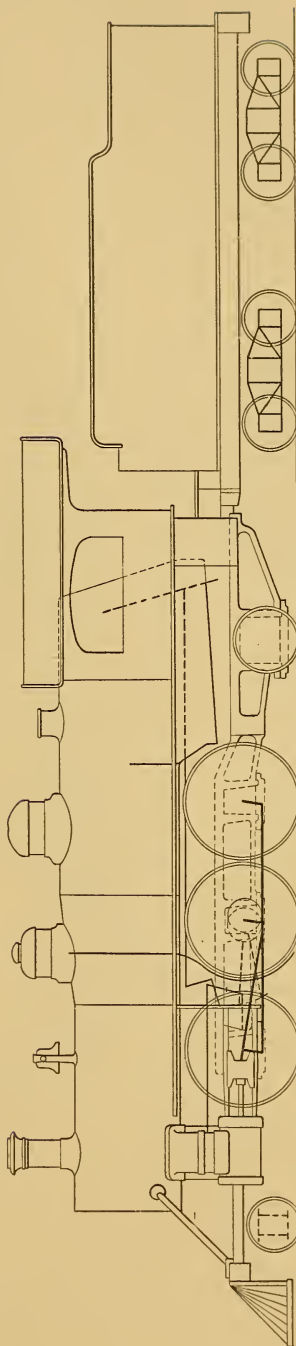


8 D MOGUL  
FREIGHT SERVICE

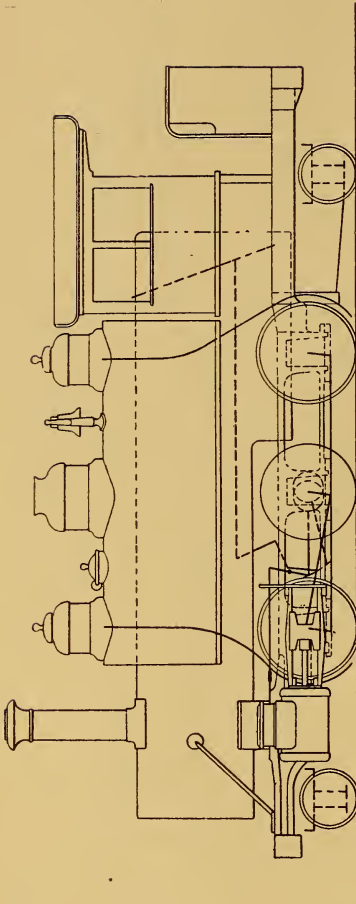




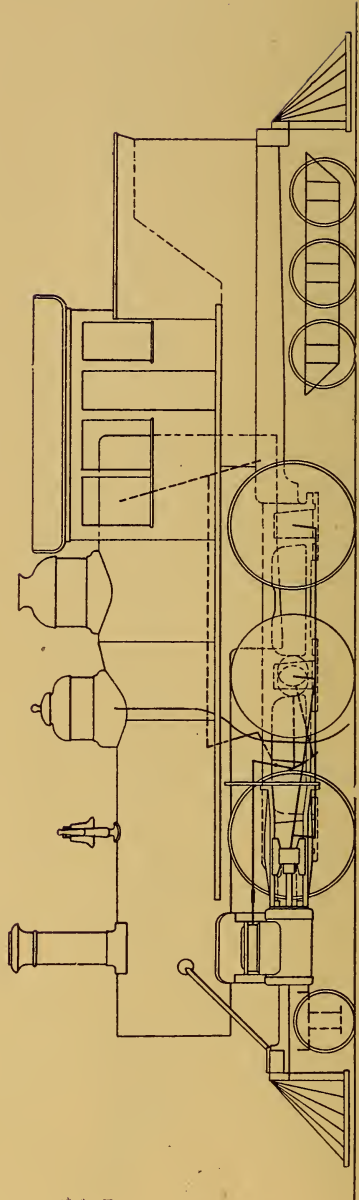
10 D TEN WHEELER  
FAST FREIGHT AND PASSENGER SERVICE



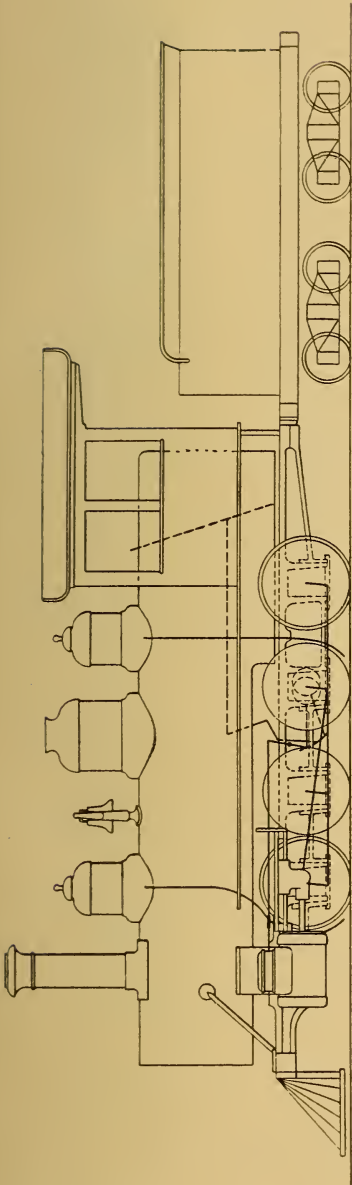
10 1/4 D PRAIRIE TYPE  
PASSENGER AND FREIGHT SERVICE



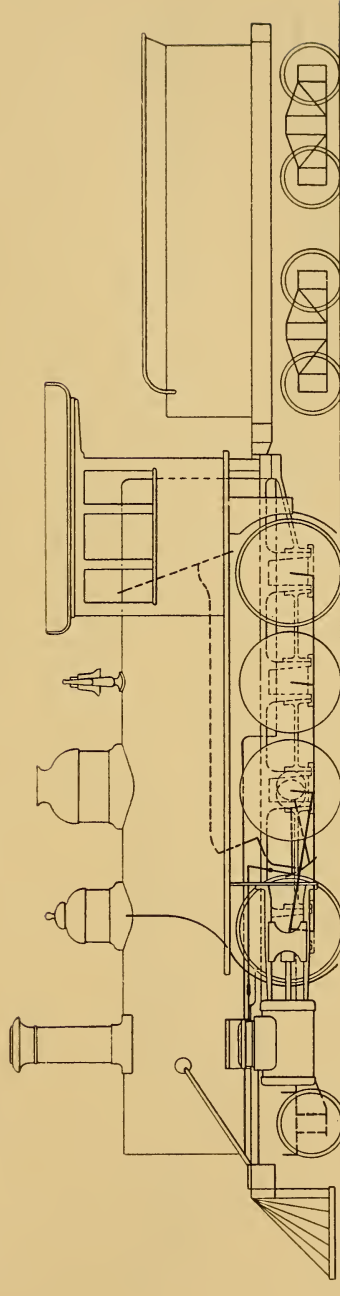
10 1/4 D TANK ON BOILER  
HEAVY SWITCHING SERVICE



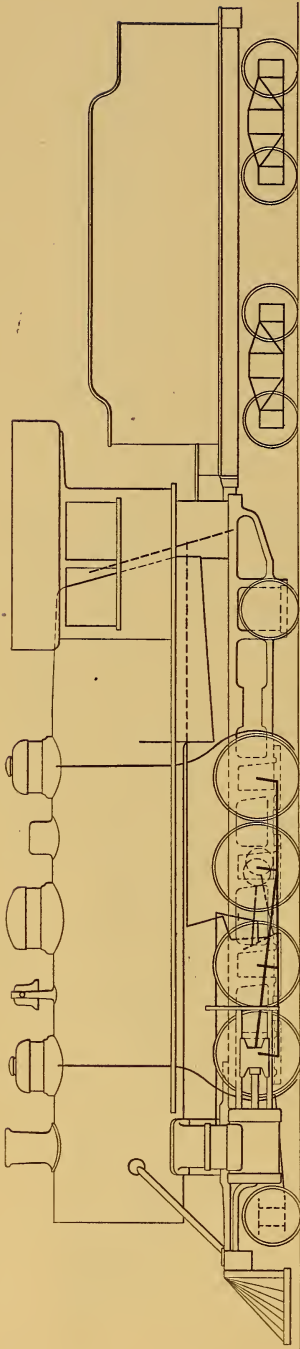
14 1/4 D TANK BACK  
LOCAL PASSENGER SERVICE



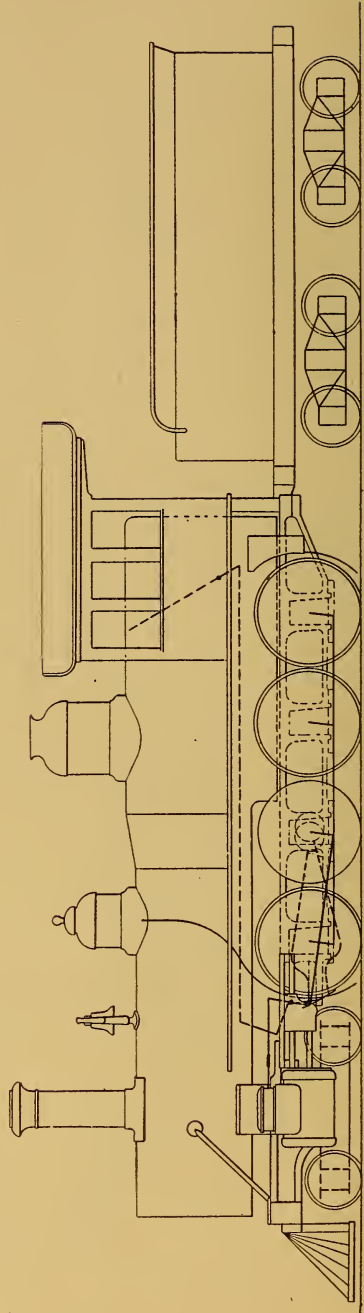
8 E  
HEAVY FREIGHT SERVICE



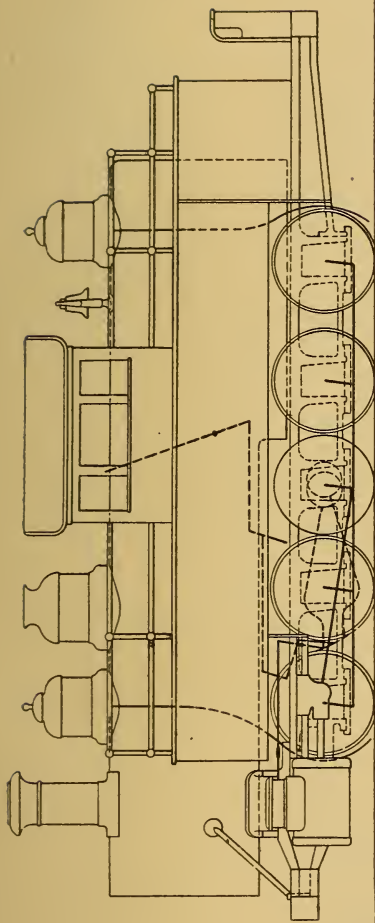
10 E CONSOLIDATION  
HEAVY FREIGHT SERVICE



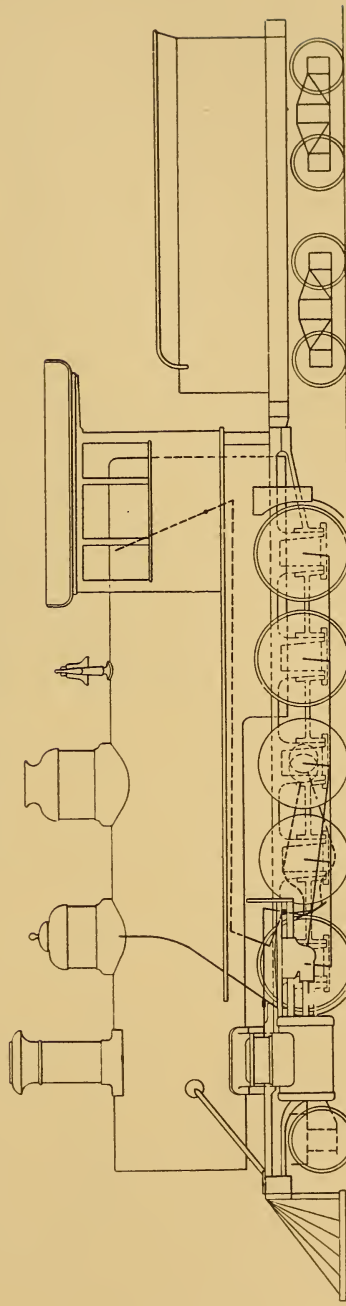
12 1/4 E MIKADO TYPE  
HEAVY FREIGHT SERVICE



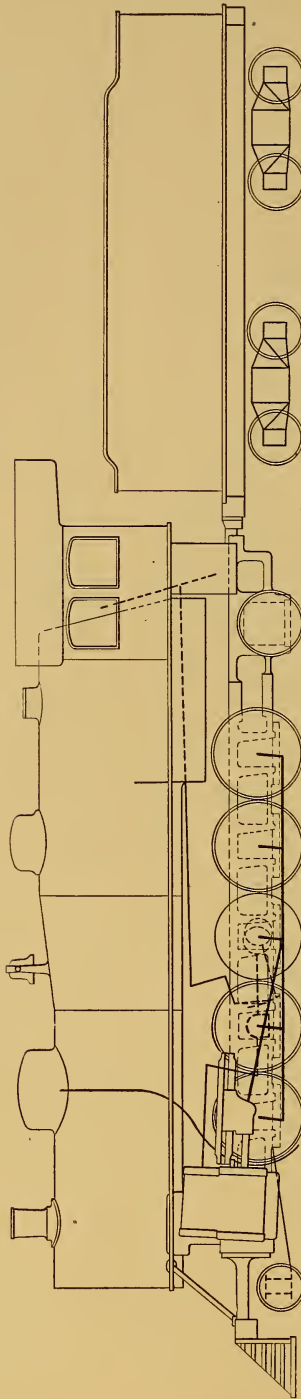
12 E  
HEAVY FREIGHT SERVICE



10 F TANK ON BOILER  
HEAVY SWITCHING SERVICE



12 F DECAPOD  
HEAVY FREIGHT SERVICE

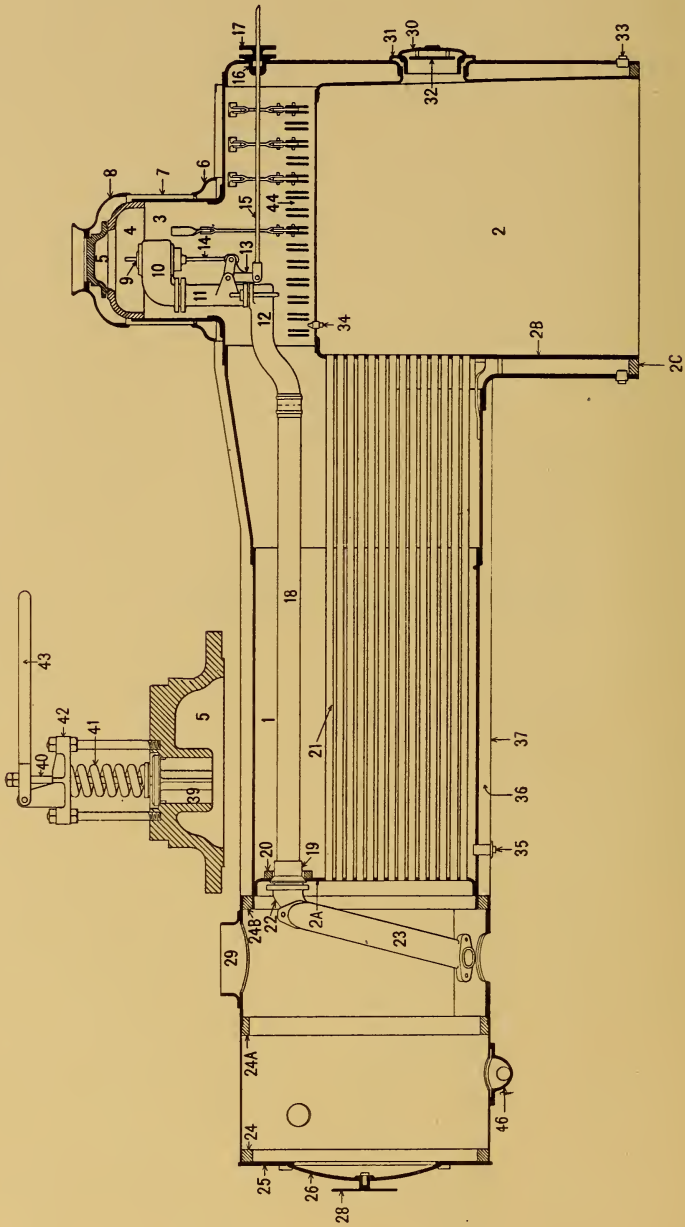


14 1/2 F SANTA FE TYPE  
HEAVY FREIGHT SERVICE

## Illustrated Plates

# Plate 1

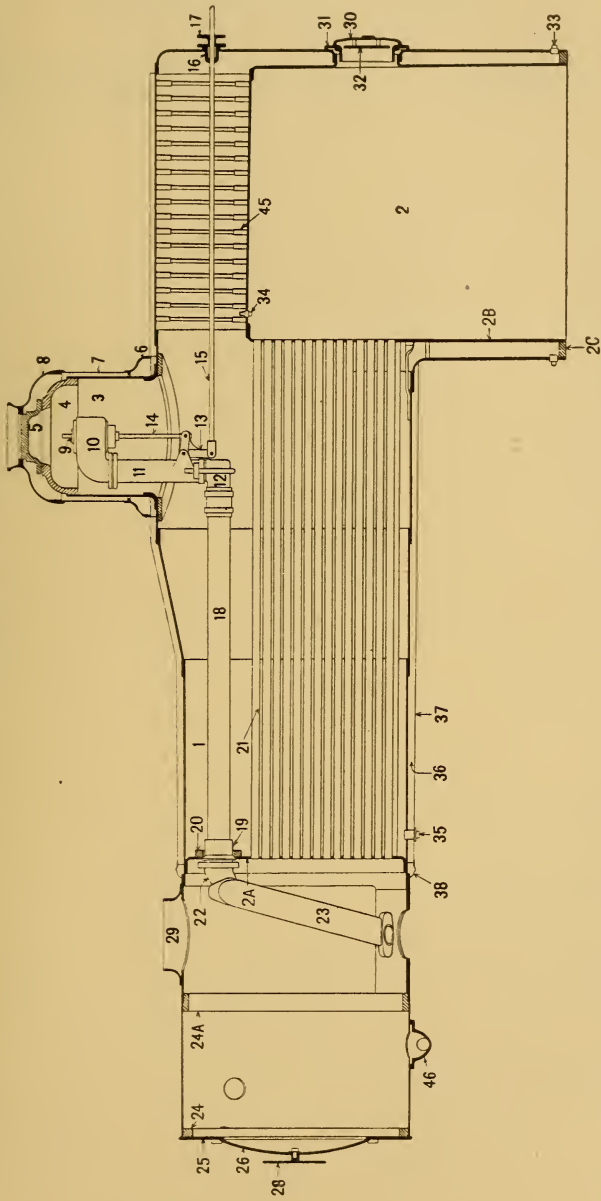
## CROWN BAR TYPE





# Plate 2

## RADIAL STAY TYPE



## Boiler and Attachments

### Plates 1 and 2. Encotyle

Encouardi . . .	1.	Boiler.
Encoubert . . .	2.	Firebox.
Encoudam . . .	2A.	Front Tube Sheet.
Encoufer . . .	2B.	Firebox " "
Encougard . . .	2C.	Water Space Frame.
Encouloir . . .	3.	Dome.
Encounters . . .	4.	" Ring.
Encourager . . .	5.	" Cap.
Encourais . . .	6.	" Base.
Encourar . . .	7.	" Casing.
Encouriez . . .	8.	" Cover.
Encourons . . .	9.	Throttle Valve.
Encourront . . .	10.	" " Box.
Encourumes . . .	11.	" Pipe.
Encouteiro . . .	12.	" " Elbow.
Encouto . . .	13.	" Valve Crank.
Encouturer . . .	14.	" " Rod.
Encradle . . .	15.	" " Stem.
Encradling . . .	16.	" Stuffing Box.
Encranio . . .	17.	" " " Gland.
Encrasser . . .	18.	Dry Pipe.
Encratitas . . .	19.	" Front End.
Encratiti . . .	20.	" Ring on Tube Sheet.
Encravacao . . .	21.	Tubes.
Encravar . . .	22.	Double Cone.
Encravo . . .	23.	Steam Pipes, R and L.
Increases . . .	24.	Smokebox Ring Front.
Encrepe . . .	24A.	" " Middle.
Encrespado . . .	24B.	" " Back.

Encrespar . . .	25.	Smokebox Front.
Encrespeis . . .	26.	“ Door.
Encrespo . . .	27.	“ “ Liner.
Encresta . . .	28.	Number Plate.
Encrestada . . .	29.	Smoke Stack Base.
Encrimson . . .	30.	Fire Door.
Encrinic . . .	31.	“ “ Frame.
Encrinital . . .	32.	“ “ Liner.
Encrisped . . .	33.	Corner Plug.
Encristado . . .	34.	Fusible “
Encrivore . . .	35.	Waist “
Encroach . . .	36.	Lagging.
Encroached . . .	37.	Jacket.
Encroise . . .	38.	Smokebox Band.
Encrotter . . .	39.	Safety Valve.
Encroutant . . .	40.	“ “ Stem.
Encruar . . .	41.	“ “ Spring.
Encruecer . . .	42.	“ “ “ Cap.
Encruzado . . .	43.	Relief Lever.
Encuaderno . . .	44.	Crown Bar.
Encubabais . . .	45.	Staybolt.
Encubado . . .	46.	Spark Ejector.

In ordering steam pipes (No. 23), it will be necessary to specify the side, if both are not wanted.

Smoke stack base (No. 29), while shown in one piece on this plate, is frequently made in two parts, as shown on Plate 38, and either part can be had by referring to the latter plate. See Plate 4 for steel base.

Jacket bands are not given a number in this list, as they are easily designated without.

In many cases patented valves are used instead of the safety valve shown on this plate. In ordering, state whether valve is wanted with or without relief lever.

# Plate 3

Fig. 1

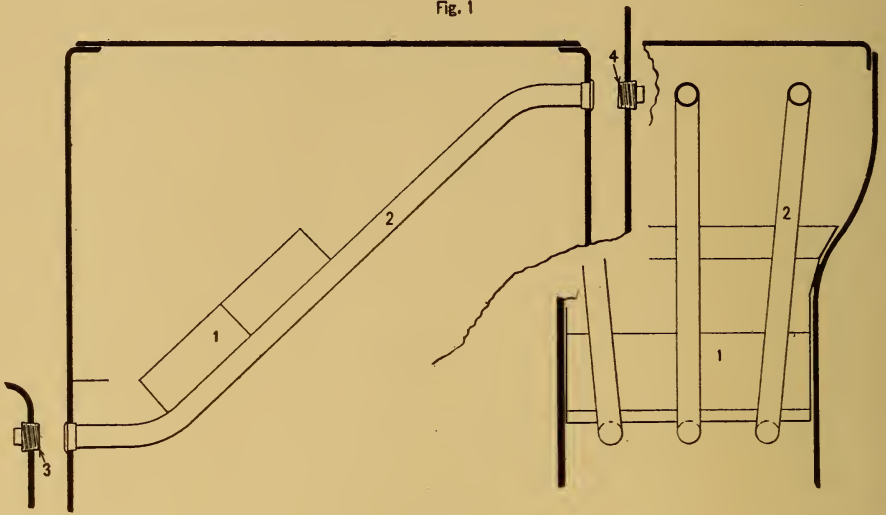
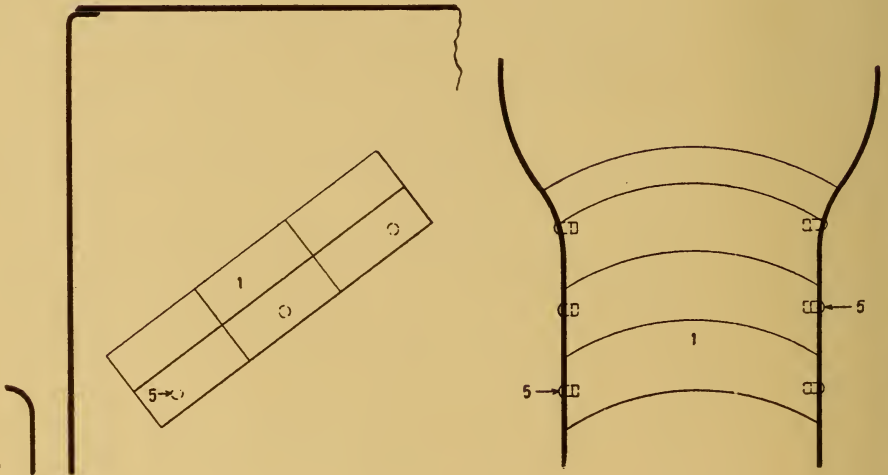


Fig. 2



## Arrangement of Fire Bricks in Firebox

### Plate 3. Encubamos

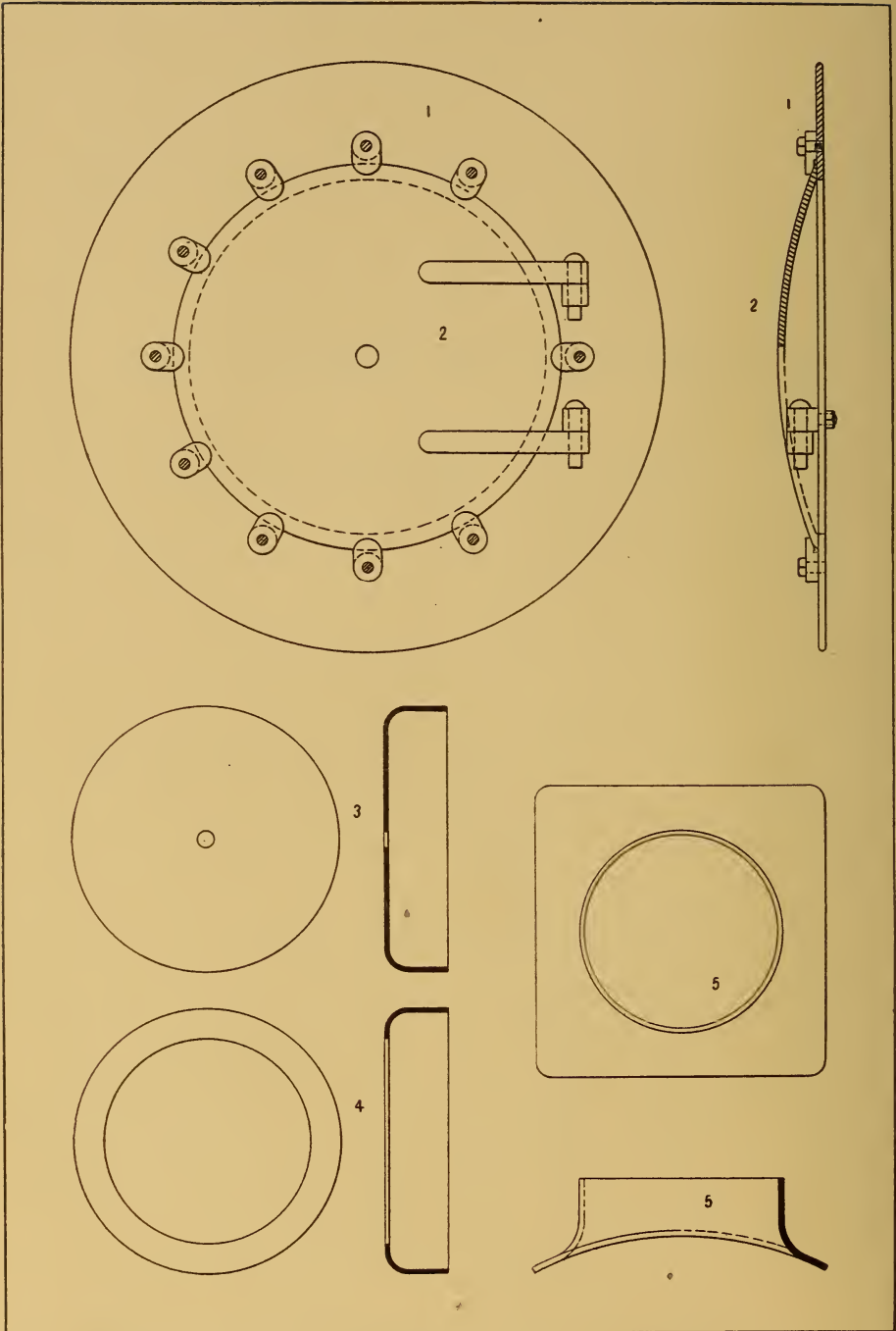
FIGURE 1.—Bricks supported on Tubes.

- |            |        |                    |
|------------|--------|--------------------|
| Encubar    | . . 1. | Fire Brick.        |
| Encubarian | . 2.   | “ “ Tube.          |
| Encubaron  | . 3.   | “ “ “ Plug, Front. |
| Encubertar | . 4.   | “ “ “ “ Back.      |

FIGURE 2.—Bricks supported on Studs.

- |            |      |                  |
|------------|------|------------------|
| Encubierta | . 5. | Fire Brick Stud. |
|------------|------|------------------|

# Plate 4



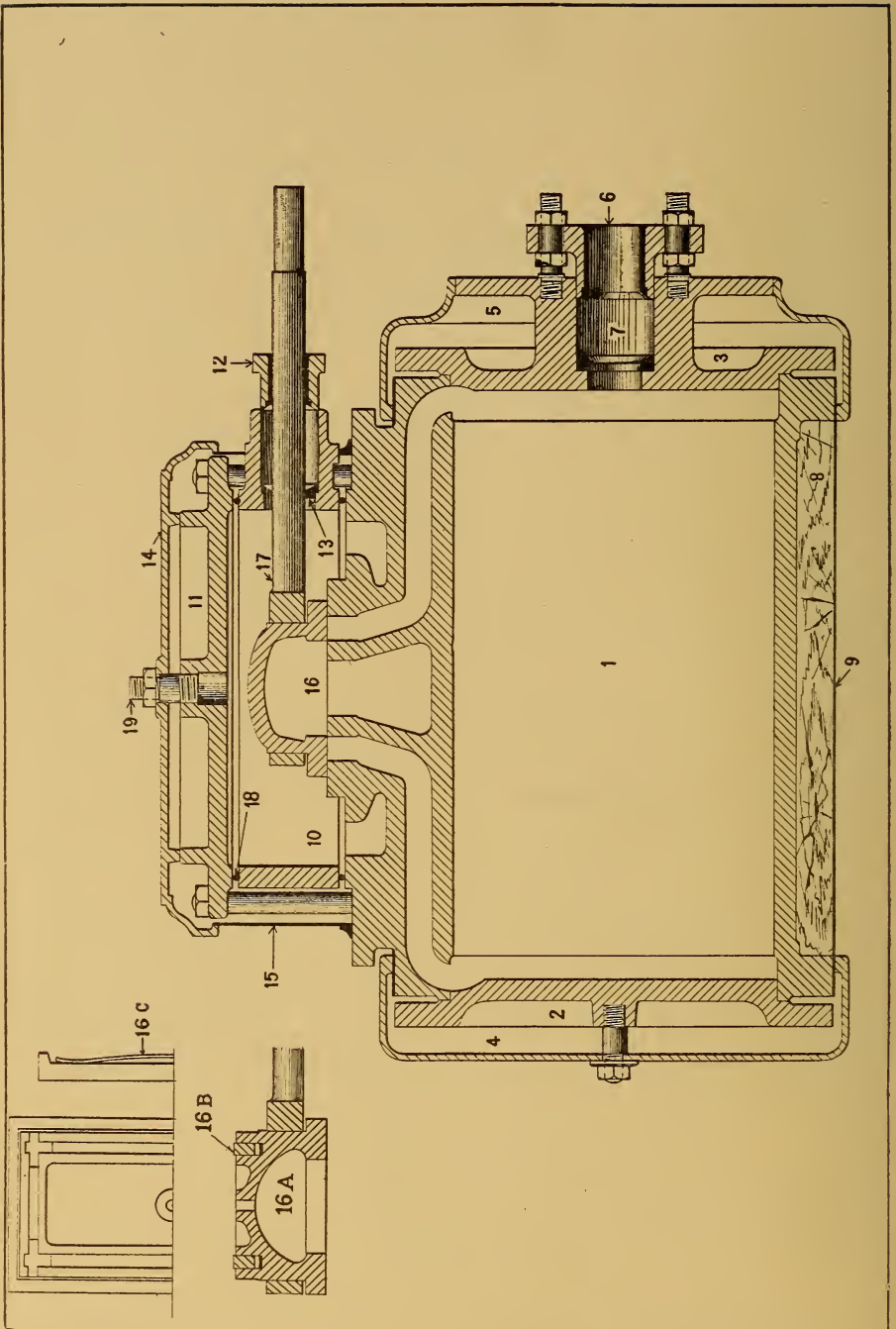
Pressed Steel Smokebox Front, Cylinder Head  
Cover, and Stack Base

Plate 4. Encubridor

- 
- Encubrimos . 1. Smokebox Front.  
Encubrir . . 2. " Door.  
Encubriras . 3. Cylinder Head Cover, Front.  
Encubriria . 4. " " " Back.  
Encuentras . 5. Stack Base.

Plates 1 and 2 show cast iron smokebox fronts and stack bases, and Plate 3 cast iron cylinder head covers. These have in recent years been superseded on many railroads by similar parts made of steel sheets pressed while hot in dies giving them the required forms. They are much stronger, and consequently more durable than cast iron, present a simple, neat appearance, and in many cases when injured can be brought back to their original shape.

# Plate 5





## Single-Expansion Cylinder, Steam Chest and Attachments

### Plate 5. Encuentro

---

Encuerda . .	1.	Cylinder.
Encugentar . .	2.	Front Head.
Encuirer . .	3.	Back “
Enculasse . .	4.	Front Casing Cover.
Encumber . .	5.	Back “ “
Encumbraba . .	6.	Cylinder Gland, R. and L.
Encumbrar . .	7.	“ “ Bottom Ring.
Encumbreis . .	8.	Wood Lagging.
Encumbro . .	9.	Casing.
Encumear . .	10.	Steam Chest.
Encunare . .	11.	“ “ Cap.
Encunasen . .	12.	“ “ Gland.
Encurralar . .	13.	“ “ “ Bottom Ring.
Encurtador . .	14.	“ “ Casing Cover.
Encurtain . .	15.	“ “ Casing.
Encurtamos . .	16.	“ “ Valve.
Encurtidos . .	16A.	“ “ “ Balanced Pattern.
Encurtiera . .	16B.	“ “ “ Packing Strips.
Encurtir . .	16C.	“ “ “ “ Springs.
Encurtiras . .	17.	“ “ “ Yoke.
Encuvage . .	18.	“ “ Joint.
Encyanthe . .	19.	“ “ Oil Pipe Stem.

If a single cylinder, head, gland, or steam chest is ordered, the side required for should be specified.

# Plate 6

FIG. 1

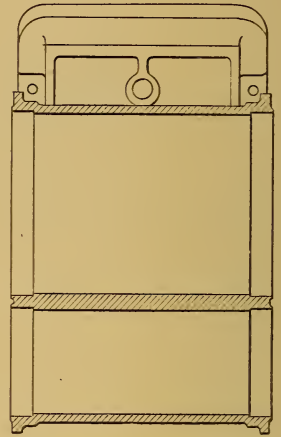
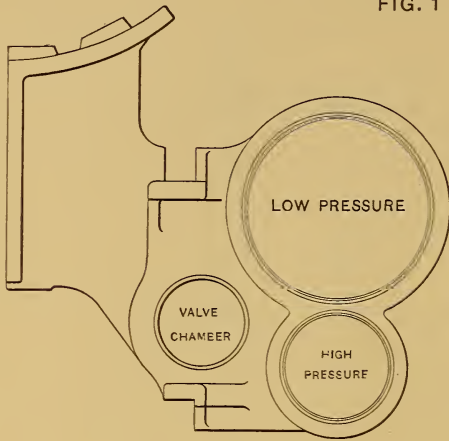
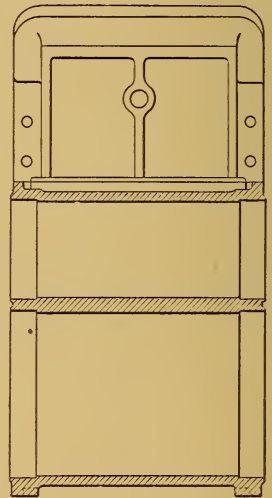
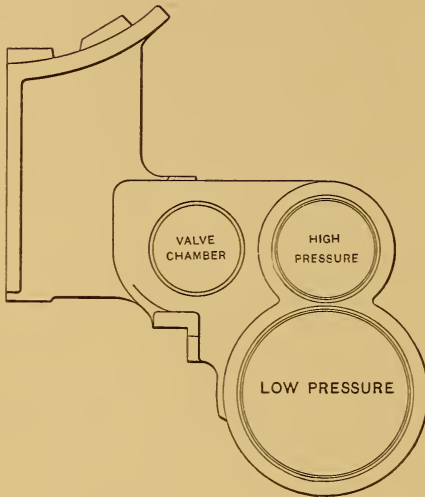


FIG. 2



Baldwin Compound Cylinders (Four Cylinder,  
Vauclain System)

Plate 6. Encycle

---

FIGURE 1.

Baldwin Compound Cylinders with Low-Pressure Cylinder above High-Pressure, showing one side of locomotive.

FIGURE 2.

Baldwin Compound Cylinders with High-Pressure Cylinder above Low-Pressure, showing one side of locomotive.

The High- and Low-Pressure Cylinders are cast in one piece.

# Plate 7

DIAGRAM SHOWING COURSE OF STEAM  
IN  
FOUR CYLINDER COMPOUND LOCOMOTIVE

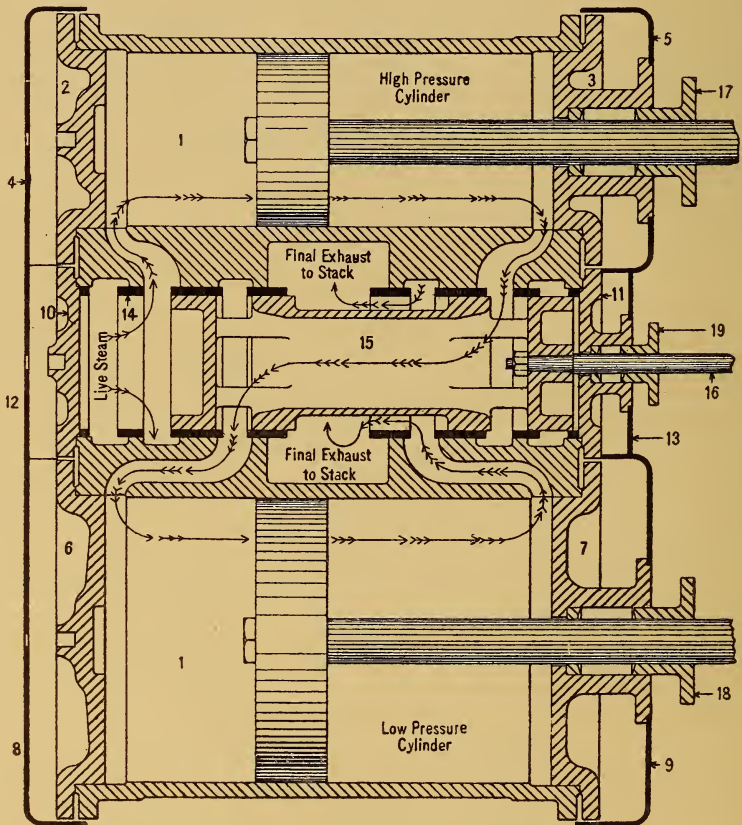


Diagram of Baldwin Compound Cylinders (Vauclain System), Showing the Course of Steam in the Cylinders and Valve Chamber

Plate 7. Encycleme

Encyclia . . .	1.	Cylinder.				
Encyclical . .	2.	High-Pressure Front Cylinder Head.				
Encyclios . .	3.	“	Back	“	“	
Encyclique . .	4.	“	Front	“	“	Casing Cover.
Encyclon . .	5.	“	Back	“	“	“ “
Encymon . .	6.	Low-Pressure Front	“	“		
Encyoneme . .	7.	“	Back	“	“	
Encyrte . . .	8.	“	Front	“	“	Casing Cover.
Encyrtite . .	9.	“	Back	“	“	“ “
Encystmnt .	10.	Front Valve Chamber Head.				
Encytis . . .	11.	Back	“	“	“	
Encyto . . .	12.	Front	“	“	“	Casing Cover.
Endacin . . .	13.	Back	“	“	“	“ “
Endagrie . .	14.	Valve Chamber Bushing. (See Plate 13).				
Endamage . .	15.	Piston Valve.			“	“
Endamaging .	16.	“	“	Stem.	“	“
Endamenes .	17.*	High-Pressure Cylinder Gland.				
Endanger . .	18.*	Low-Pressure	“	“		
Endangered .	19.*	Valve Chamber Gland.				

If a single cylinder, head, casing cover, bushing, valve, stem, or gland is ordered, the side required for should be specified.

\*Metallic Packing is used in all Stuffing Boxes of Compound Cylinders. (See Plates 91 and 92).

# Plate 8

DIAGRAM SHOWING COURSE OF STEAM IN  
IN  
BALANCED COMPOUND LOCOMOTIVE

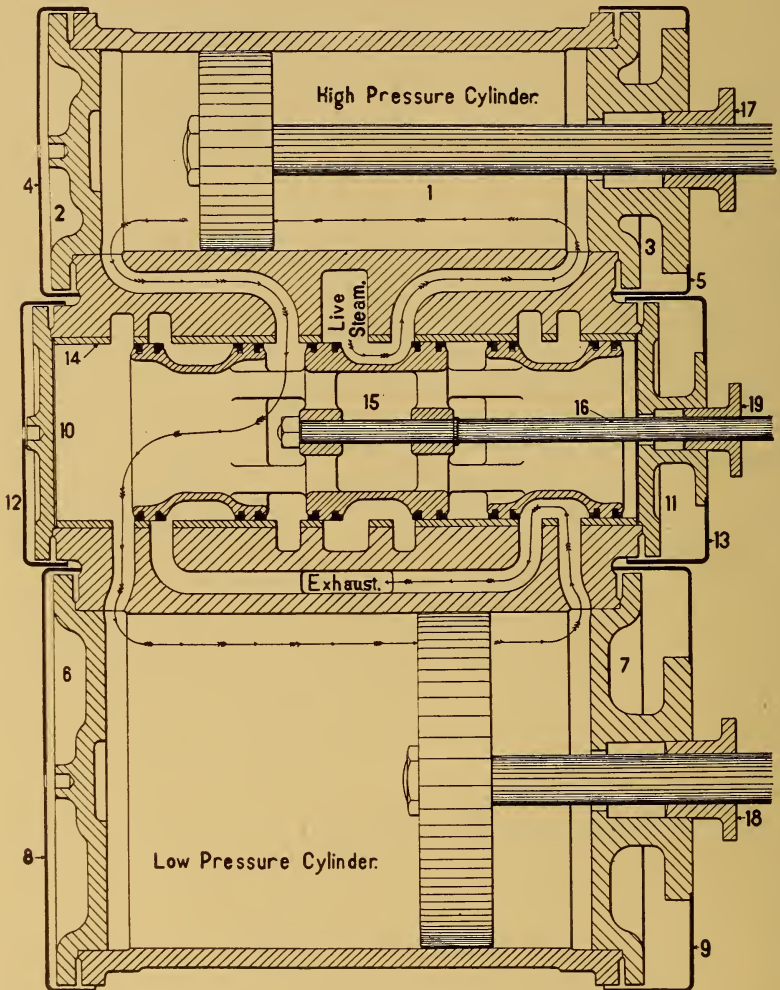


Diagram of Baldwin Balanced Compound Cylinders  
 Showing the Course of Steam in the Cylinders  
 and Valve Chamber

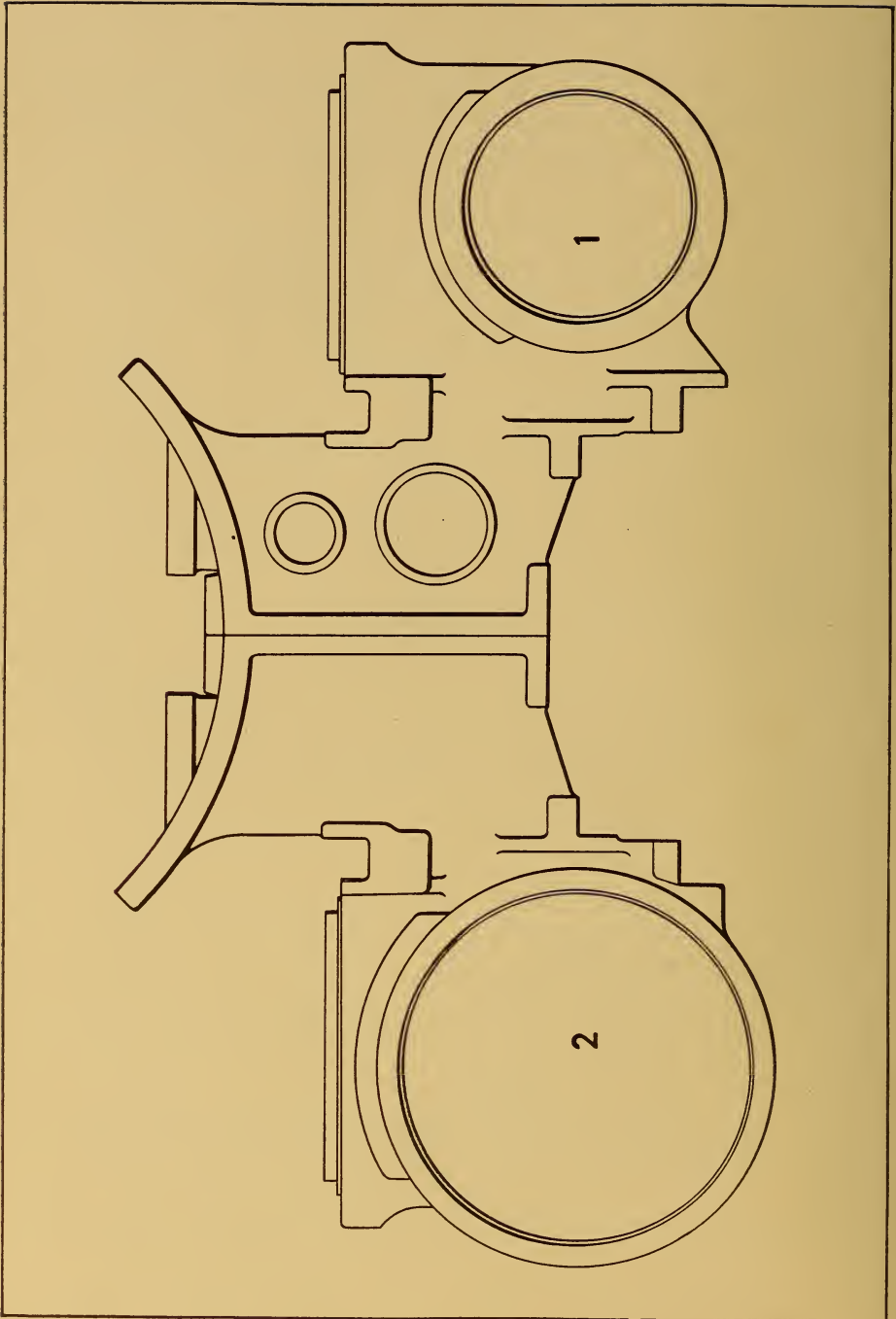
Plate 8. Endangion

Endark . . .	1.	Cylinder.				
Endarken . .	2.	High-Pressure Front Cylinder Head.				
Endarkened .	3.	“ “ Back “ “				
Endarking . .	4.	“ “ Front “ “			Casing Cover.	
Endaubage . .	5.	“ “ Back “ “			“ “	
Endaubeur . .	6.	Low “ Front “ “				
Endazeh . . .	7.	“ “ Back “ “				
Endearedly .	8.	“ “ Front “ “			Casing Cover.	
Endearment .	9.	“ “ Back “ “			“ “	
Endeavour .	10.	Front Valve Chamber Head.				
Endebles . .	11.	Back “ “ “				
Endeblezes .	12.	Front “ “ “			Casing Cover.	
Endecader . .	13.	Back “ “ “			“ “	
Endecaedro .	14.	Valve Chamber Bushing. (See Plate 13.)				
Endecagono .	15.	Piston Valve. “ “				
Endechador .	16.	“ “ Stem. “ “				
Endechamos .	17.*	High-Pressure Cylinder Gland.				
Endechando .	18.*	Low “ “ “				
Endechar . .	19.*	Valve Chamber Gland.				

If a single cylinder, head, casing cover, bushing, valve, stem, or gland is ordered, the side required for should be specified.

\*Metallic Packing is used in all Stuffing Boxes of Compound Cylinders. (See Plates 91 and 92).

# Plate 9





## Baldwin Compound Cylinders, Two Cylinder Type

### Plate 9. Endecharon

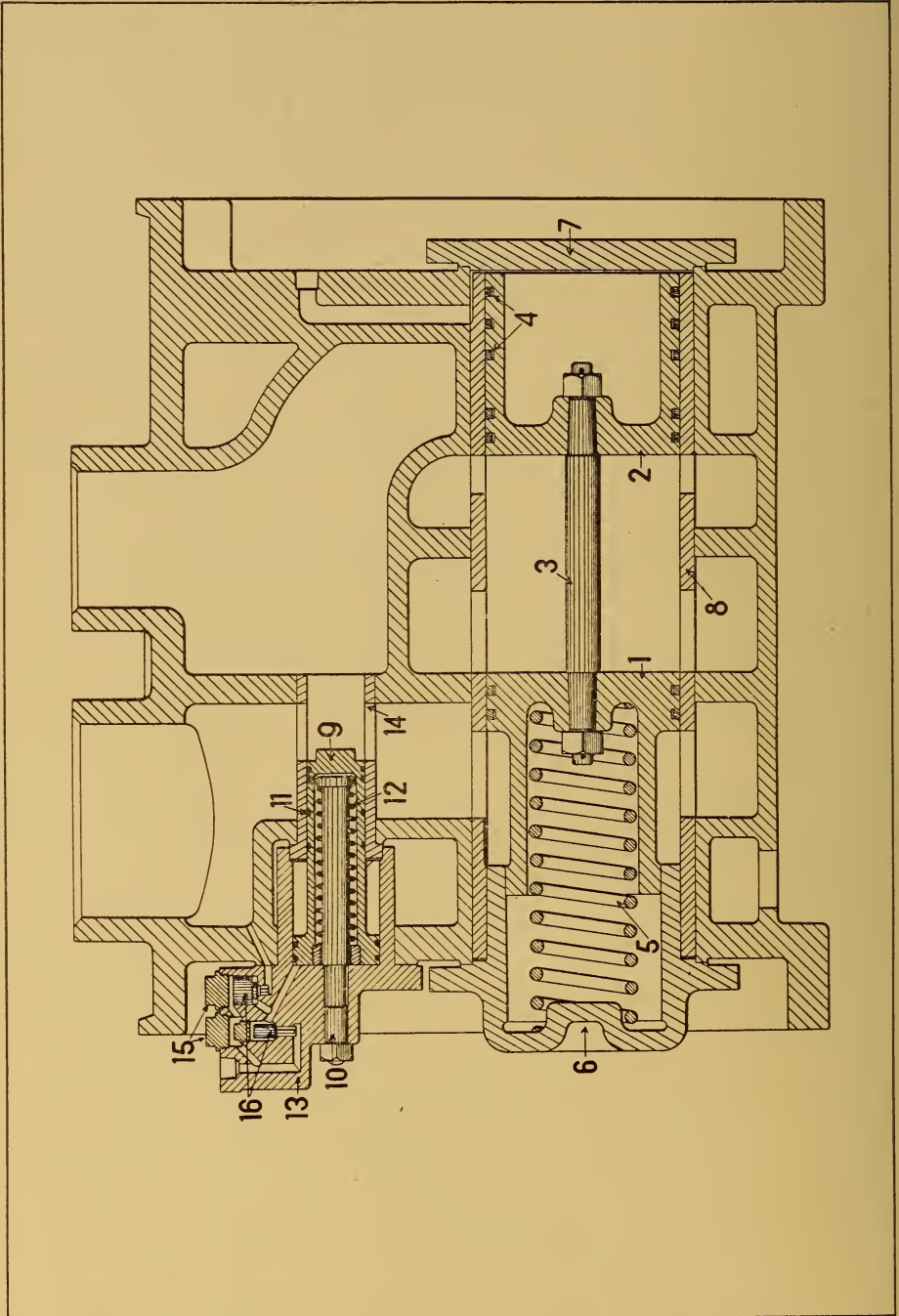
---

Endechases . . 1. High-Pressure Cylinder.

Endecheis . . . 2. Low-Pressure Cylinder.

In ordering steam chest, steam chest valve, steam chest cap or casing, cylinder heads or cylinder head covers, use code words shown on Plate 5, specifying for which side the parts are required.

# Plate 10



Intercepting and Reducing Valves for Baldwin Two  
Cylinder Compound Locomotives

Plate 10. Endechosos

---

Endehesado . . .	1.	Intercepting Valve	Front.
Endehesais . . .	2.	“	“ Back.
Endehesar . . .	3.	“	“ Distance Bar.
Endeictic . . .	4.	“	“ Packing Ring.
Endeixis . . .	5.	“	“ Spring.
Endelechia . . .	6.	“	“ Front Head.
Endellione . . .	7.	“	“ Back “
Endelsy . . .	8.	“	“ Bushing.
Endemial . . .	9.	Reducing Valve	Piston.
Endemicite . . .	10.	“	“ Rod.
Endemico . . .	11.	“	“ Packing Ring.
Endemie . . .	12.	“	“ Spring.
Endemique . . .	13.	“	“ Head.
Endemoniar . . .	14.	“	“ Bushing.
Endenize . . .	15.	“	“ Plugs.
Endenizing . . .	16.	“	“ Poppet Valves.

# Plate 11

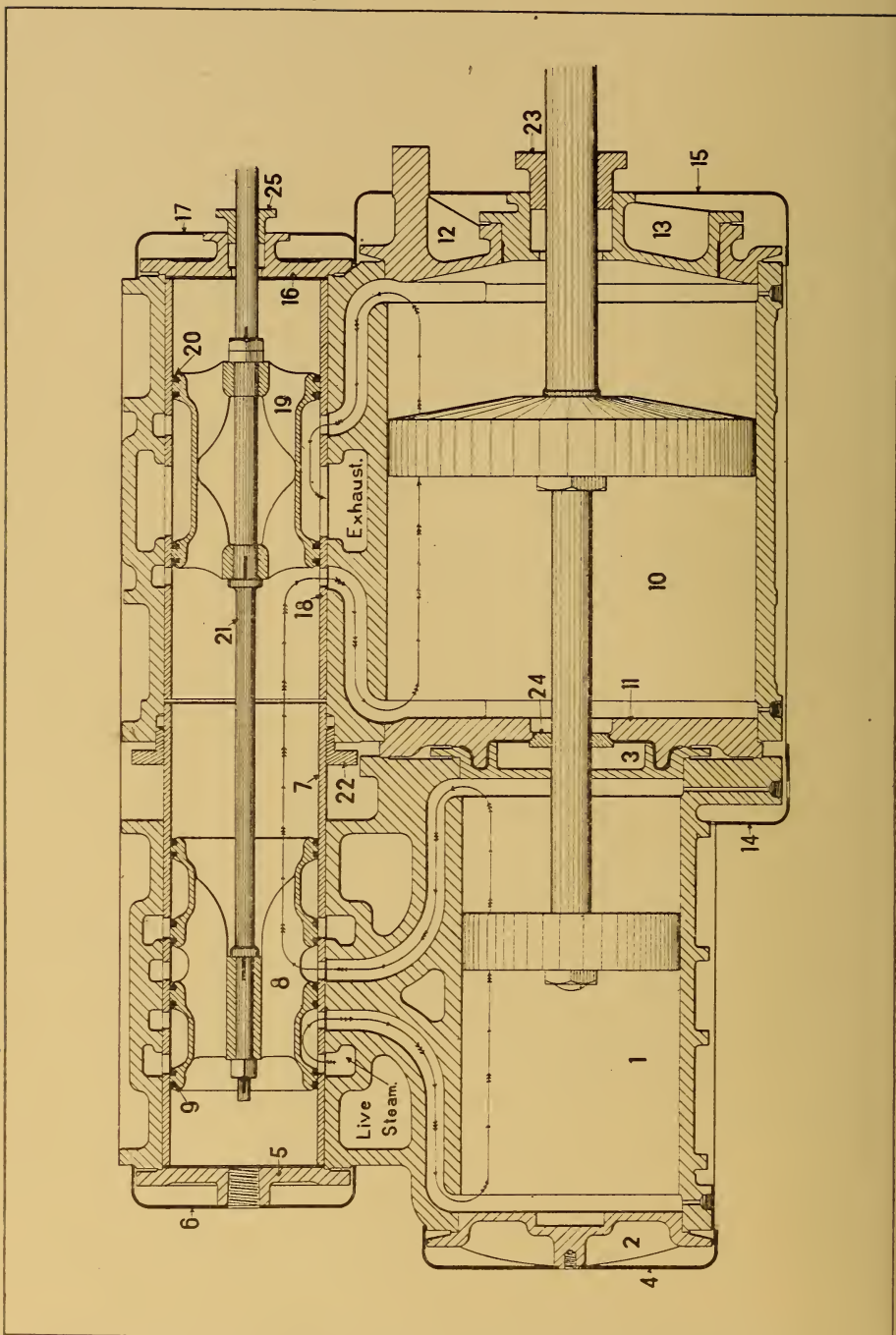


Diagram of Tandem Compound Cylinders, Showing  
the Course of Steam in the Cylinders and  
Valve Chamber

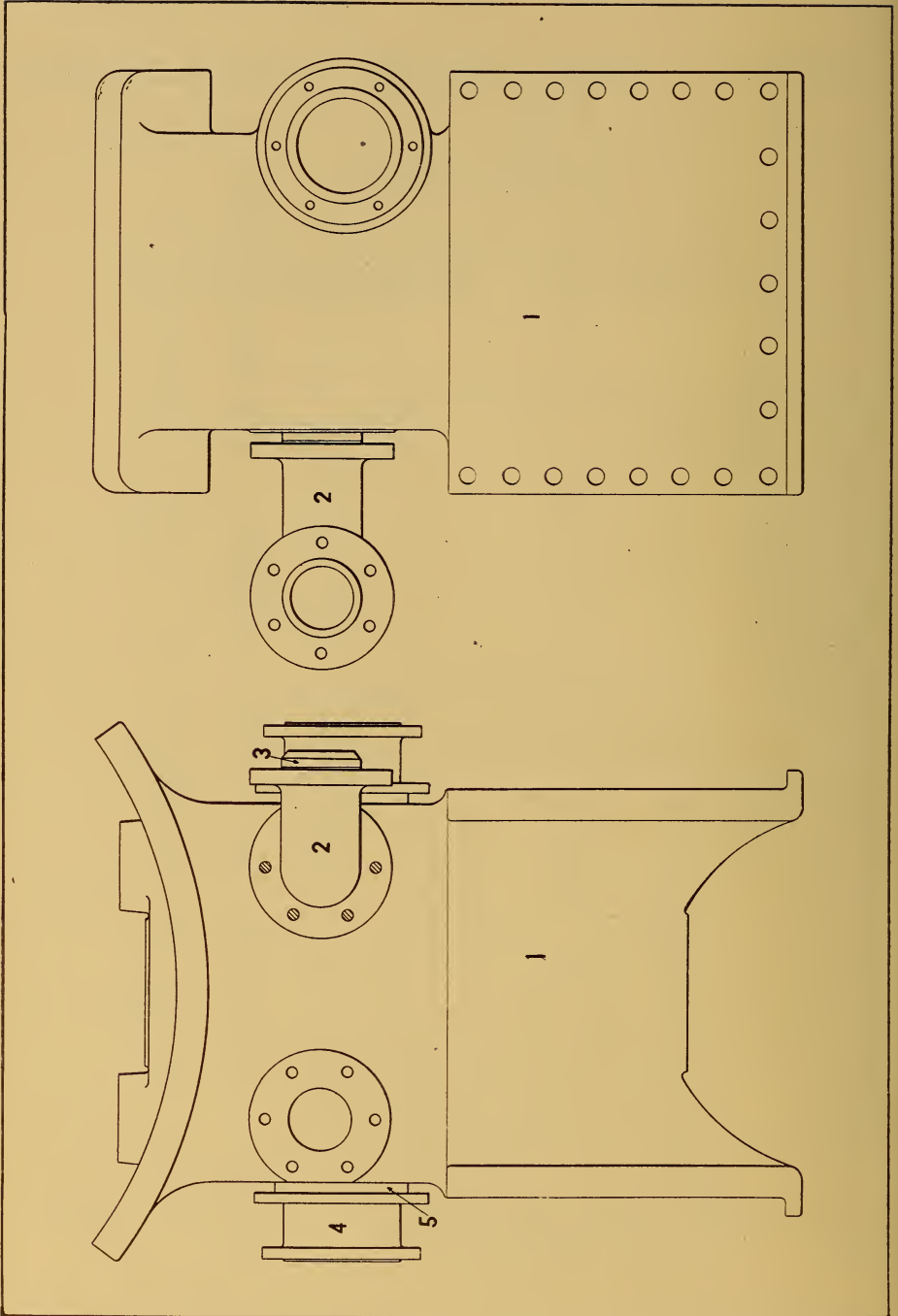
Plate 11. Endentacao

Endentadas . . .	1.	High-Pressure Cylinder.	
Endentado . . .	2.	“ “	Front Head.
Endentamos . . .	3.	“ “	Back “
Endentaron . . .	4.	“ “	Front “ Cover.
Endentecer . . .	5.	“ “	Valve Chamber Head.
Endenteis . . .	6.	“ “	“ “ “ Cover.
Endentezco . . .	7.	“ “	“ Bushing.
Endenture . . .	8.	“ “	Piston Valve.
Endeonose . . .	9.	“ “	“ “ Rings.
Endeosar . . .	10.	Low-Pressure Cylinder.	
Endeque . . .	11.	“ “	Front Head.
Enderecar . . .	12.	“ “	Back “
Endereco . . .	13.	“ “	“ “ (Central).
Enderezado . . .	14.	“ “	Front “ Cover.
Enderezeis . . .	15.	“ “	Back “ “
Endermatic . . .	16.	“ “	Valve Chamber Head.
Endermic . . .	17.	“ “	“ “ “ Cover.
Enderon . . .	18.	“ “	“ Bushing.
Enderum . . .	19.	“ “	Piston Valve.
Endetteras . . .	20.	“ “	“ “ Rings.
Endettiez . . .	21.	Valve Stem.	
Endettons . . .	22.	Intermediate Valve Chamber Gland.	
Endever . . .	23.	*Low-Pressure Cylinder Gland.	
Endexa . . .	24.	*Intermediate Cylinder Gland.	
Endgueltig . . .	25.	*Valve Chamber Gland.	

If a single cylinder, head, casing cover, bushing, valve, stem or gland is ordered, the side required for should be specified.

\*Metallic Packing is used in all Stuffing Boxes of Compound Cylinders. (See Plates 91 and 92).

# Plate 12



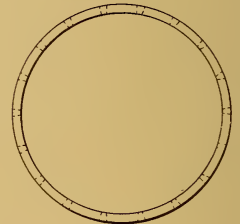
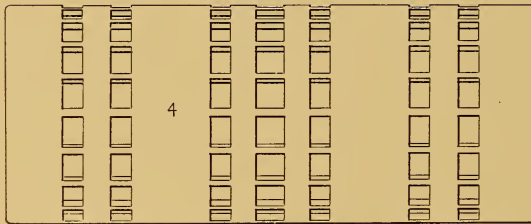
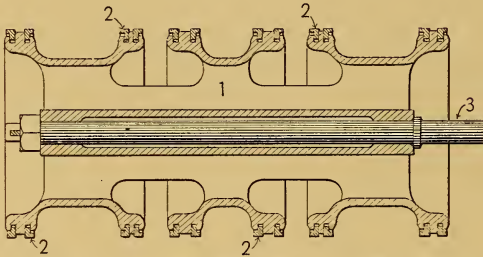
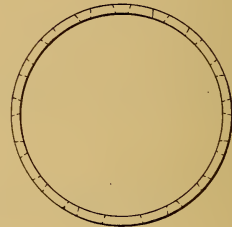
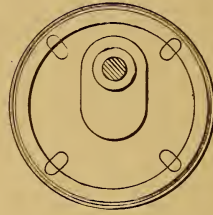
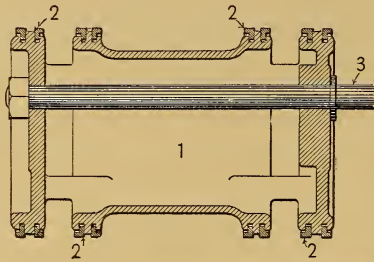
## Saddle for Tandem Compound Cylinders

**Plate 12. Endiable**

---

- Endiabrado . 1. Saddle.  
Endiaco . . . 2. Steam Pipe.  
Endiamante . 3. “ “ Ring.  
Endiandre . . 4. Exhaust Connection.  
Endiaper . . 5. “ “ Gland.

# Plate 13





Piston Valve and Bushing for Baldwin Compound  
Locomotives (Vauclain and Balanced Systems)

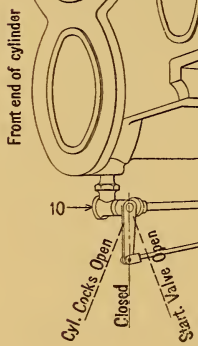
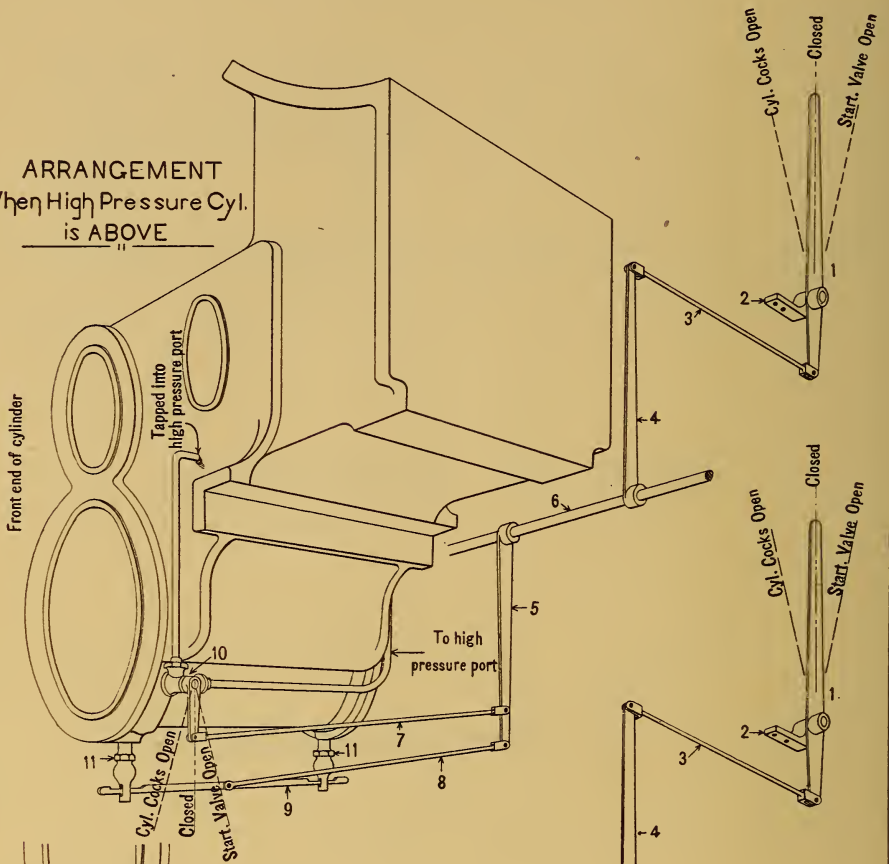
Plate 13. Endiapered

- Endica . . . 1. Piston Valve.  
Endicuzza . . 2. " " Packing Ring.  
Endigue . . . 3. " " Stem.  
Endilgada . . 4. Valve Chamber Bushing.

If a single valve, stem, or bushing is ordered, the side required for should be specified.

# Plate 14

**ARRANGEMENT**  
When High Pressure Cyl.  
is ABOVE



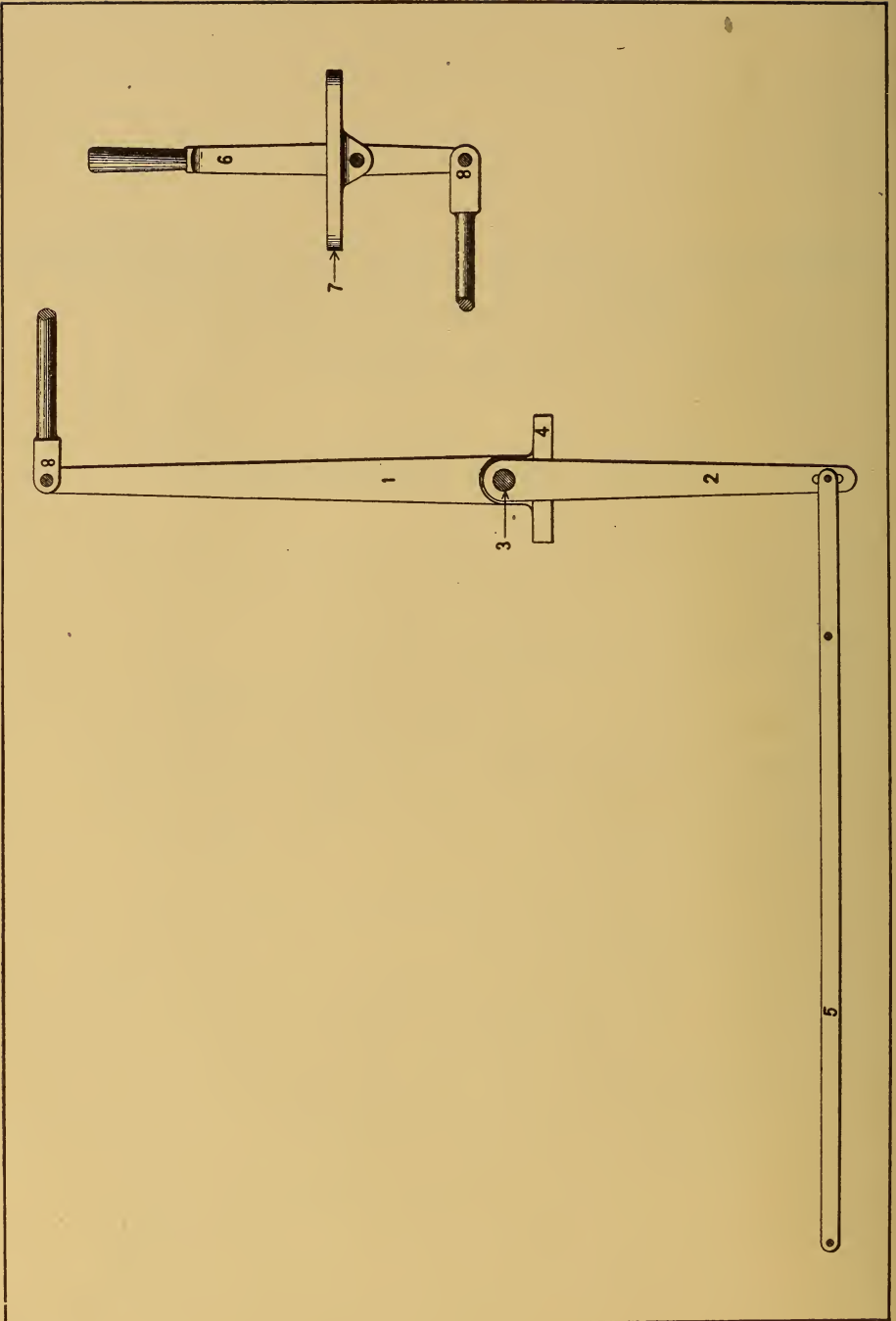
**ARRANGEMENT**  
When High Pressure Cyl.  
is BELOW

Arrangement of Starting Valves and Cylinder Cocks  
for Baldwin Compound Locomotives  
(Vauclain System)

Plate 14. Endilgador

- Endilgamos . 1. Starting Valve Lever in Cab.  
 Endilgar . . 2. " " " Fulcrum in Cab.  
 Endilgaron . 3. " " Rod from Cab.  
 Endilgases . 4. Upper Arm.  
 Endilgueis . 5. Lower "  
 Endimanche . 6. Shaft.  
 Endiosado . 7. Starting Valve Rod under Cylinder.  
 Endiosamos . 8. Cylinder Cock " " "  
 Endiosaron . 9. " " Strip.  
 Endiosases . 10. Starting Valve.  
 Endioseis . . 11. Cylinder Cock.

# Plate 15

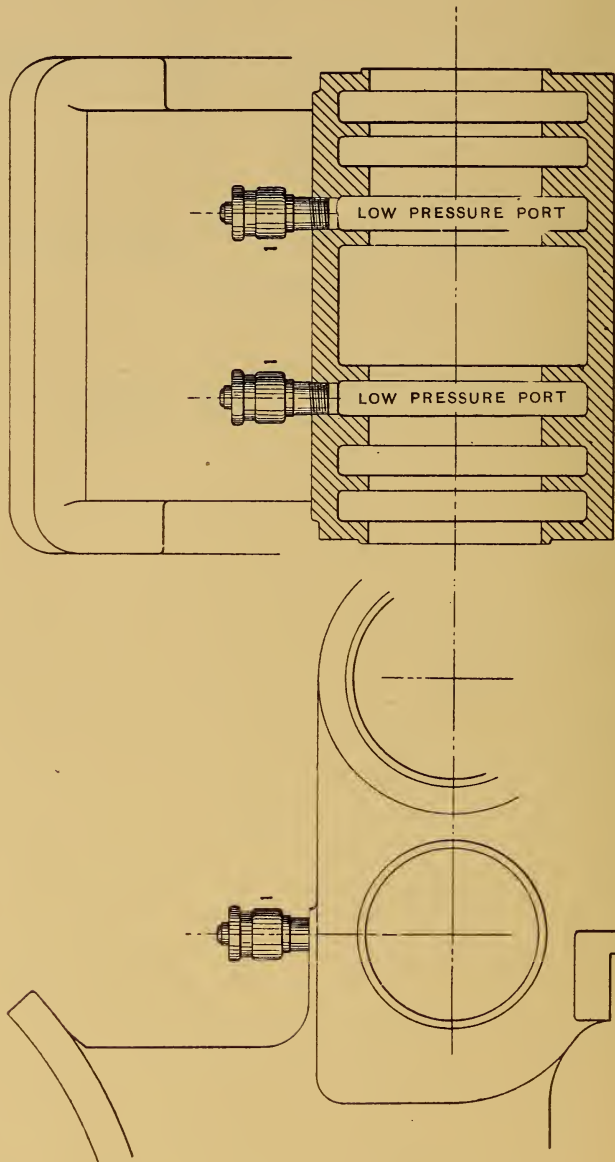


Cylinder Cock Work, for Single-Expansion  
Locomotives

Plate 15. Endiple

- Endreitar . . . 1. Upper Arm.  
Endive . . . 2. Lower “  
Endivia . . . 3. Shaft.  
Endknospe . . 4. “ Bearing.  
Endkopf . . . 5. Cock Strips.  
Endless . . . 6. Lever in Cab.  
Endlessly . . 7. “ Fulcrum.  
Endlich . . . 8. Coupling Rod Jaws.

# Plate 16



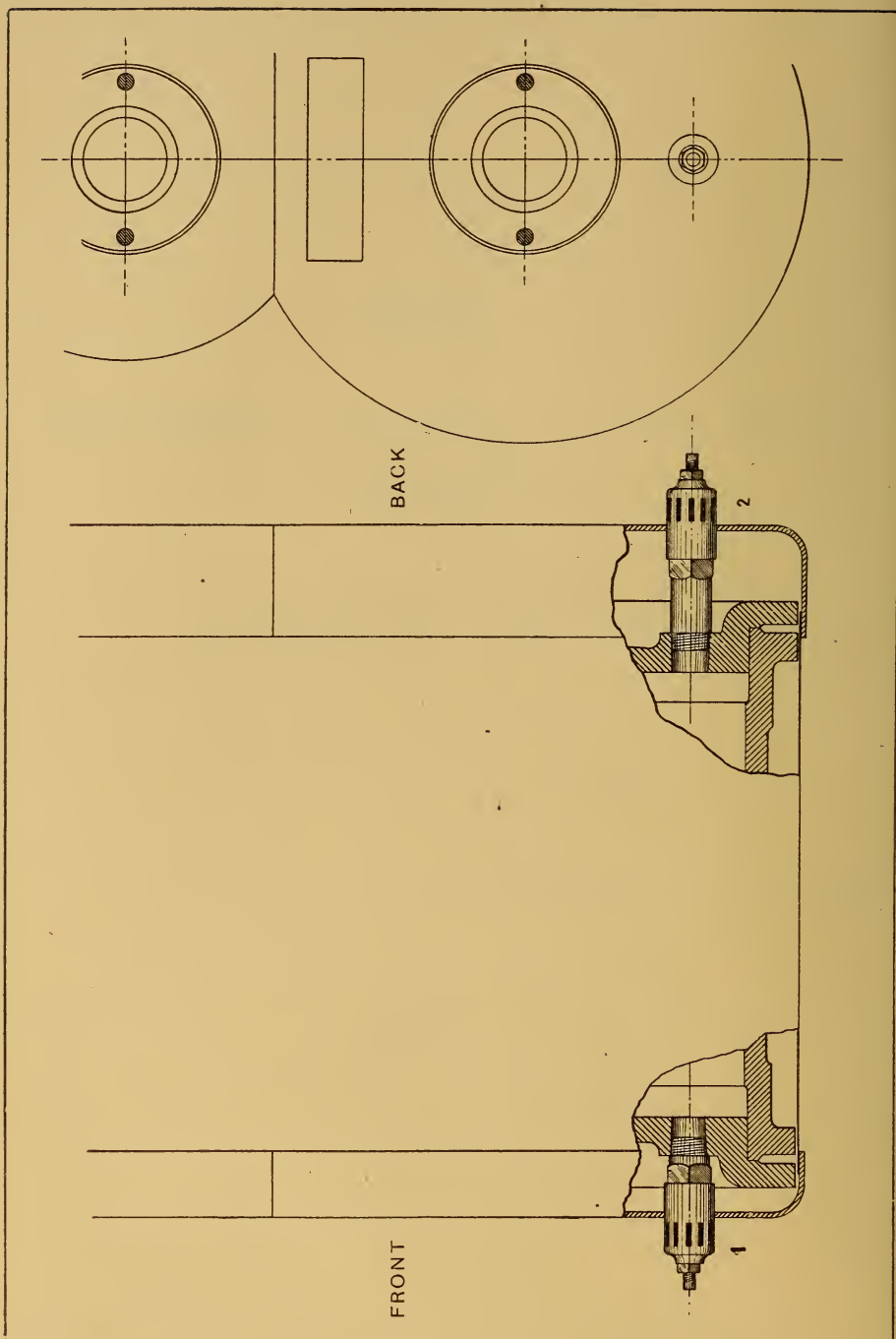
Vacuum Valve for Low-Pressure Cylinder Ports  
(Vauclain System)

Plate 16. Endlichere



Endlong . . . 1 Low-Pressure Port Vacuum Valve.

# Plate 17





Relief Valve for Low-Pressure Cylinder Heads  
(Vauclain System)

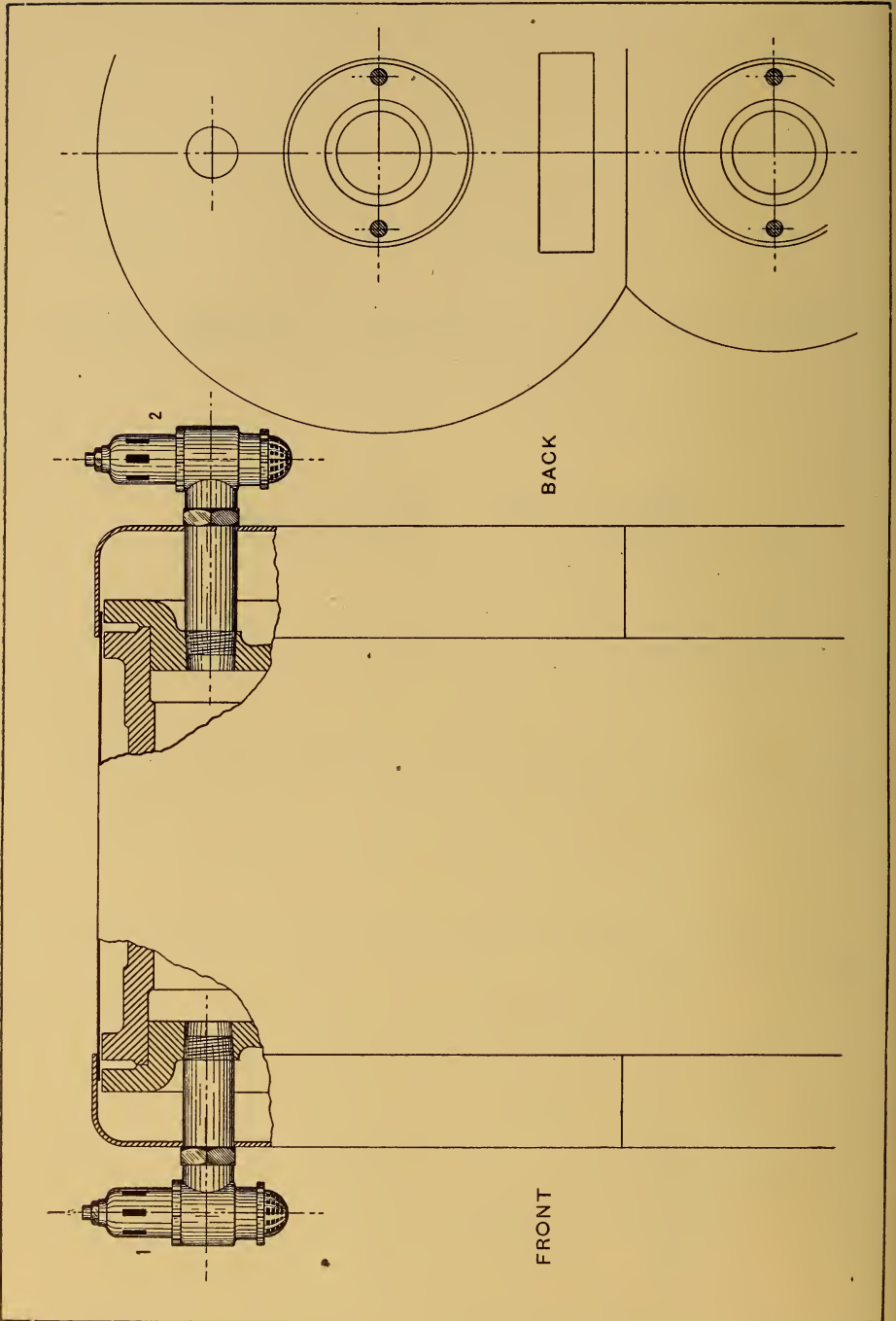
Plate 17. Endmost

---

Endoblado . 1. Low-Pressure Cylinder Head Relief Valve, Front.  
Endocardio . 2. " " " " " Back.

In ordering a single valve, state whether it is wanted for front or back cylinder head.

# Plate 18



## Combined Relief and Vacuum Valve for Low-Pressure Cylinder Heads (Vauclain System)

### Plate 18. Endocarp

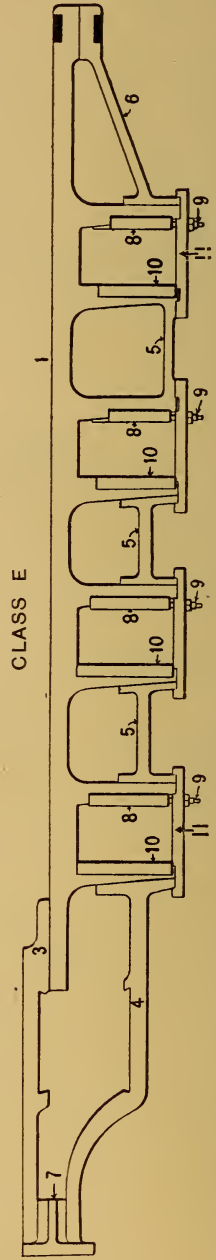
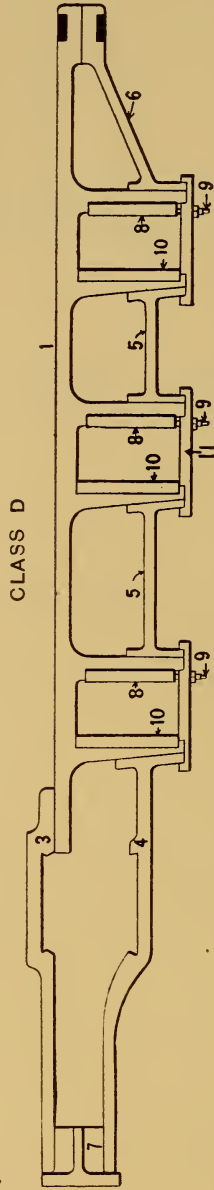
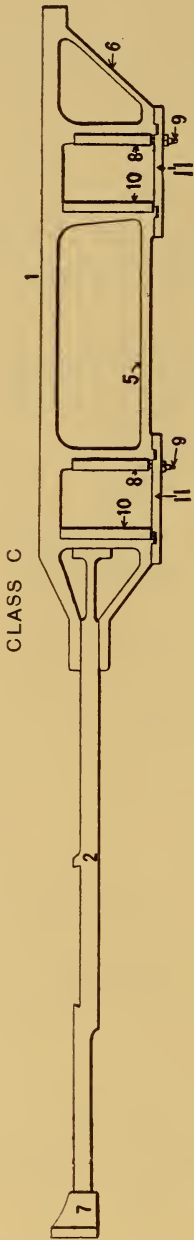
---

Endocarpei . 1. Low-Pressure Cylinder Head Relief and Vacuum Valve, Front.

Endocarpon . 2. Low-Pressure Cylinder Head Relief and Vacuum Valve, Back.

In ordering a single valve, state whether it is wanted for front or back cylinder head.

# Plate 19



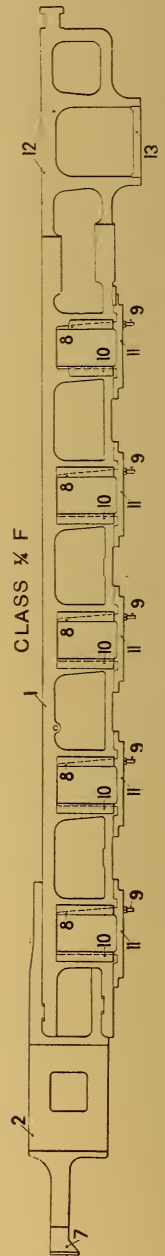
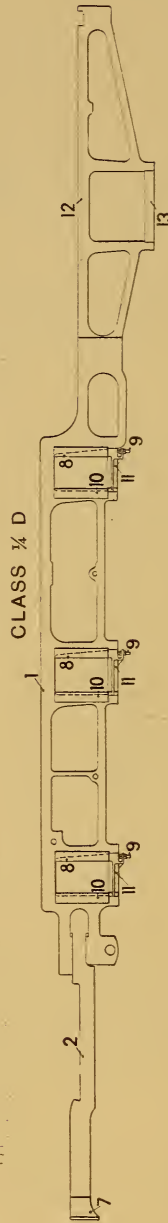
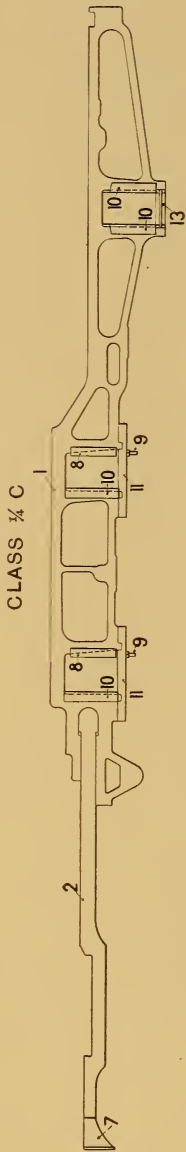
Frames and Pedestals

Plate 19. Endoceras

- Endochroa . . 1. Top Rail and Pedestals.
- Endochromo . . 2. Front Rail.
- Endocladie . . 3. " " Top.
- Endocrane . . 4. " " Bottom.
- Endoctorer . . 5. Middle Brace.
- Endoctrine . . 6. Back "
- Endocus . . . 7. Frame Filling Piece.
- Endocyme . . 8. Pedestal Wedge.
- Endocyst . . . 9. " " Bolt.
- Endodaque . . 10. " Gib.
- Endomyque . . 11. " Cap.

While this plate does not show the pedestal bolted to the frame rail, engines have been constructed on this plan, and when ordering a pedestal to replace, it will only be necessary to refer to its position on the frame.

# Plate 20



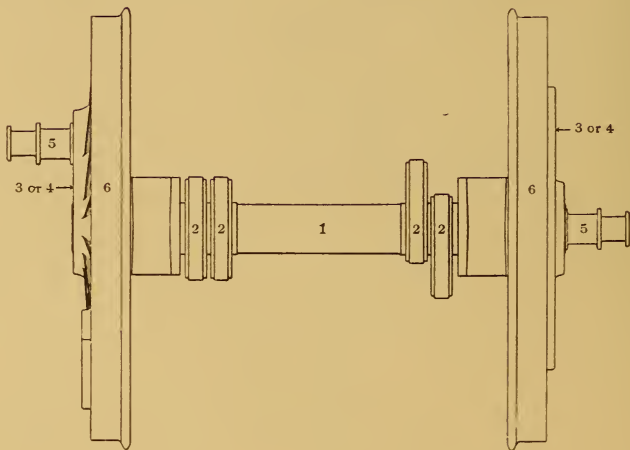
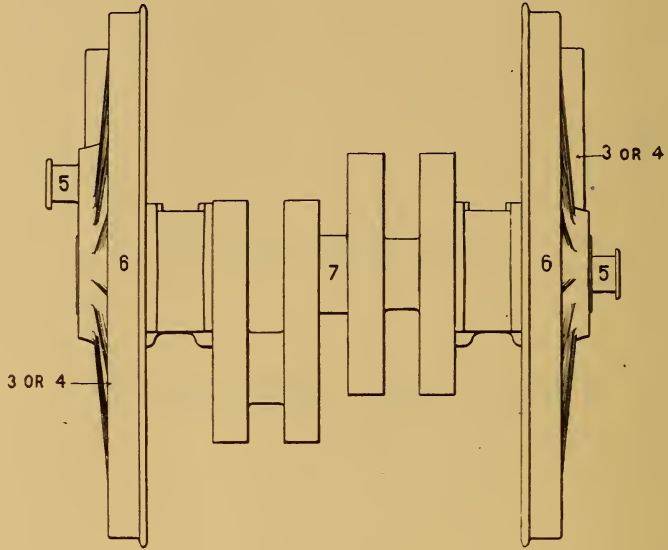
## Frames and Pedestals

## Plate 20. Endophlee

- 
- Endophleon . . 1. Top Rail and Pedestals.  
 Endophore . . 2. Front Rail.  
 Endophylle . . 7. Frame Filling Piece.  
 Endoplast . . 8. Pedestal Wedge.  
 Endopleura . . 9. " " Bolt.  
 Endopodite . 10. " Gib.  
 Endopogon . 11. " Cap.  
 Endoptere . . 12. Back Frame.  
 Endoptilo . . 13. Trailing Pedestal Cap.

L O F C.

# Plate 21





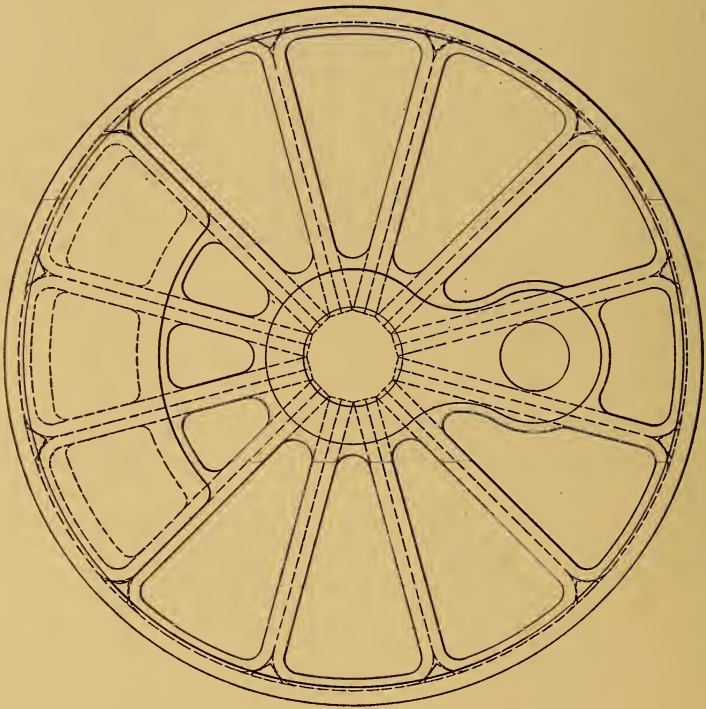
## Driving Wheels, Axles and Tires

## Plate 21. Endor

- Endorhizal . . 1. Axle.  
Endorhizo . . 2. Eccentric.  
Endormais . . 3. Wheel Center (Cast Iron).  
Endormant . . 4. " " (Cast Steel).  
Endormeur . . 5. Wrist Pin.  
Endormez . . 6. Tire.  
Endormi . . 7. Crank Axle.

Orders for wheels or their parts, when not in full sets, should indicate particular pair of wheels required, or the pair for which parts are needed.

# Plate 22



## Wrought Iron Driving Wheel Center (Vauclain Type)

### Plate 22. Endormions

---

#### Endormiras . . Driving Wheel Center.

For many years cast iron has been used in this country for driving wheel centers. Lately, however, on account of the increased severity of locomotive service, a demand has arisen for stronger wheels, and this has been met by the wrought iron center here described.

The method of manufacture is plainly shown by the drawing. The parts are forged separately under drop and steam hammers and a hydraulic machine, and assembled as shown by the dotted lines. They are then brought to a welding heat and placed between steel dies of suitable dimensions, the upper one being connected to the piston rod of a powerful steam hammer. A few blows then weld the parts together, making a homogeneous, solid forging.

These wheels possess great strength, lightness, and beauty of design. The counterbalance is filled with lead when necessary to bring it to the required weight.

For clearer illustration of method of manufacture, (See Plate 23, Figure 1).

# Plate 23

Fig. 1

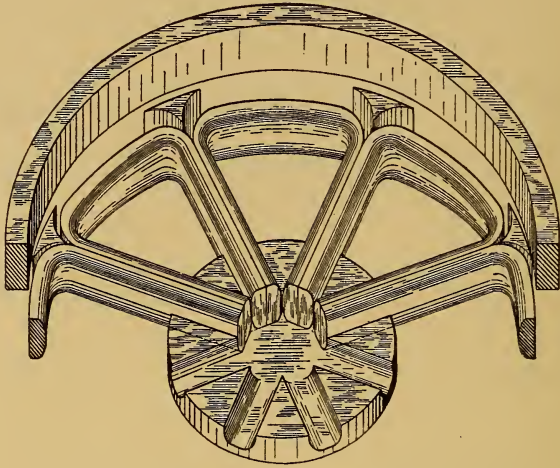
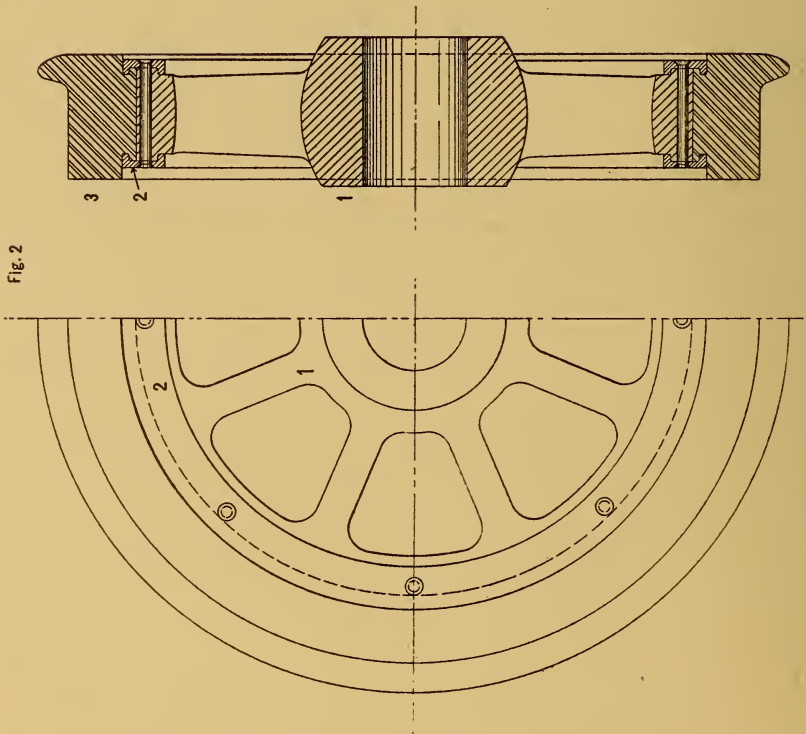


Fig. 2



## Wrought Iron Engine Truck and Tender Wheel (Vauclain Type)

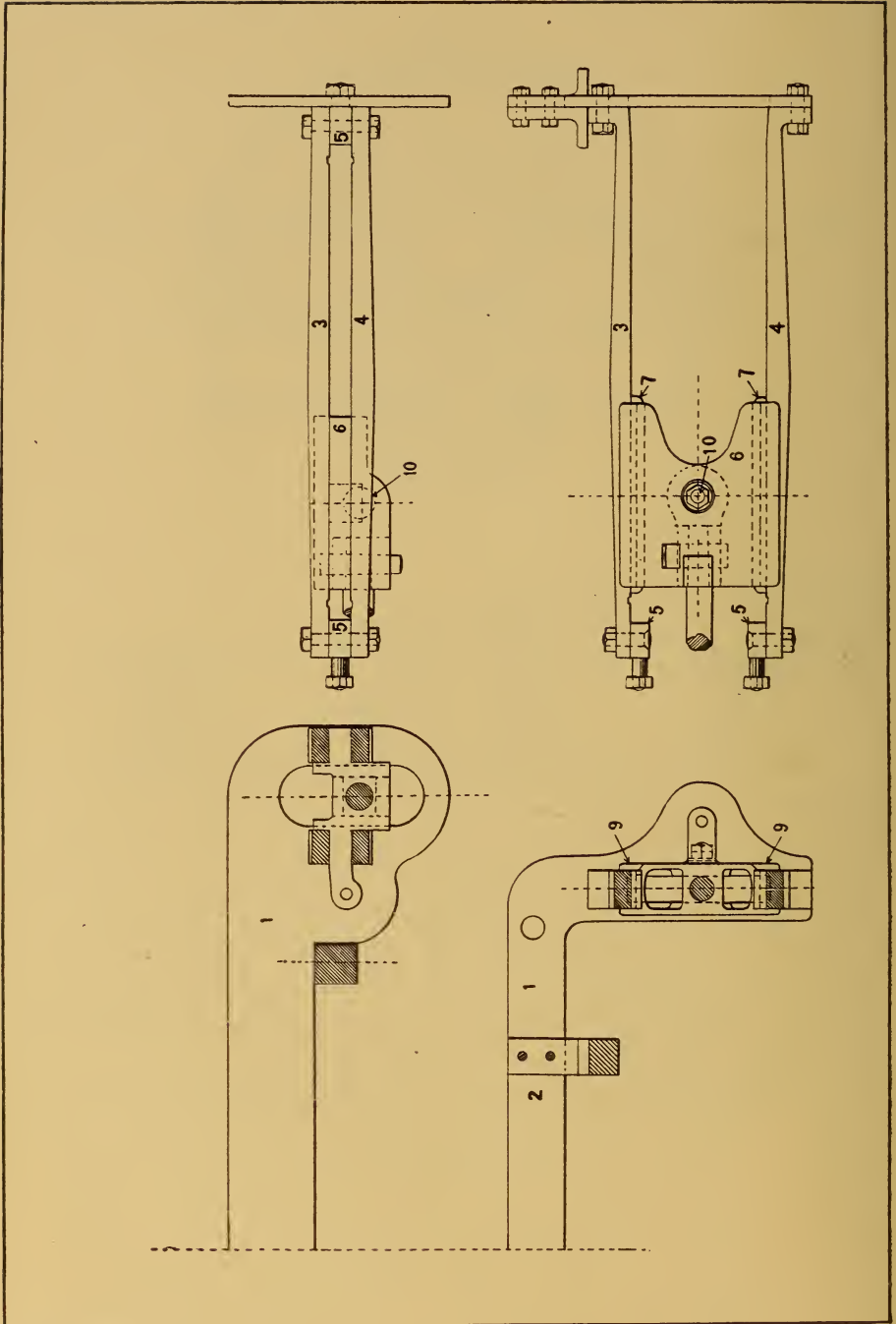
### Plate 23. Endorsing

- Endosados . . 1. Wheel Center.  
Endosarc . . 2. Retaining Ring.  
Endosareis . 3. Tire.

The conditions which brought forth the wrought iron driving wheel have caused the existence of the engine truck and tender wheel of the same type. The construction is shown by Figure 1. The tire is shrunk on the center and is further secured by two wrought iron retaining rings held by rivets (see Figure 2). The steel tire lasts much longer than the chilled tread of a cast iron wheel, and when, after having been turned several times, it is finally worn too thin for use, it can be replaced by a new one; whereas, when the tread of a cast iron wheel is worn through the chill, the whole wheel must be thrown away.

For the position of these wheels in the truck, (see Plates 42 and 72).

# Plate 24



## Guide Bearer, Guides, and Crosshead for Single-Expansion Locomotives

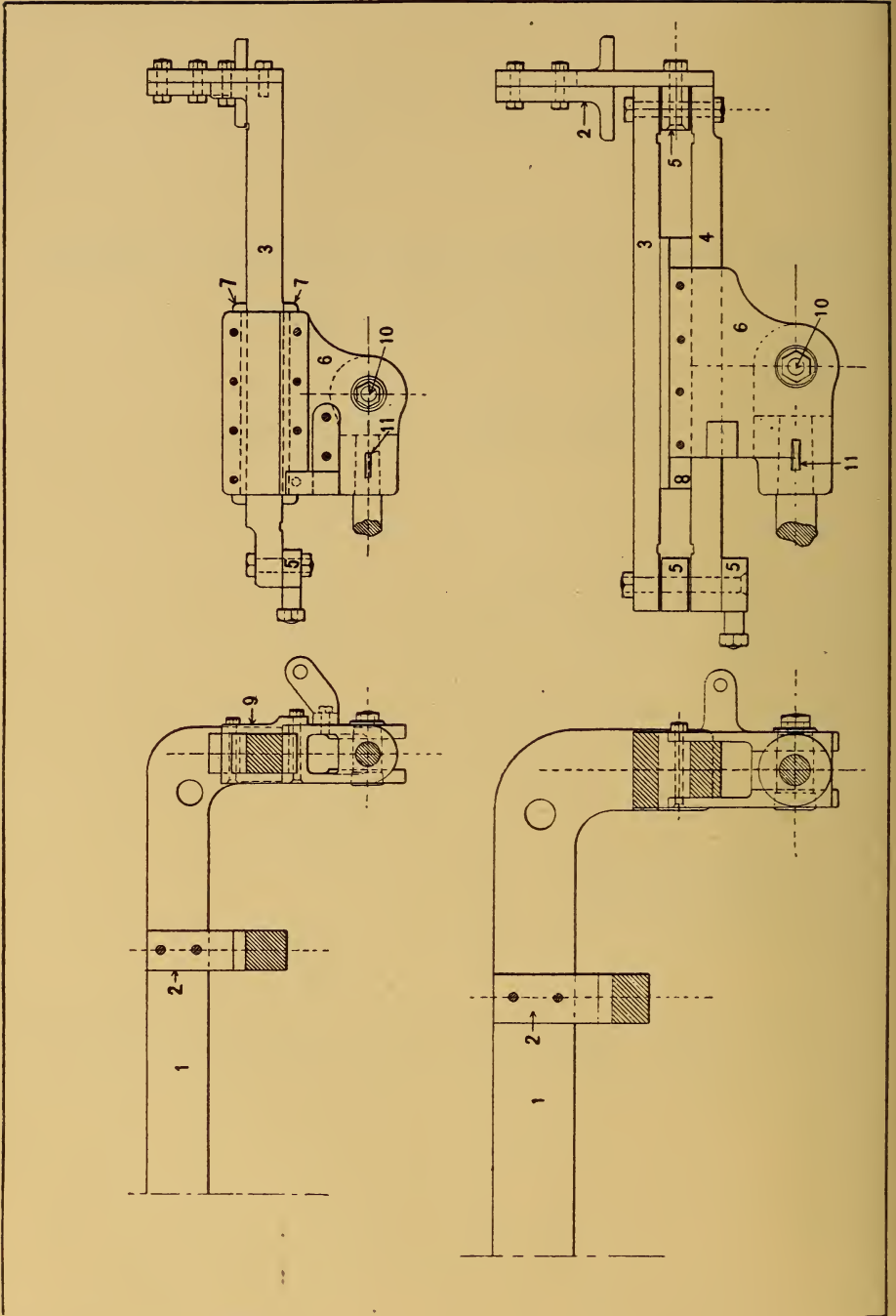
### Plate 24. Endosas

---

Endoscopie . . .	1.	Guide Bearer.
Endoselado . . .	2.	“ “ Knee.
Endoselar . . .	3.	Top Guide Bar.
Endosimon . . .	4.	Bottom Guide Bar.
Endosiphie . . .	5.	Guide Fillings.
Endosmic . . .	6.	Crosshead.
Endosmose . . .	7.	“ Gibs.
Endosmosis . . .	9.	“ Plate.
Endosmotic . . .	10.	“ Pin.
Endosperma . . .	11.	“ Key.

Orders for guides, when not in full sets, should specify whether top or bottom guides are wanted, and for crosshead the side should be given.

# Plate 25





## Guide Bearer, Guides, and Crosshead for Single-Expansion Locomotives

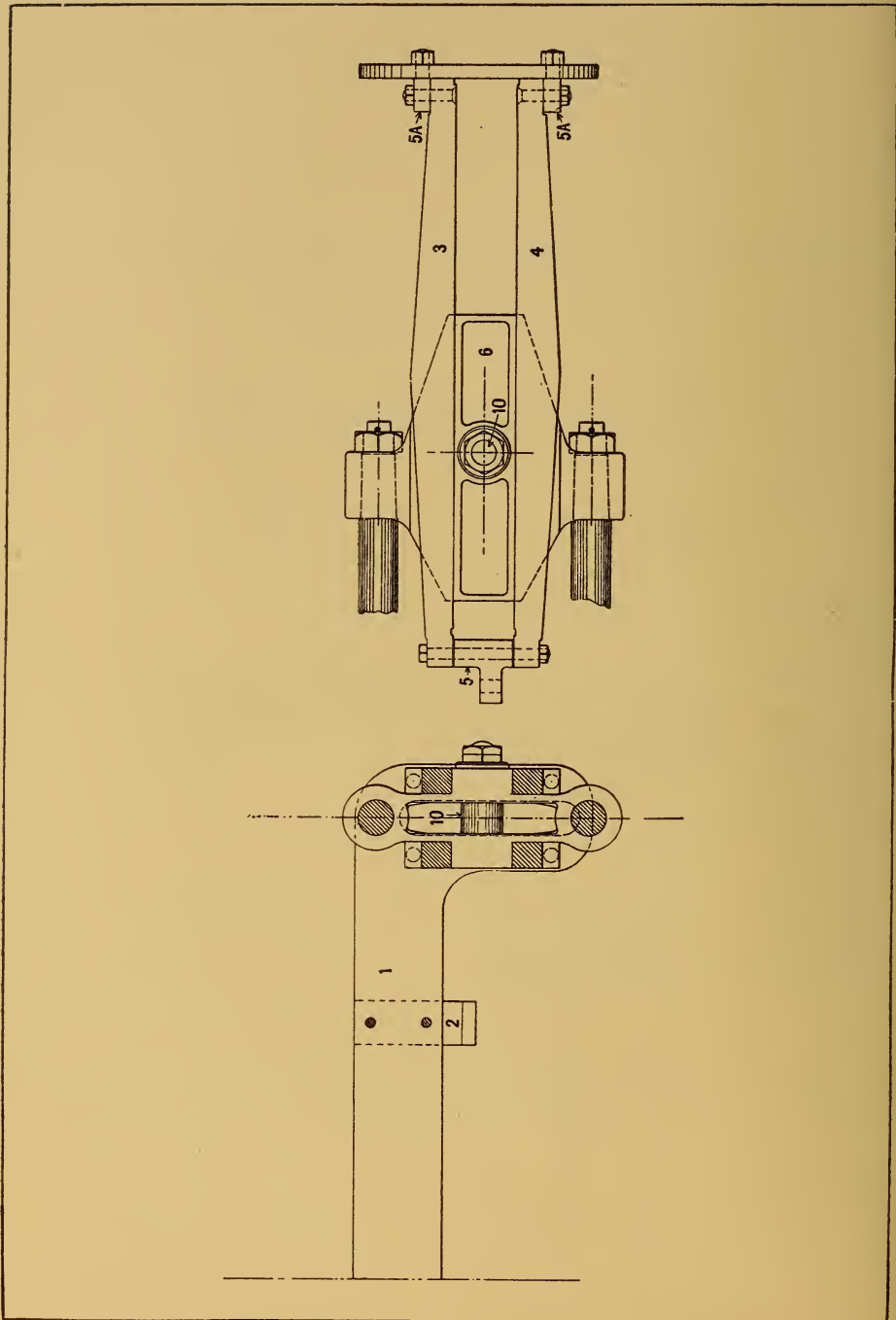
### Plate 25. Endospore

---

Endossador . . .	1.	Guide Bearer.
Endossed . . .	2.	“ “ Knee.
Endosseras . . .	3.	Top Guide Bar.
Endossiez . . .	4.	Bottom Guide Bar.
Endosso . . .	5.	Guide Fillings.
Endostomo . . .	6.	Crosshead.
Endotheque . . .	7.	“ Gibs.
Endotric . . .	8.	“ Filling Piece.
Endotropis . . .	9.	“ Plate.
Endoudecer . . .	10.	“ Pin.
Endouzaine . . .	11.	“ Key.

Orders for guides, when not in full sets, should specify whether top or bottom guides are wanted, and for crosshead the side should be given.

# Plate 26



Guide Bearer, Guides, and Crosshead for Baldwin  
Compound Locomotives (Vauclain System)

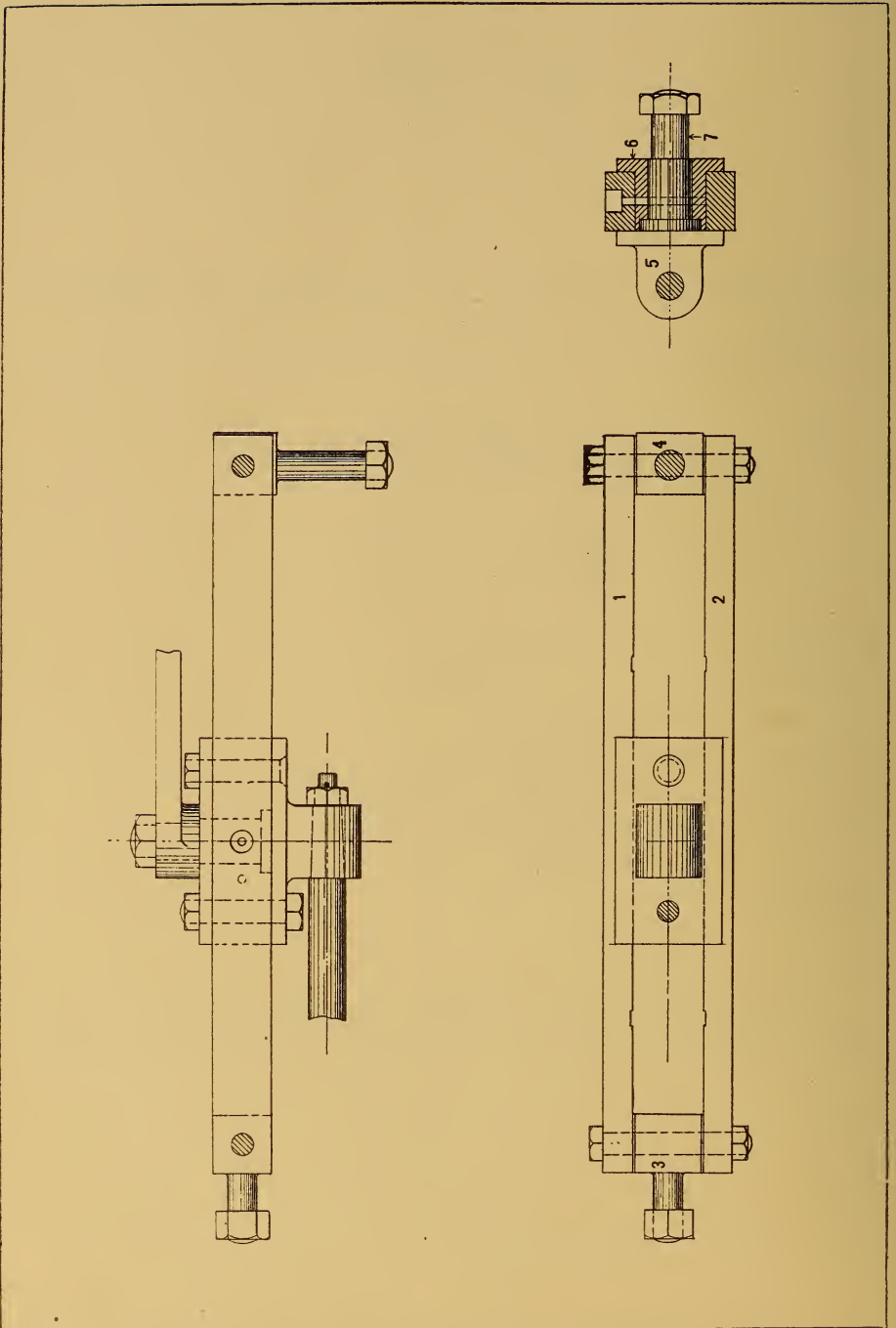
Plate 26. Endowed

---

Endowing . . .	1.	Guide Bearer.
Endowment . . .	2.	“ “ “ Knee.
Endplatte . . .	3.	Top Guide Bar.
Endpunkt . . .	4.	Bottom Guide Bar.
Endracco . . .	5.	Guide Front Filling or Block.
Endrao . . .	5A.	“ Back “ “ “
Endreim . . .	6.	Crosshead.
Endressie . . .	10.	“ Pin.

Orders for guides, when not in full sets, should specify whether top or bottom guides are wanted and for crosshead the side should be given.

# Plate 27



Valve Stem Guides and Crosshead for Baldwin  
Compound Locomotives (Vauclain System)

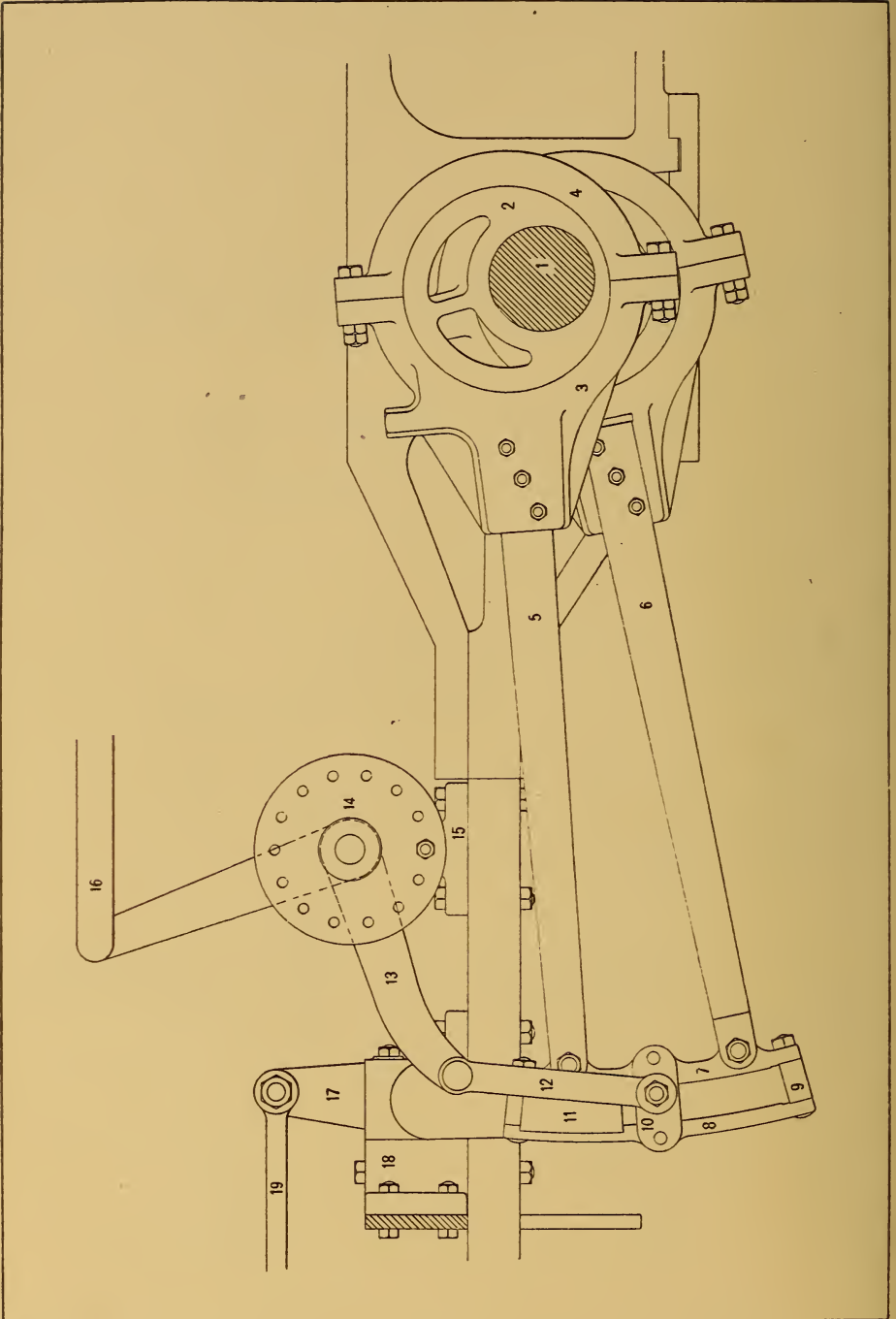
Plate 27. Endrevelo

---

Endriago . . 1.	Valve Stem Top Guide Bar.
Endrinales . 2.	“ “ Bottom Guide Bar.
Endrinas . . 3.	“ “ Guide Front Filling or Block.
Endrispe . . 4.	“ “ “ Back “ “ “
Endrivet . . 5.	“ “ Crosshead Lug.
Endroquant . 6.	“ “ Crosshead.
Endroguet . . 7.	“ “ “ Pin.

Orders for valve stem guides, when not in full sets, should specify whether top or bottom guides are wanted; and for crosshead the side should be given.

# Plate 28



Valve Motion Work (Stephenson)

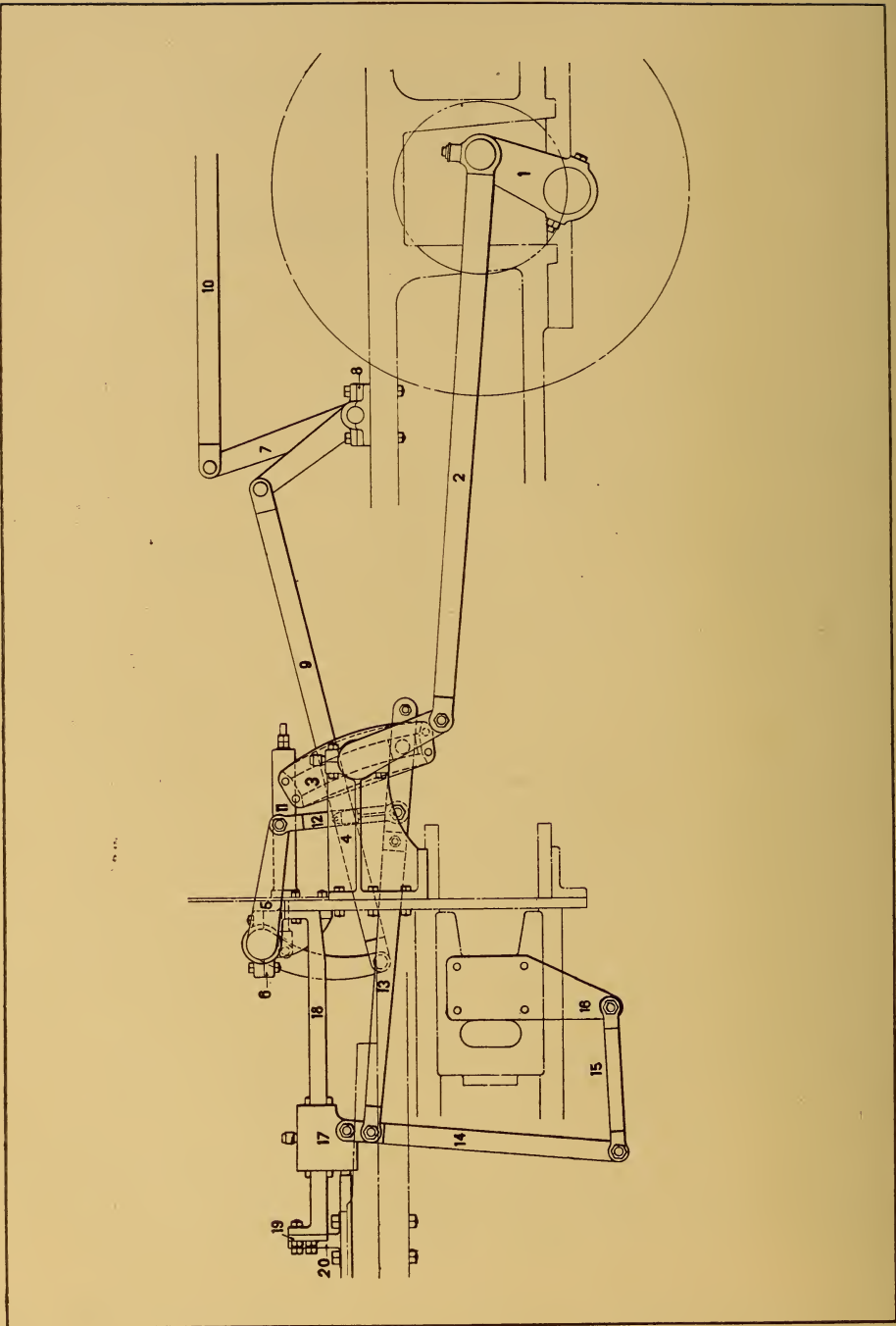
Plate 28. Endroit

---

Endromide . . .	1.	Axle.
Endromidis . . .	2.	Eccentrics.
Endrudge . . .	{	3. Eccentric Strap, Front Half.
		4. " " Back "
Endrudging . . .	5.	" Rod, Inside (Forward Motion).
Endschloss . . .	6.	" " Outside (Back " ).
Endsilbe . . .	7.	Reverse Link, Back Half.
Endspitz . . .	8.	" " Front "
Endstuhl . . .	9.	" " Filling Piece.
Enduisiez . . .	10.	" " Saddle.
Enduisions . . .	11.	Sliding Block.
Endulzaban . . .	12.	Link Lifter.
Endulzadas . . .	13.	Reverse Shaft.
Endulzado . . .	14.	Counterbalance Spring.
Endulzais . . .	15.	Reverse Shaft Bearing.
Endulzemos . . .	16.	" Lever Rod.
Endulzo . . .	17.	Rock Shaft.
Endurable . . .	18.	" " Box.
Endurais . . .	19.	Valve Rod.

Orders for reverse shaft bearings, rock shaft boxes, and link work, when not in sets, should specify the side required for.

# Plate 29





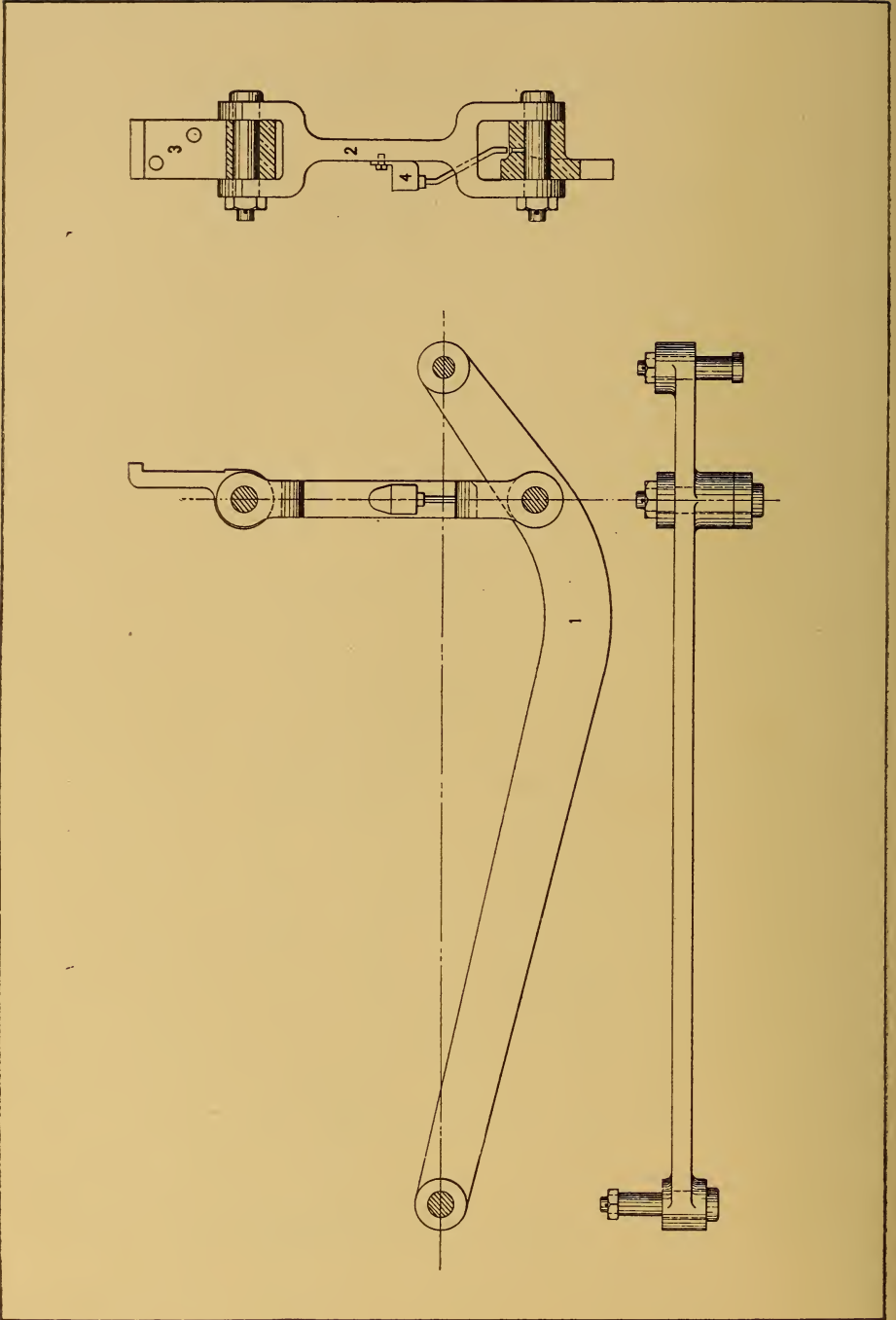
Valve Motion Work (Walschaerts)

Plate 29. Endurance

Endurant . . .	1.	Eccentric Crank.
Endurcimes . . .	2.	“ Rod.
Endurciras . . .	3.	Link.
Endurecias . . .	4.	“ Bearing.
Endurecido . . .	5.	Front Reverse Shaft.
Endurentar . . .	6.	“ “ “ Bearing.
Endurer . . .	7.	Back “ “
Endurezcas . . .	8.	“ “ “ Bearing.
Endurezco . . .	9.	Front Reverse Lever Rod.
Enduring . . .	10.	Back “ “ “
Enduringly . . .	11.	Counterbalance Spring.
Endurons . . .	12.	Lifting Link.
Endways . . .	13.	Radius Rod
Endwise . . .	14.	Combination Lever.
Endyalite . . .	15.	“ “ Link.
Endymion . . .	16.	Crosshead Plate.
Endymionem . . .	17.	Valve Yoke Crosshead.
Endymionis . . .	18.	“ “ Guide.
Endytis . . .	19.	“ “ “ Crosstie.
Endzapfen . . .	20.	“ “ “ “ Knee.

Orders for reverse shaft bearings, link bearings and valve motion work, when not in sets, should specify the side required for.

# Plate 30



## Rock Shaft Rod and Hanger

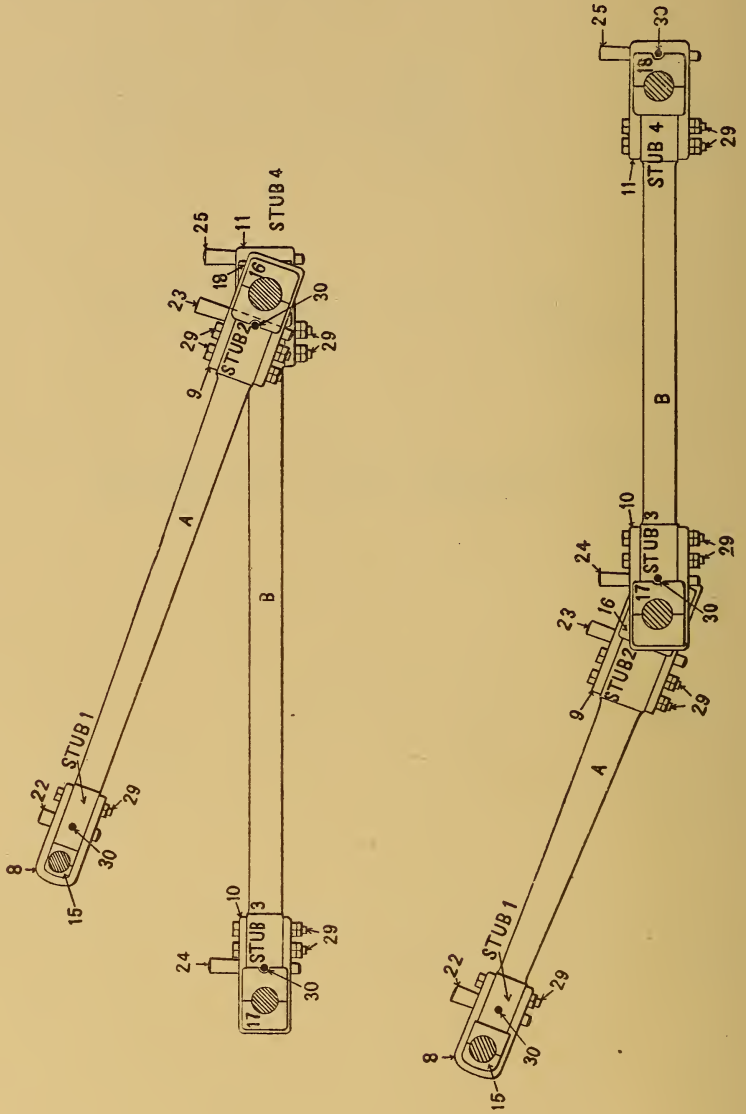
## Plate 30. Endziel

---

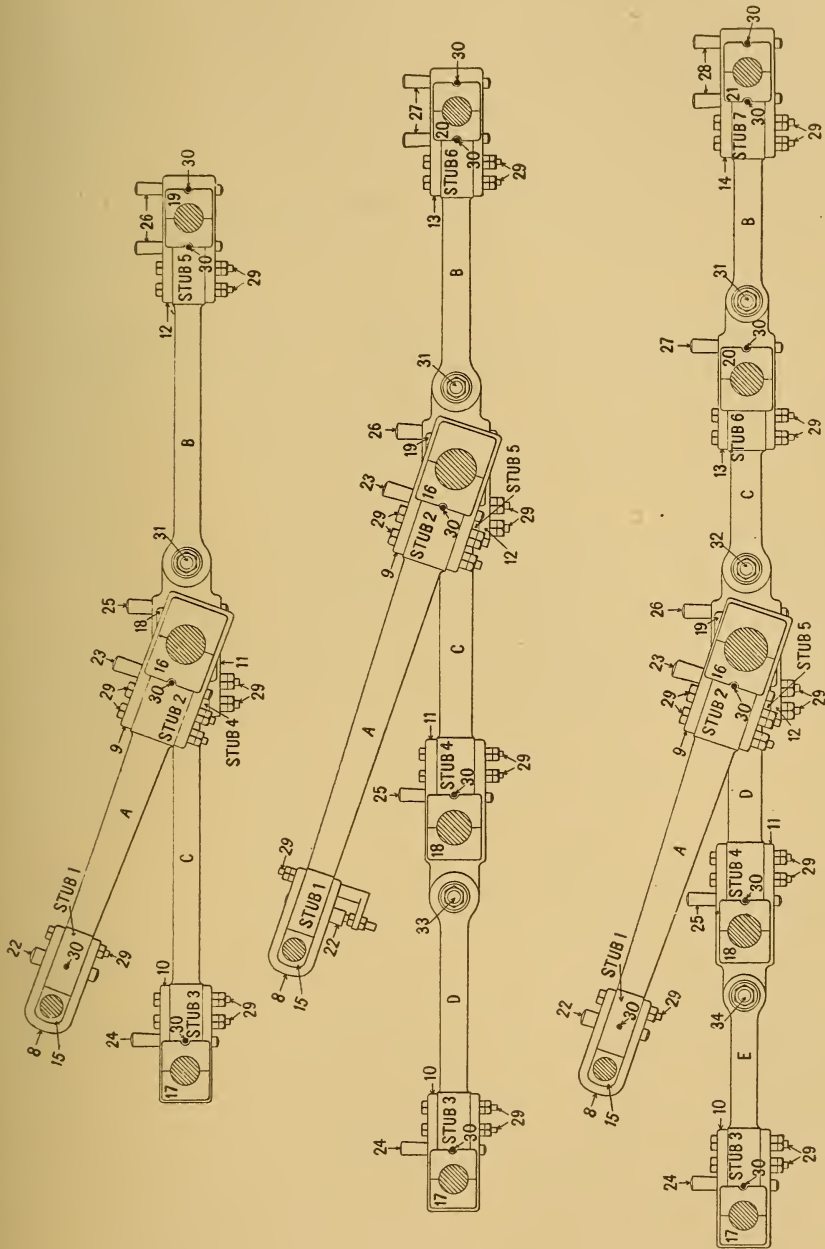
Endzweck . . .	1.	Rock Shaft Rod.
Eneacordio . . .	2.	“ “ “ Hanger.
Eneadas . . .	3.	“ “ “ “ Bearing.
Eneaginas . . .	4.	“ “ “ Oil Cup.

Orders for rock shaft rods, hangers, and bearings, when not in sets, should specify the side required for.

# Plate 31



# Plate 32



## Rods, Straps and Brasses

## Plates 31 and 32. Eneagona

---

Eneagonos	. A.	Main Rod.
Eneandria	. . B.	Back Parallel or Side Rod.
Enebral	. . . C.	Second " " " "
Enebrinas	. . D.	Third " " " "
Enebros	. . . E.	Fourth " " " "

---

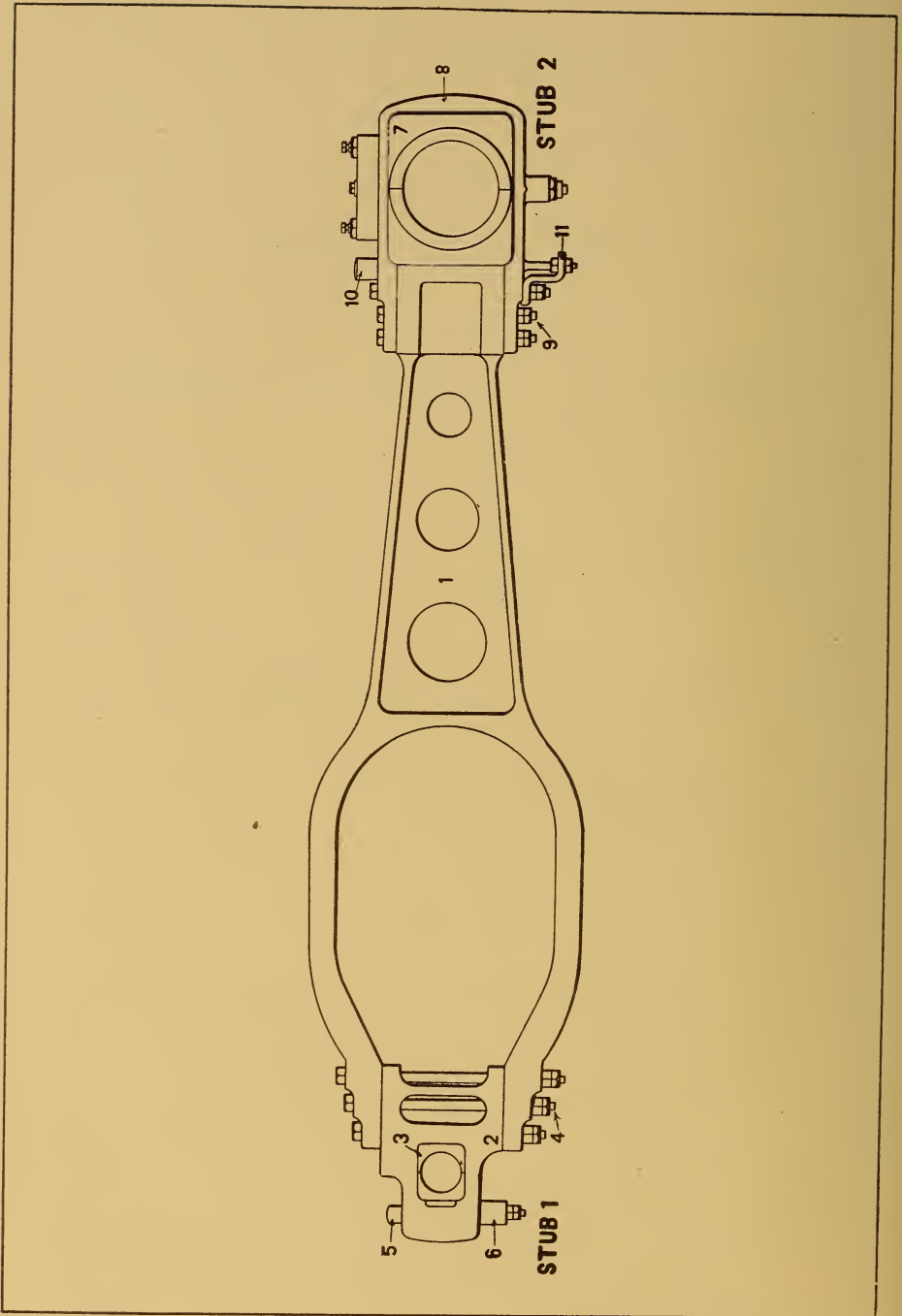
Enecabamus	8.	Strap of Stub	1.
Enecandos	. 9.	" " "	2.
Enecantium	. 10.	" " "	3.
Enecaremus	. 11.	" " "	4.
Enecate	. . . 12.	" " "	5.
Enecating	. . 13.	" " "	6.
Enecatrici	. . 14.	" " "	7.
Enecatrix	. . 15.	Brass " "	1.
Enecia	. . . 16.	" " "	2.
Enecturam	. 17.	" " "	3.
Enecturi	. . 18.	" " "	4.
Enecturos	. . 19.	" " "	5.

Enecuero . . .	20.	Brass of Stub	6.
Enecuerunt . . .	21.	“ “ “	7.
Enedreyte . . .	22.	Key “ “	1.
Eneida . . .	23.	“ “ “	2.
Eneldos . . .	24.	“ “ “	3.
Eneleo . . .	25.	“ “ “	4.
Enematibus . . .	26.	“ “ “	5.
Enemion . . .	27.	“ “ “	6.
Enemistado . . .	28.	“ “ “	7.
Enemistas . . .	29.	Bolt.	
Enemitique . . .	30.	Set Screw.	
Enenkel . . .	31.	Jaw Pin for	B.
Eneoptere . . .	32.	“ “ “	C.
Eneorema . . .	33.	“ “ “	D.
Energema . . .	34.	“ “ “	E.

When rods are not ordered in full sets, the side for which the parts are wanted should be given, as well as the letter of the rod and the stub number.

Give the stub number in all cases when ordering straps, brasses, keys, bolts, or set screws

# Plate 33





Inside Connecting Rod for Balanced Compound  
Locomotives

Plate 33. Energemati

Energetico	. 1.	Rod Body.
Energical	. . 2.	Front Stub.
Energiche	. . 3.	“ “ Brass.
Energizar	. . 4.	“ “ Bolts.
Energizing	. 5.	“ “ Key.
Energumeno	6.	“ “ “ Washer.
Energy	. . . 7.	Back Stub Brass.
Enero	. . . . 8.	“ “ Strap.
Enervabais	. 9.	“ “ Bolts.
Enervabunt	. 10.	“ “ Key.
Enervacao	. 11.	“ “ “ Holder.

# Plate 34

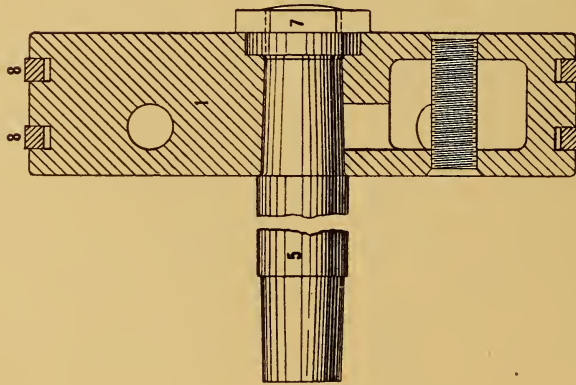


Fig. 1

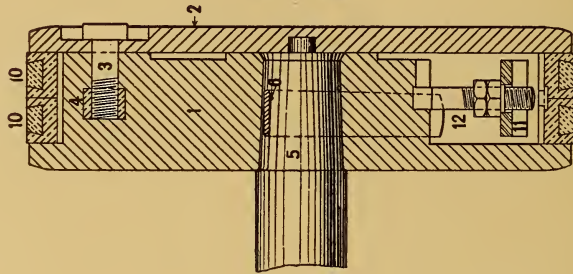


Fig. 2

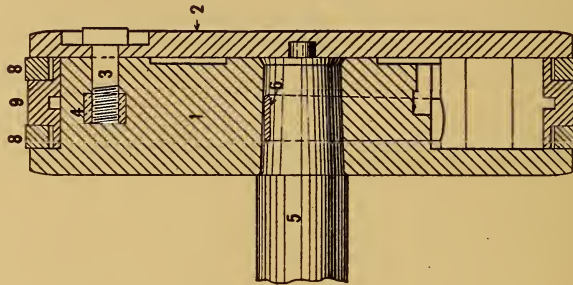


Fig. 3

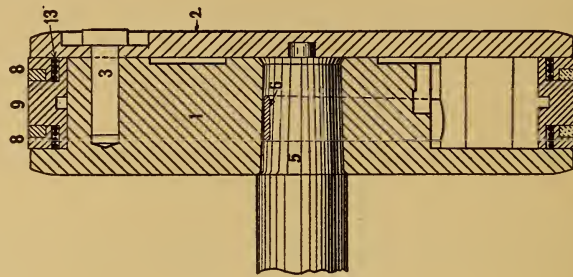


Fig. 4

## Pistons and Packing Rings

## Plate 34. Enervador

---

Enervais . . .	1.	Piston Head.
Enervamos . . .	2.	“ Follower.
Enervant . . .	3.	“ “ Bolts.
Enervaron . . .	4.	“ “ Bolt Nuts.
Enervasses . . .	5.	“ Rod.
Enervative . . .	6.	“ “ Key.
Enervaturo . . .	7.	“ “ Nut.
Enervavero . . .	8.	“ Spring Rings (Cast Iron).
Enervement . . .	9.	“ T Ring (Cast Iron).
Enerverais . . .	10.	“ Brass and Composition Rings.
Enerveront . . .	11.	“ Spring.
Enervibus . . .	12.	“ “ Studs and Nuts.
Enerviez . . .	13.	“ Wire Springs.

This plate indicates four kinds of packing generally used, and customers can readily refer to the particular pieces by the number of the piece, as well as the figure number.

# Plate 35

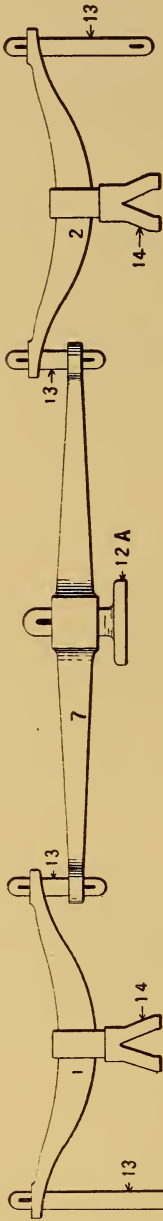


FIG. 1

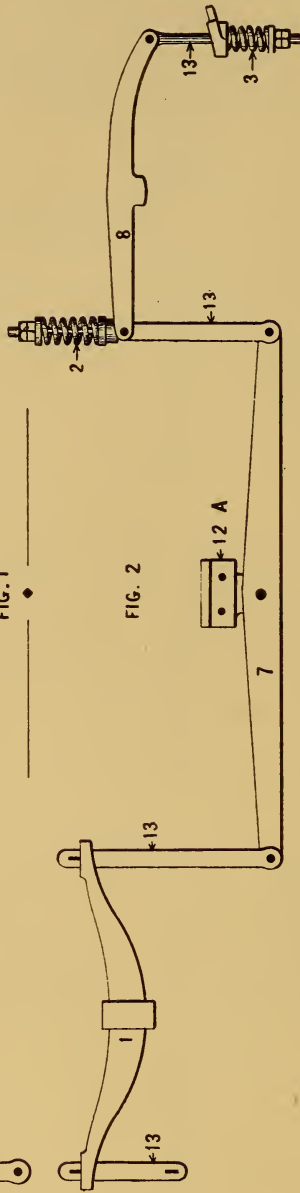


FIG. 2

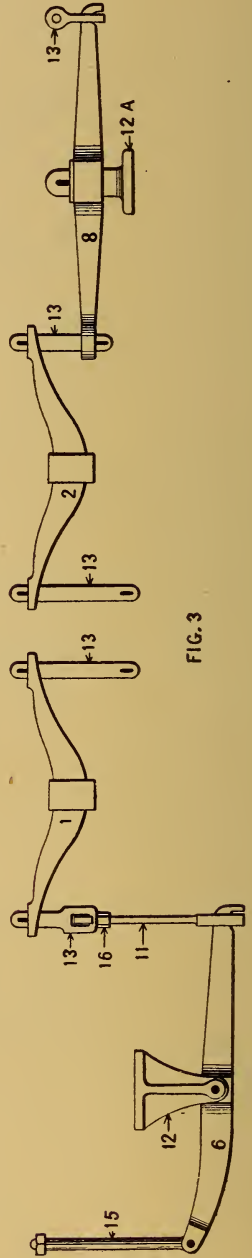


FIG. 3

# Plate 36

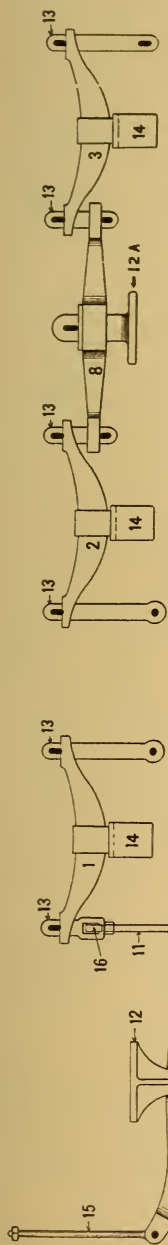


FIG. 4

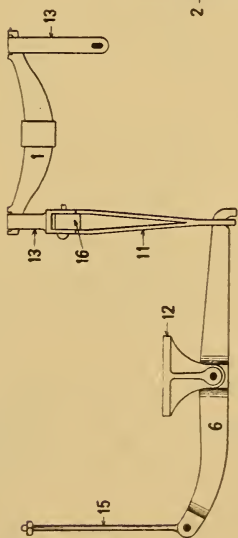


FIG. 5

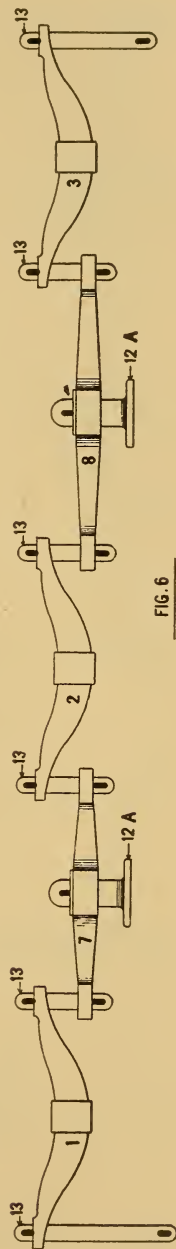


FIG. 6

# Plate 37

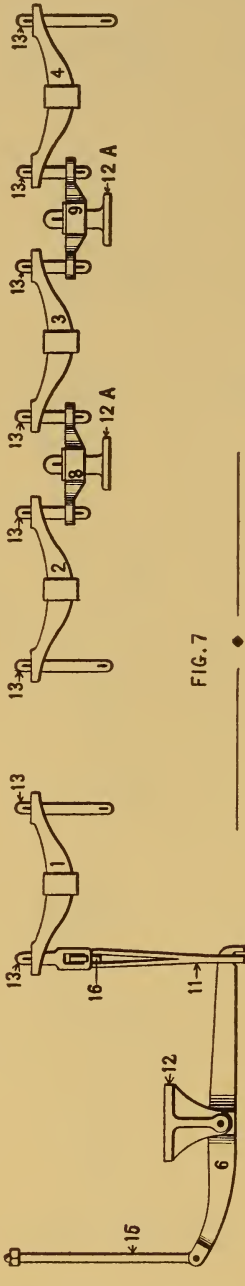


FIG. 7

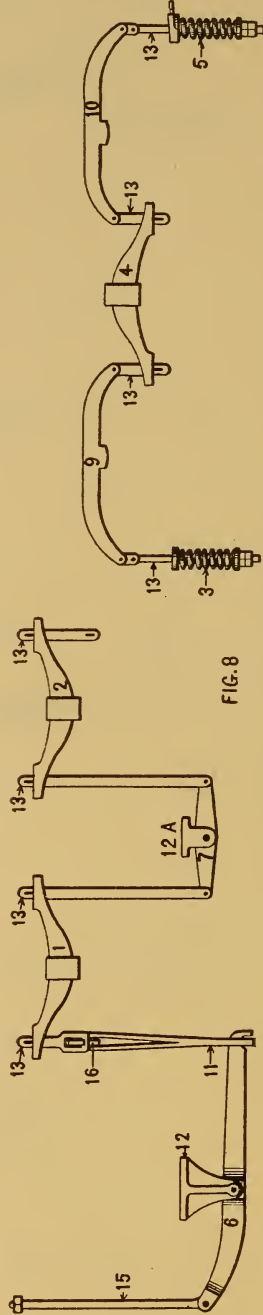


FIG. 8

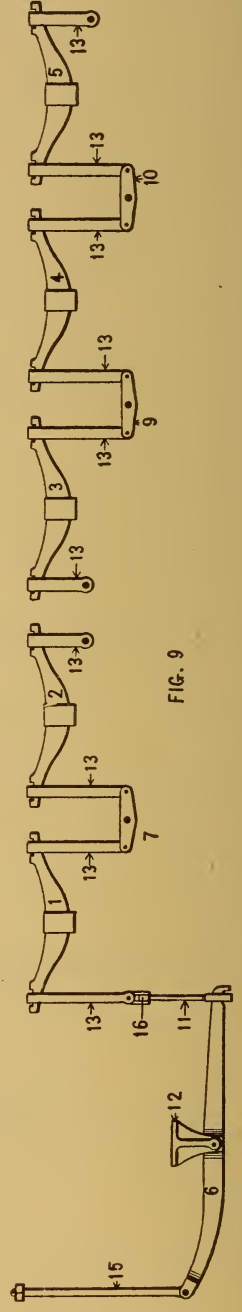


FIG. 9

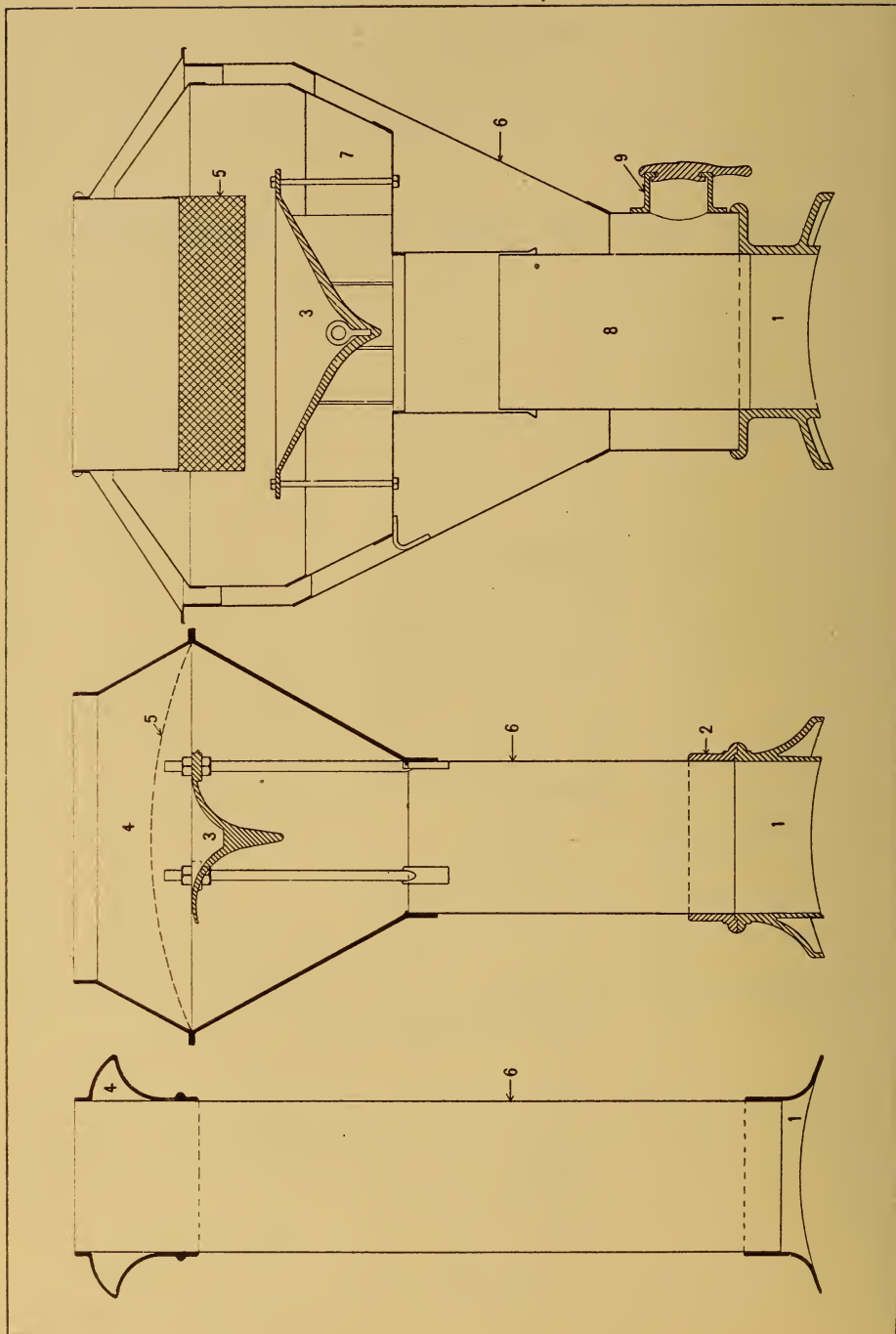
Springs and Equalizing Work

Plates 35, 36 and 37. Enervons

Enervorum . . . . .	1.	Forward Driving Spring.
Eneti . . . . .	2.	Second " "
Eneyer . . . . .	3.	Third " "
Enfadadas . . . . .	4.	Fourth " "
Enfadadico . . . . .	5.	Fifth " "
Enfadando . . . . .	6.	Forward Truck Equalizing Beam.
Enfadarian . . . . .	7.	Driving Equalizing Beam, First.
Enfadeis . . . . .	8.	" " " Second.
Enfaddonho . . . . .	9.	" " " Third.
Enfagoter . . . . .	10.	" " " Fourth.
Enfaixar . . . . .	11.	Forward " " Link.
Enfaldada . . . . .	12.	" " " Fulcrum.
Enfaldador . . . . .	12A.	Driving " " "
Enfaldamos . . . . .	13.	" Spring Link
Enfaldare . . . . .	14.	" " Staple.
Enfaldaron . . . . .	15.	Forward Truck Center Pin Bolt.
Enfamar . . . . .	16.	Transverse Equalizing Beam.

In ordering from these plates, it is necessary to specify the figure as well as the number of piece, as it will be noticed that the same numbers have different shapes on the different figures.

# Plate 38





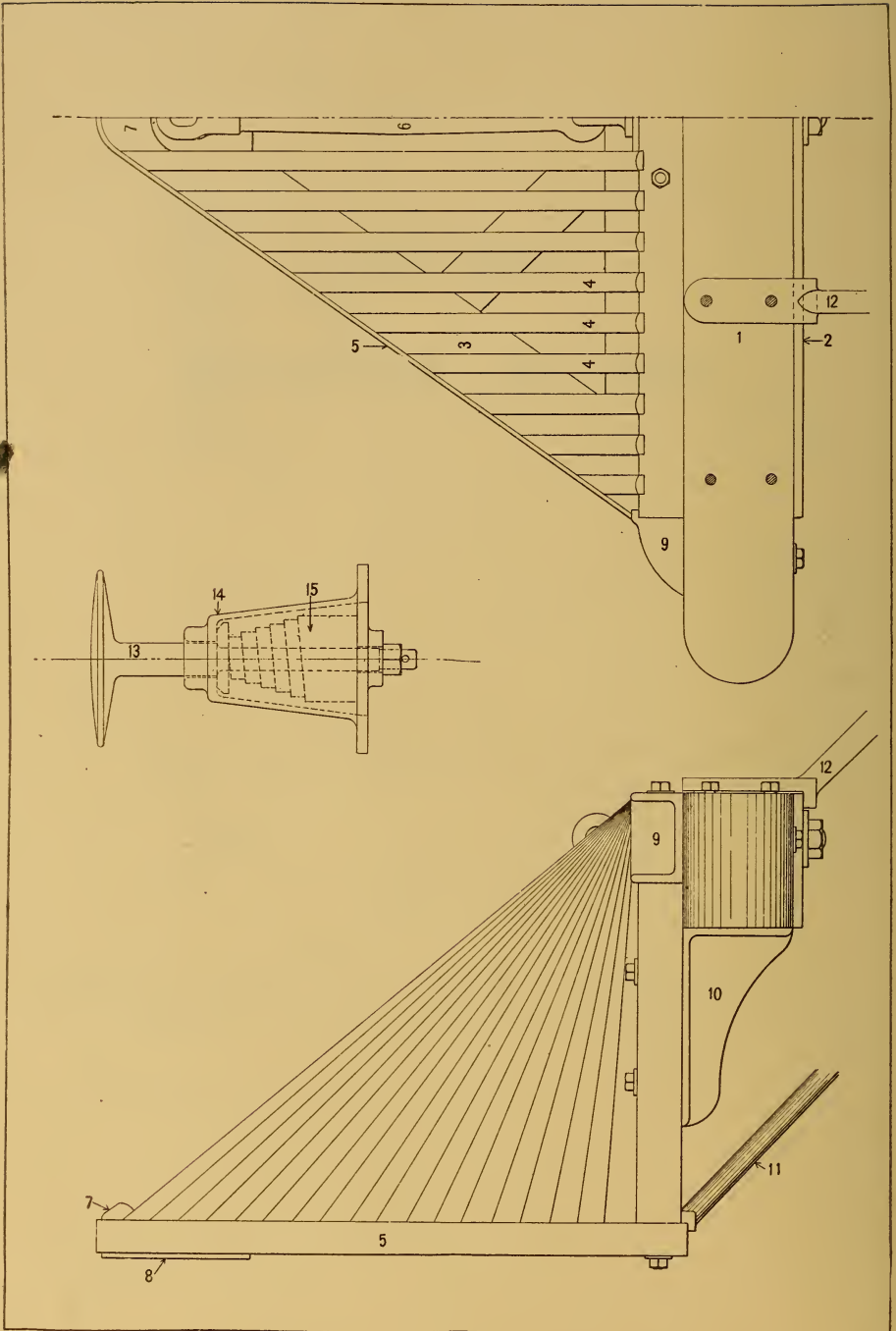
## Smoke Stacks

## Plate 38. Enfamined

- 
- Enfamished . . 1. Base.  
Enfancon . . 2. " Flange.  
Enfangada . . 3. Cone.  
Enfangados . . 4. Top.  
Enfangueis . . 5. Netting.  
Enfardaras . . 6. Body.  
Enfardasen . . 7. Chamber.  
Enfardelo . . 8. Inside Pipe.  
Enfarelar . . 9. Hand Hole and Plate.

In ordering top parts of "Diamond" plan of stack, the order should always specify whether top or bottom part of No. 4 is wanted when both pieces are not required.

# Plate 39



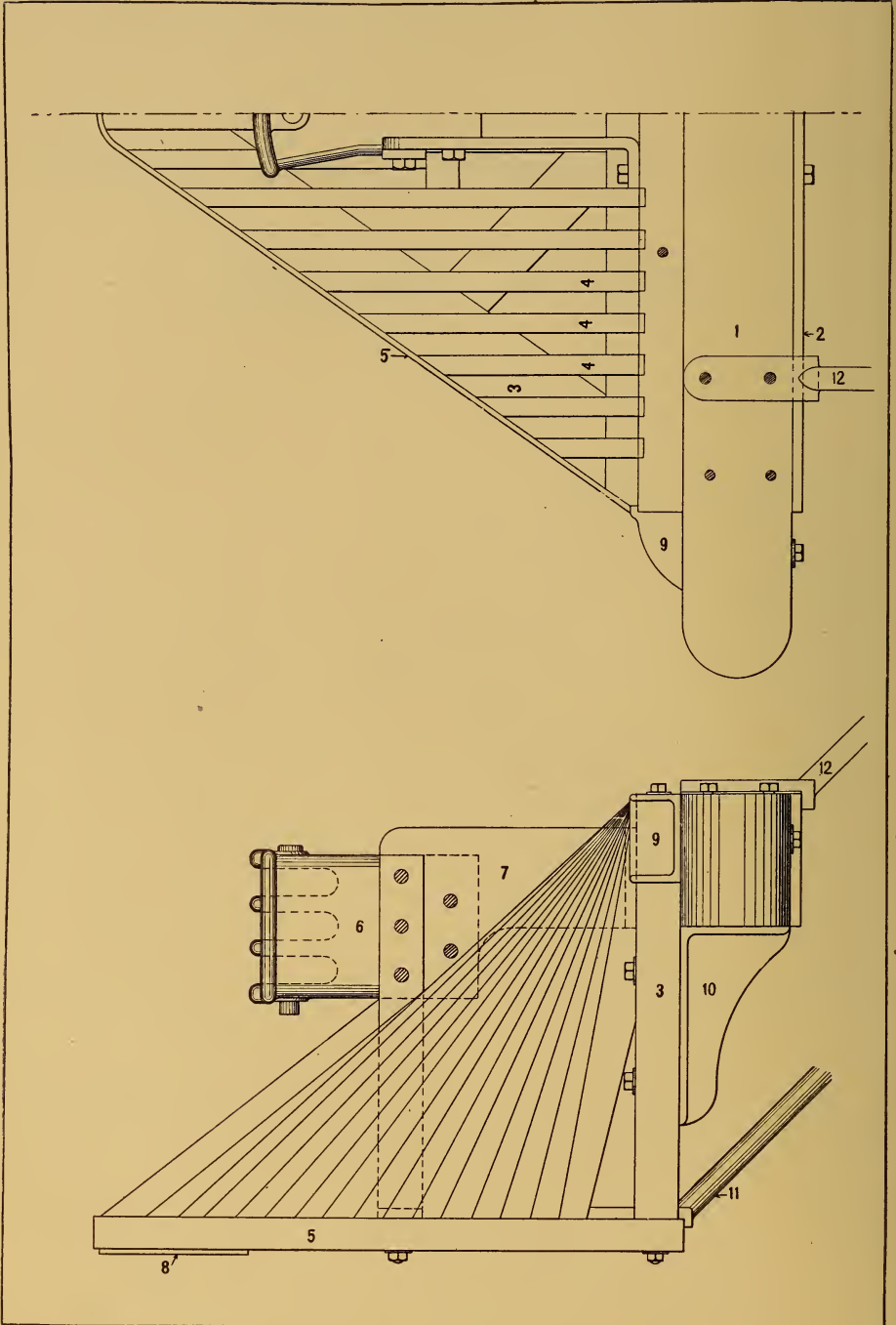
Pilot and Front Bumper, Iron Draw Bar Attachment

Plate 39. Enfarinait

- Enfarinhar . . . 1. Bumper.
- Enfarinons . . . 2. Stiffening Plate.
- Enfascie . . . 3. Pilot Frame.
- Enfastiado . . . 4. " Bars.
- Enfatiche . . . 5. " Bottom Band.
- Enfatico . . . 6. Draw Bar.
- Enfatilhar . . . 7. " " Shoe.
- Enfects . . . 8. Bottom Plate.
- Enfeeble . . . 9. Pushing Shoe.
- Enfeebling . . . 10. Pilot Bracket.
- Enfeeblish . . . 11. Middle Brace.
- Enfeitador . . . 12. Smokebox Brace.
- Enfeiticar . . . 13. Spring Buffer.
- Enfelon . . . 14. " " Case.
- Enfeloned . . . 15. " " Spring.

The bracket No. 10 is made right and left, and when only one is wanted the side required for should be specified.

# Plate 40



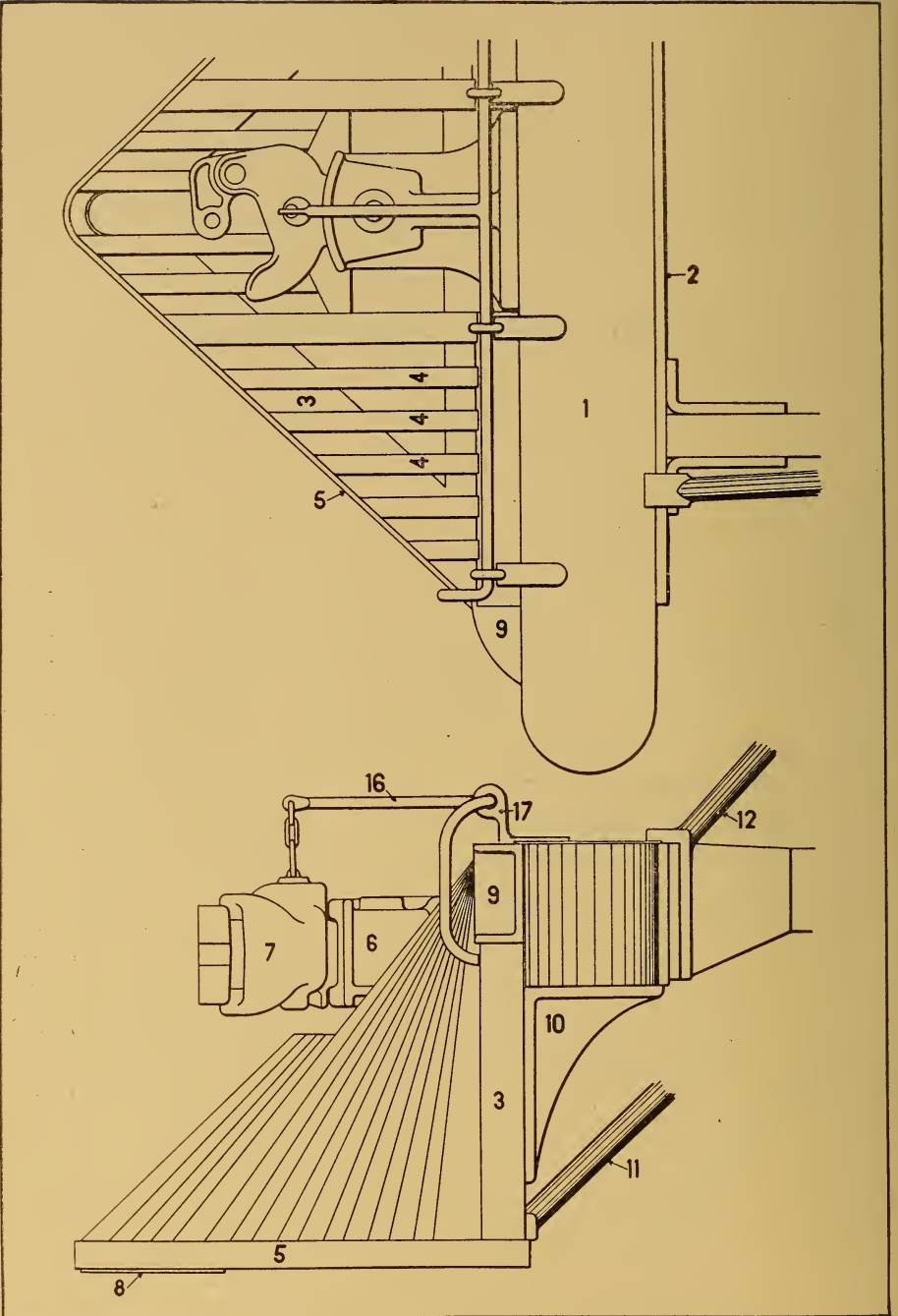
Pilot and Front Bumper, Bull Nose Attachment

**Plate 40. Enfeloning**

- 
- Enfelujar . . . 1. Bumper.
  - Enfeoff . . . 2. Stiffening Plate.
  - Enfeoffed . . . 3. Pilot Frame.
  - Enfeoffing . . . 4. " Bars.
  - Enfermaban . . . 5. " Bottom Band.
  - Enfermados . . . 6. " Draw Casting.
  - Enfermames . . . 7. " " " Support.
  - Enfermar . . . 8. Bottom Plate.
  - Enfermaria . . . 9. Pushing Shoe.
  - Enfermedad . . . 10. Pilot Bracket.
  - Enfermeiro . . . 11. Middle Brace.
  - Enfermiez . . . 12. Smokebox Brace.

The bracket No. 10 is made right and left, and when only one is wanted the side required for should be specified.

# Plate 41



Pilot and Front Bumper, Automatic Coupler

Plate 41. Enfermizas

- Enfermizo . . . 1. Bumper.
- Enfermons . . . 2. Stiffening Plate.
- Enfernizar . . . 3. Pilot Frame.
- Enferonner . . . 4. " Bars.
- Enferrure . . . 5. " Bottom Band.
- Enfesta . . . 6. " Draw Casting.
- Enfettered . . . 7. Pilot Automatic Coupler.
- Enfeudacao . . . 8. Bottom Plate.
- Enfevered . . . 9. Pushing Shoe.
- Enfevering . . . 10. Pilot Bracket.
- Enfezado . . . 11. Middle Brace.
- Enfiada . . . 12. Smokebox Brace.
- Enfiadura . . . 16. Coupling Pin Lifter.
- Enfiamento . . . 17. " " " Bearing.

The bracket No. 10 is made right and left, and when only one is wanted the side required for should be specified.

# Plate 42

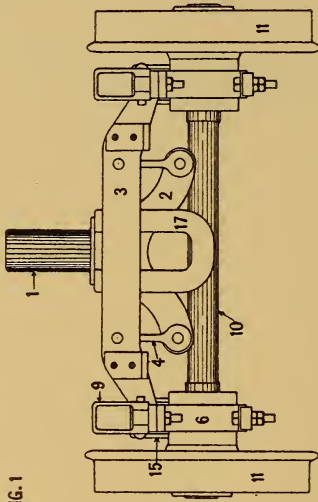


FIG. 1

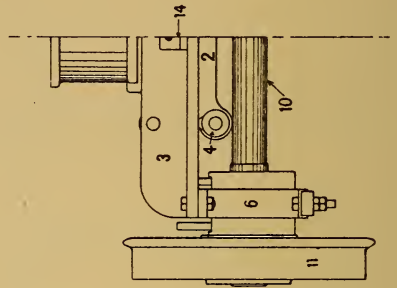
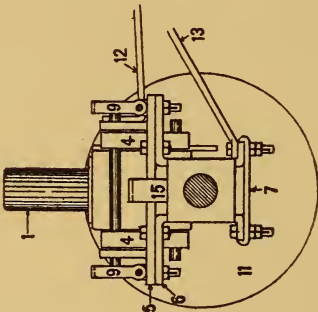
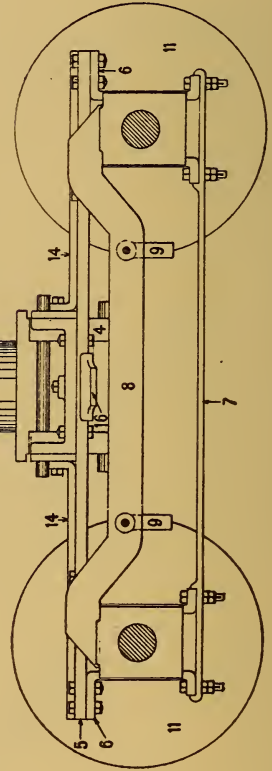


FIG. 2





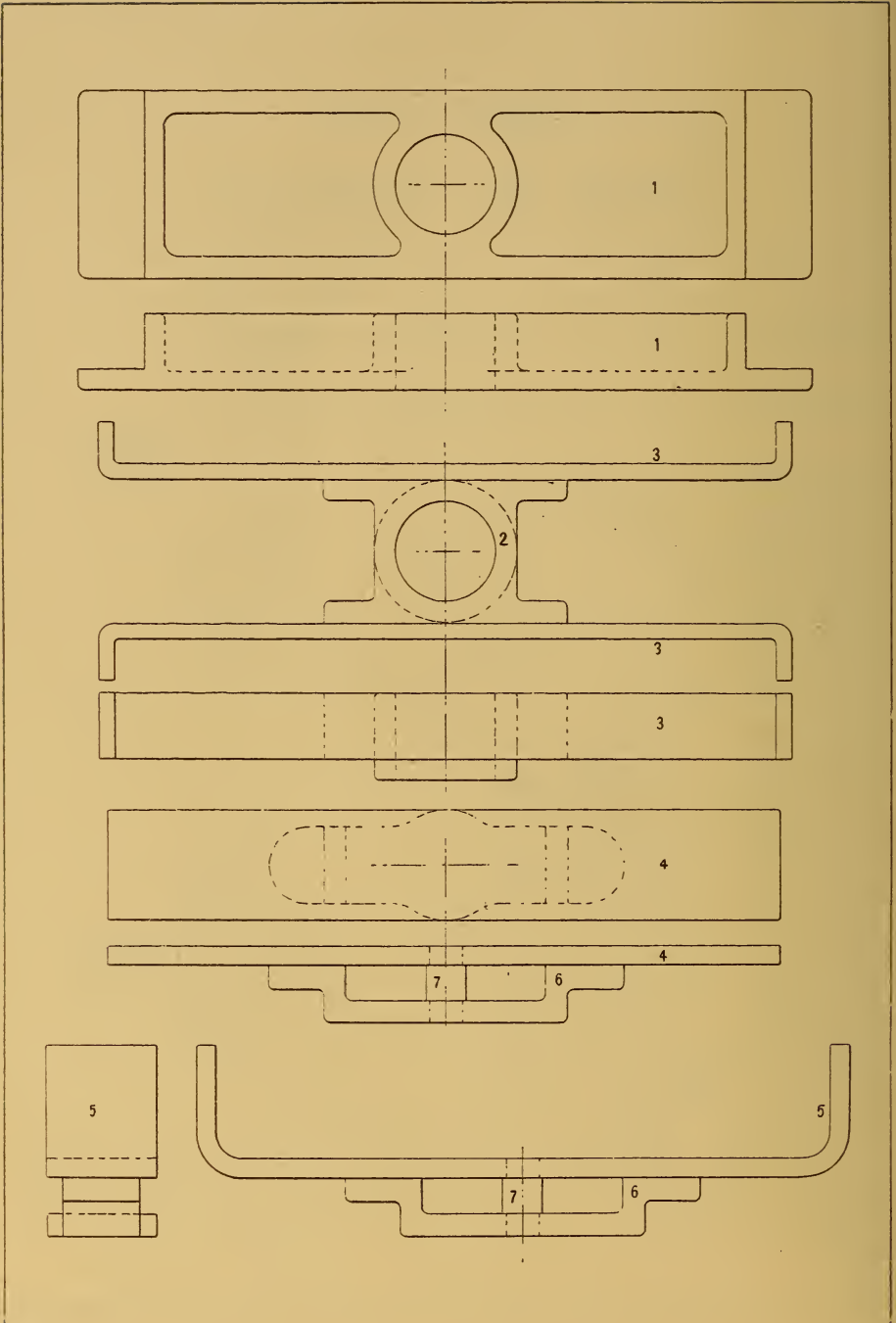
## Engine Trucks

## Plate 42. Enfiando

Enfiarono . . .	FIG. 1.—Two-Wheeled or Pony Truck.
Enfiassimo . . .	FIG. 2.—Four-Wheeled Truck.
Enfiatello . . .	1. Center Pin.
Enfiativo . . .	2. Swing Bolster.
Enfiatuzzo . . .	3. “ “ Crosstie.
Enfiavamo . . .	4. “ “ Link.
Enfiavate . . .	5. Truck Frame.
Enfiazione . . .	6. “ Pedestal.
Enficeler . . .	7. “ “ Cap.
Enfieranno . . .	8. Equalizing Beam.
Enfierced . . .	9. Spring Link.
Enfiercing . . .	10. Axle.
Enfierebbe . . .	11. Wheel.
Enfieremo . . .	12. Radius Bar.
Enfieresti . . .	13. “ “ Brace.
Enfiero . . .	14. Longitudinal “
Enfiévrait . . .	15. Spring Staple.
Enfiévriez . . .	16. “ Seat.
Enfiévront . . .	17. Safety Strap.

This plate embodies both the pony and ordinary four-wheel truck, and in ordering parts by the designating numbers the figure number should first be given.

# Plate 43



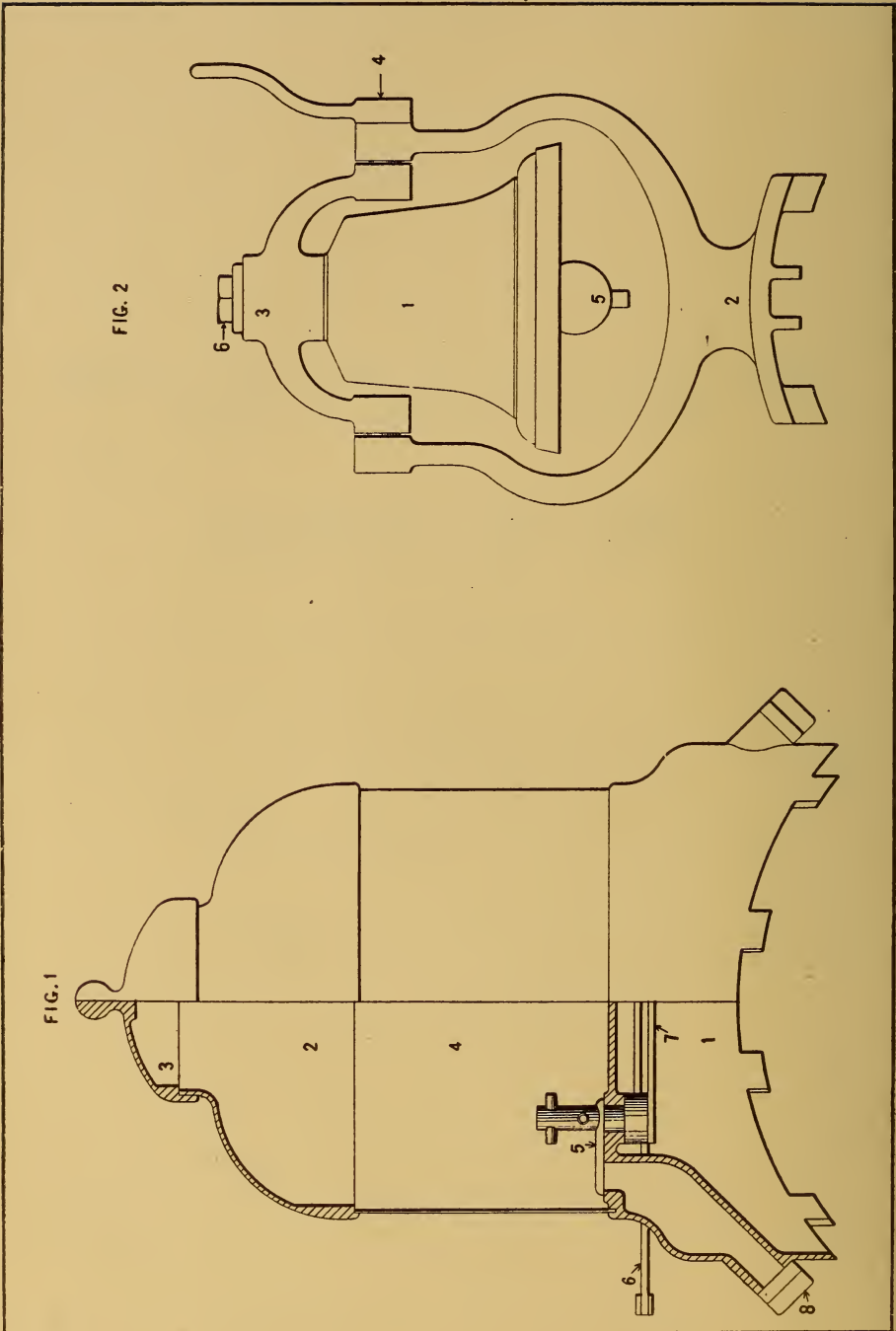
Engine Truck Center Pin Guide and Crosstie,  
 Radius Bar Crosstie and Clamp

Plate 43. Enfiladed

---

Enfilading . . . 1.	Engine Truck Center Pin Guide.
Enfilado . . . 2.	“ “ “ “ “
Enfilais . . . 3.	“ “ “ “ “ Crosstie.
Enfilamos . . . 4.	“ “ Radius Bar Crosstie.
Enfilant . . . 5.	“ “ “ “ “
Enfilasses . . . 6.	“ “ “ “ Clamp.
Enfileirar . . . 7.	“ “ “ “ Pin.

# Plate 44



Sand Box and Bell Work

Plate 44. Enfilerais

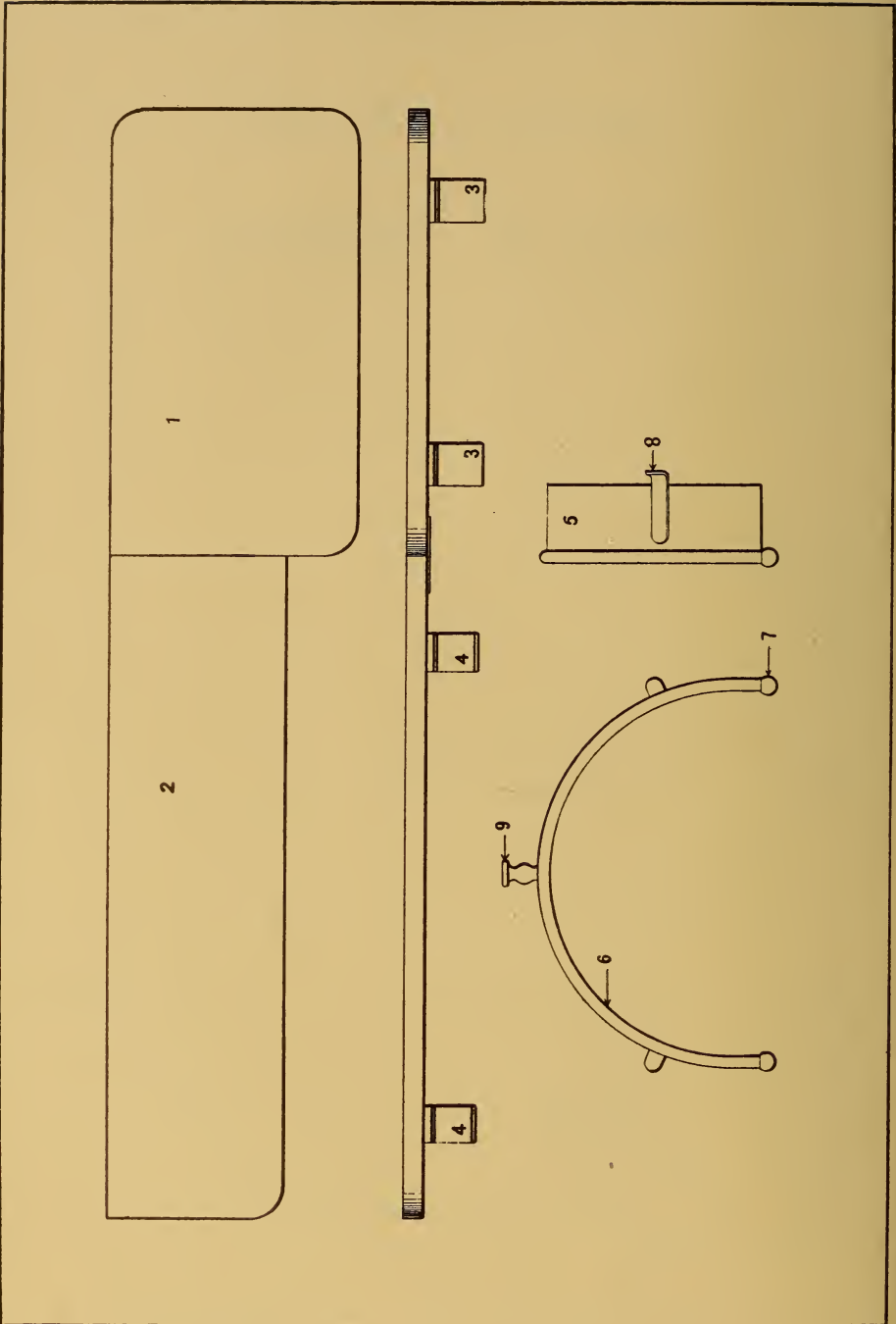
Enfiliez . . . FIG. 1.—Sand Box.

- Enfilons . . . 1. Base.
- Enfiring . . . 2. Top.
- Enfisema . . . 3. Lid.
- Enfitar . . . 4. Body.
- Enfiteusis . . . 5. Valve.
- Enfiteuta . . . 6. Lever.
- Enfivelar . . . 7. Valve Connecting Rod.
- Enflais . . . 8. Pipe Flange.

Enflammit . . . FIG. 2.—Bell and Frame.

- Enflaquer . . . 1. Bell.
- Enflautado . . . 2. Frame.
- Enflautar . . . 3. Yoke.
- Enflauteis . . . 4. Crank.
- Enflauto . . . 5. Tongue.
- Enflerez . . . 6. Acorn.

# Plate 45



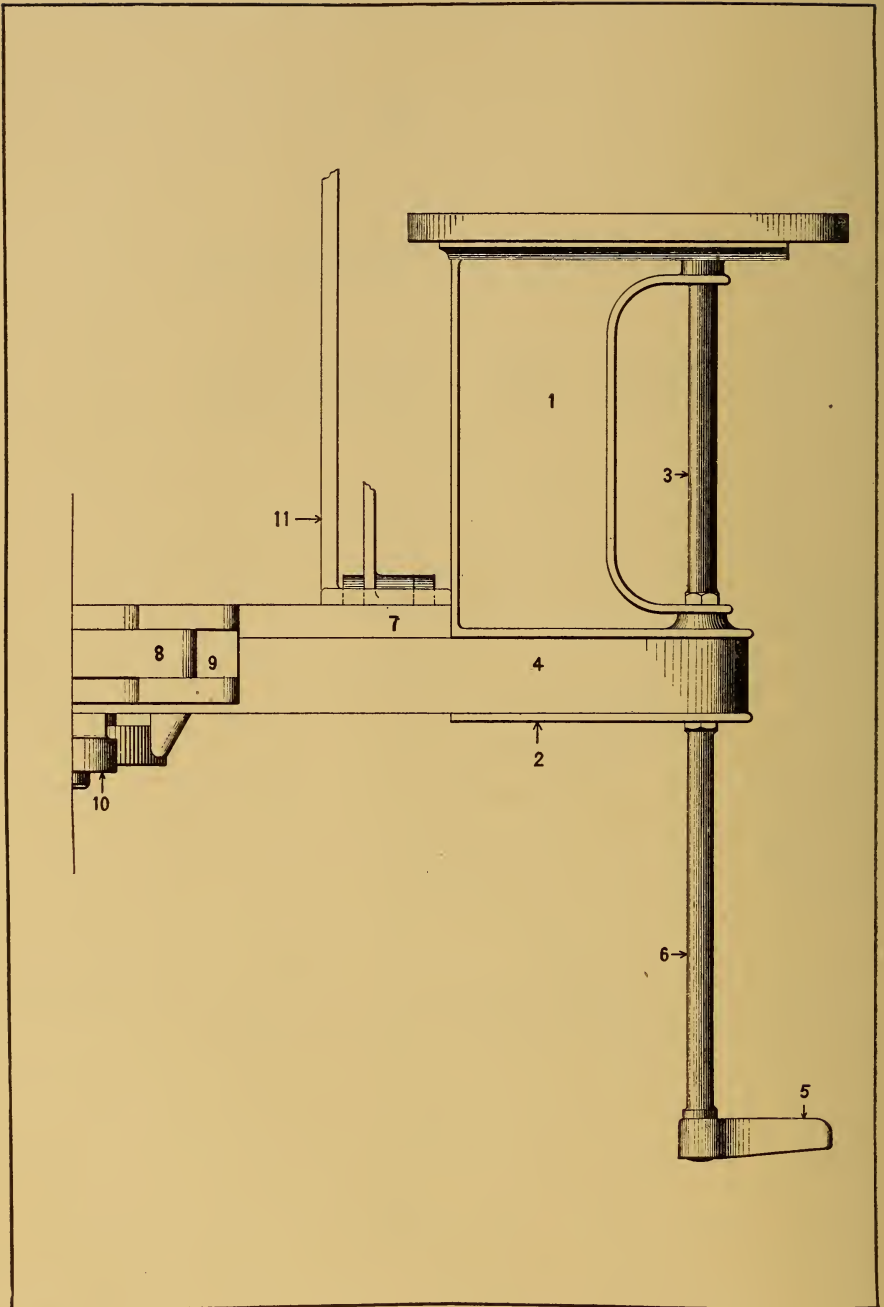
Foot Boards and Wheel Covers

Plate 45. Enfleront

- |                  |    |                      |
|------------------|----|----------------------|
| Enfleshed . . .  | 1. | Cab Foot Board.      |
| Enfleshing . . . | 2. | Running “            |
| Enfleurant . . . | 3. | Cab Foot “ Brackets. |
| Enfleuri . . .   | 4. | Running “ “          |
| Enflorar . . .   | 5. | Wheel Cover.         |
| Enflowered . . . | 6. | “ “ Pipe.            |
| Enfogado . . .   | 7. | “ “ Acorn.           |
| Enfoliates . . . | 8. | “ “ Bracket.         |
| Enfolier . . .   | 9. | “ “ Column.          |

These parts are seldom ordered except in full sets, and the side wanted for should be given when they are not so ordered.

# Plate 46





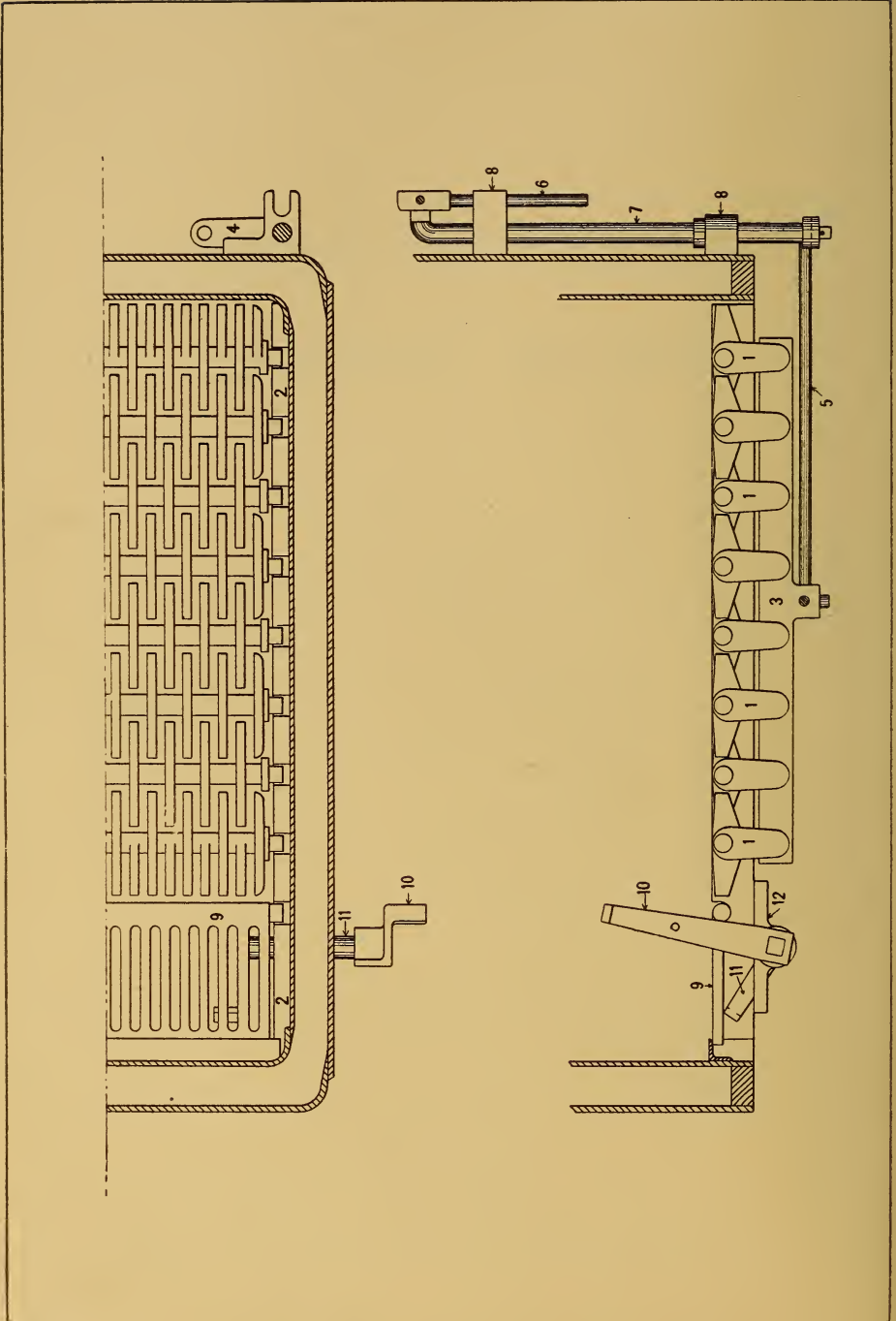
## Back Bumper and Attachments

### Plate 46. Enfoncage

Enfoncáis . .	1.	Cab Bracket.
Enfonceur . .	2.	“ “ Plate.
Enforcedly . .	3.	“ “ Pipe.
Enforcing . .	4.	Back Bumper.
Enforciras . .	5.	Engine Step.
Enforcive . .	6.	-- “ “ Hanger.
Enformacao . .	7.	Foot Plate.
Enforms . .	8.	Tender Wedge.
Enfortuned . .	9.	“ “ Box.
Enfouimes . .	10.	Back Draw Bar.
Enfouining . .	11.	“ Brace.

Cab brackets are made right and left. Orders for single brackets should give side wanted for.

# Plate 47



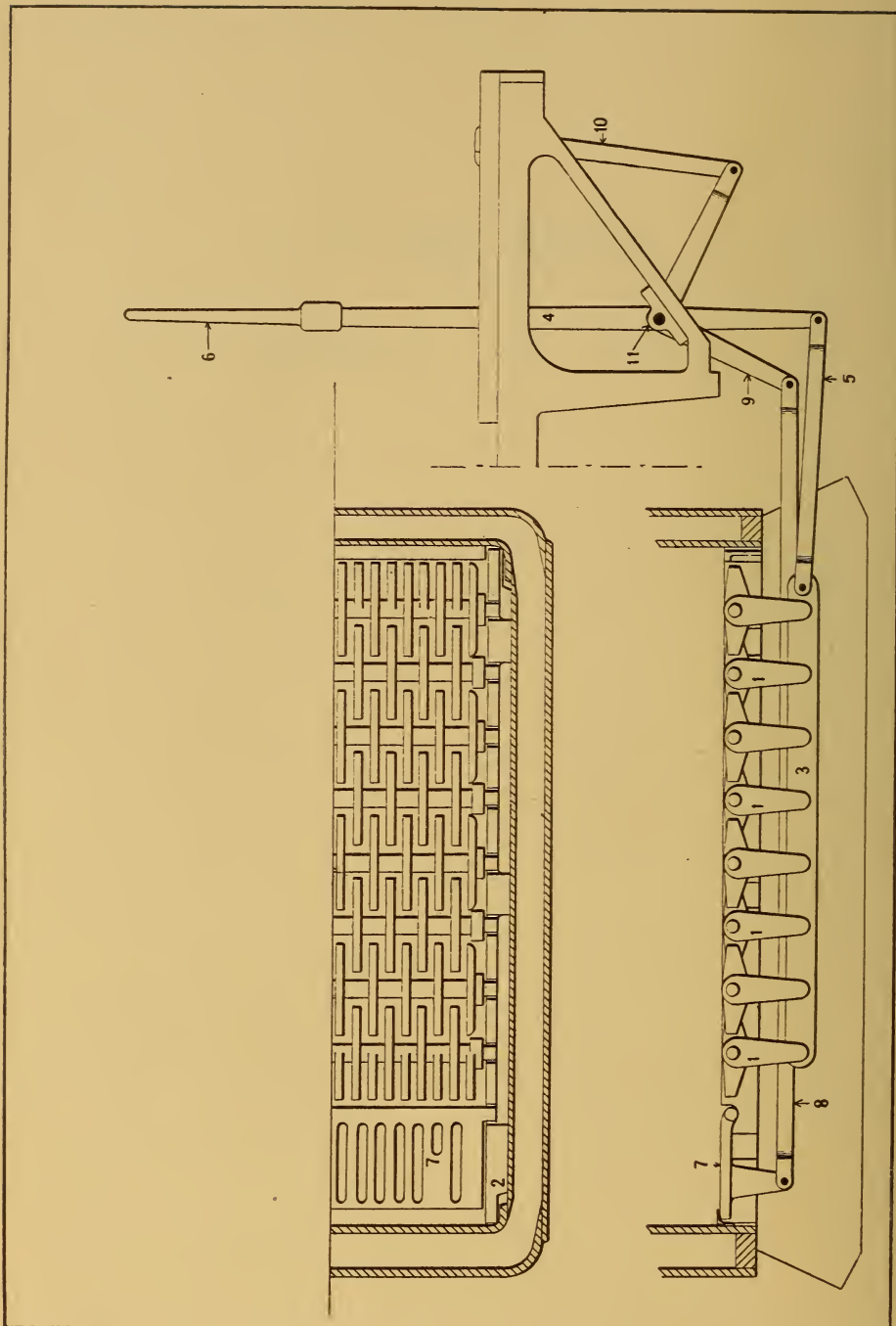
Rocking Grate Work

Plate 47. Enfourir

- Enfouriras . . . 1. Bar.
- Enfouririez . . . 2. Frame.
- Enfouriront . . . 3. Connecting Bar.
- Enfourchi . . . 4. Arm.
- Enfournait . . . 5. Rod.
- Enfournons . . . 6. Handle.
- Enfourrer . . . 7. Shaft.
- Enfraile . . . 8. " Bearings.
- Enfranger . . . 9. Drop Plate.
- Enfrasques . . . 10. " " Handle.
- Enfrassia . . . 11. " " Shaft.
- Enfratico . . . 12. " " " Bearing.

When complete sets of these bars are not wanted, the order should give the position from the front of the bars that are required.

# Plate 48



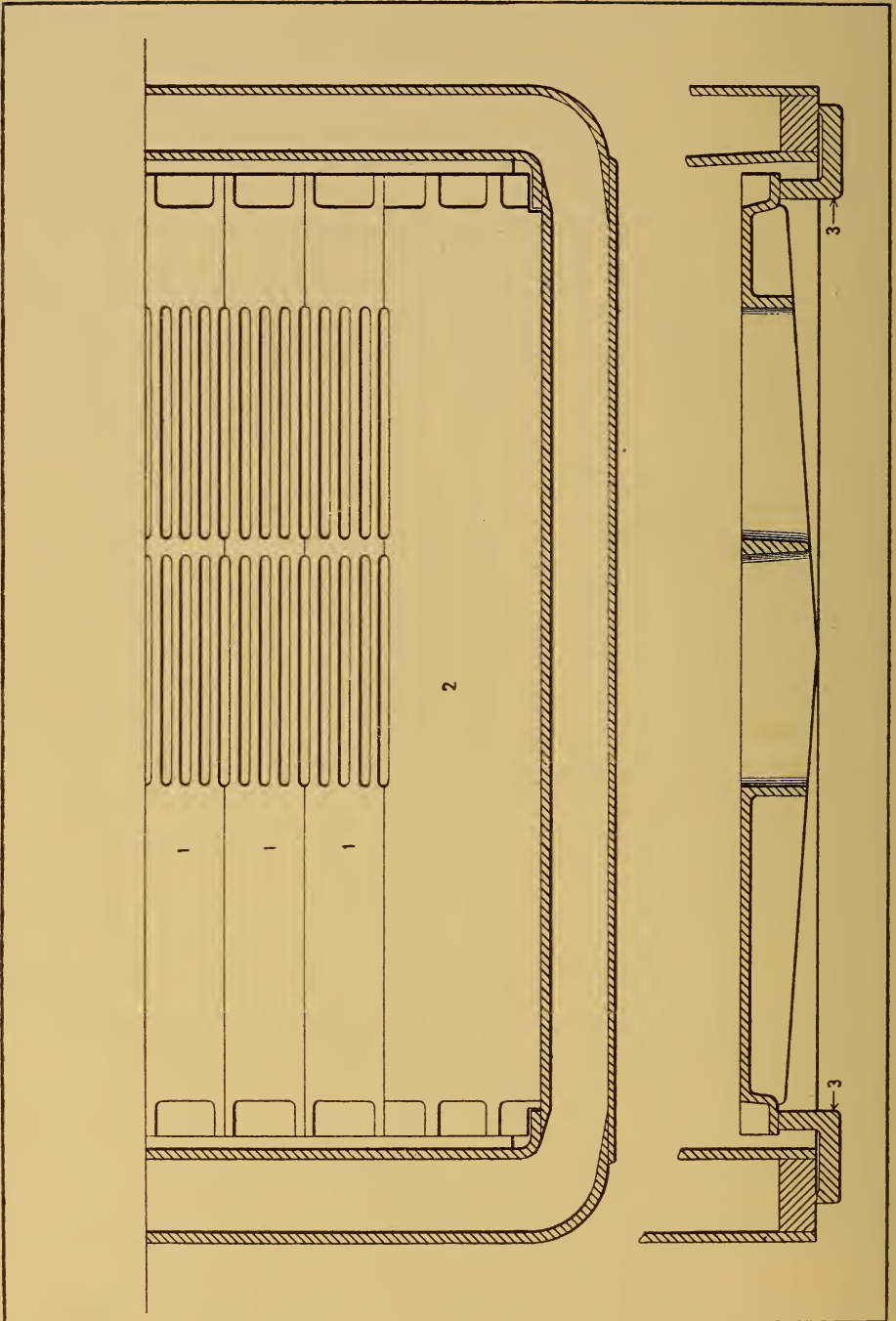
## Rocking Grate Work

## Plate 48. Enfreador

Enfrear . . .	1.	Bar.
Enfreador . . .	2.	Frame.
Enfrenaba . . .	3.	Connecting Bar.
Enfrenases . . .	4.	Lever.
Enfrestado . . .	5.	“ Rod.
Enfriabais . . .	6.	“ Handle.
Enfriadera . . .	7.	Drop Plate.
Enfriado . . .	8.	“ “ Rod.
Enfriamos . . .	9.	“ “ Crank.
Enfriarian . . .	10.	“ “ “ Handle.
Enfriaron . . .	11.	“ “ “ Bearing.

When complete sets of these bars are not wanted, the order should give the position from the front of the bars that are required.

# Plate 49



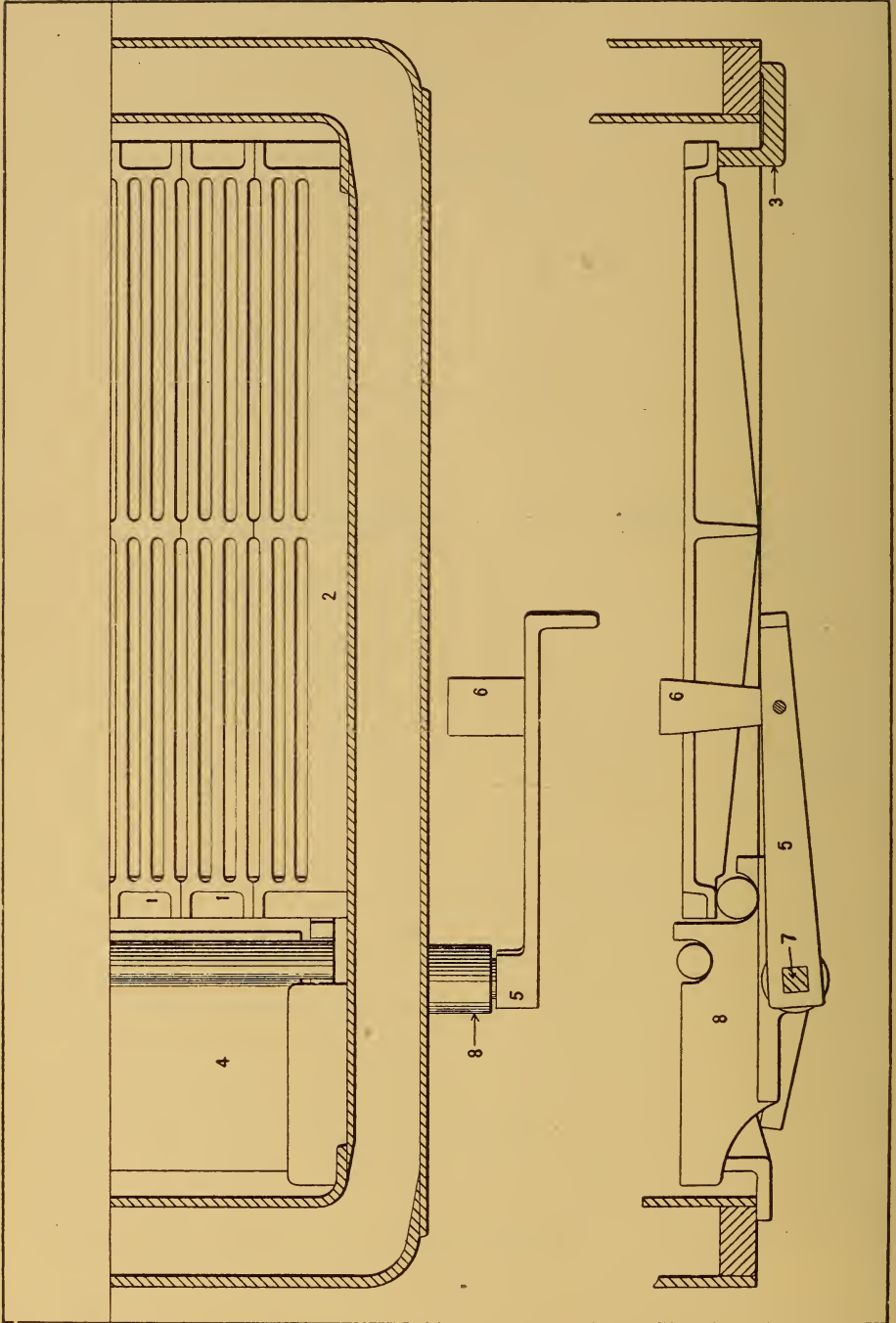
## Plain Grate for Wood

## Plate 49. Enfronhar

- 
- Enfroquer . . 1. Bar.  
Enfroward . . 2. Dead Plate.  
Enfueirar . . 3. End Holder.

For this plan of grate it will be necessary to specify for which side dead plate is required when not in full sets.

# Plate 50





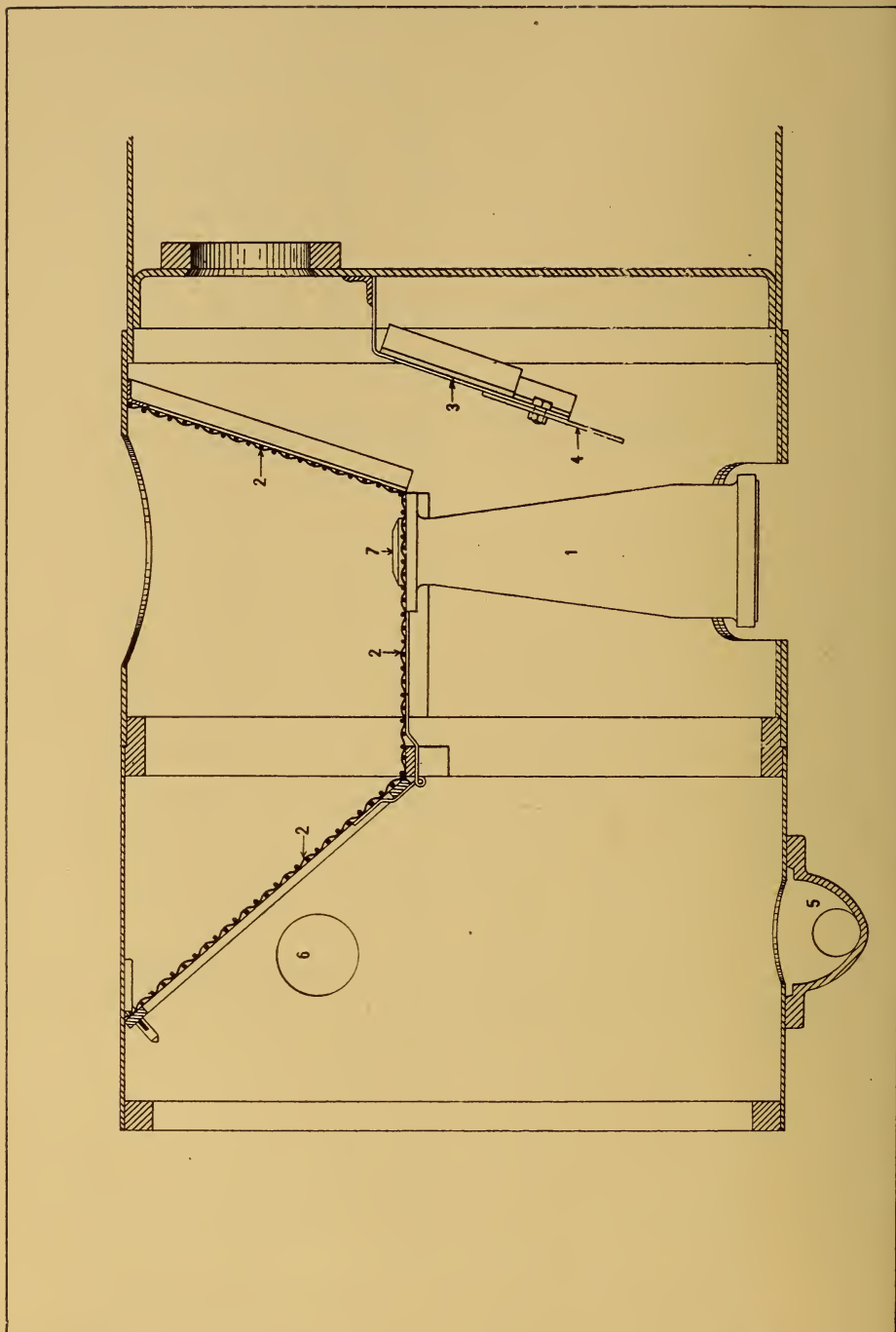
## Plain Grate for Soft Coal

## Plate 50. Enfuisses

Enfumado . . 1.	Bar.
Enfumar . . 2.	Dead Plate.
Enfumoires . . 3.	End Holder.
Enfundadas . 4.	Drop Plate.
Enfundado . 5.	“ “ Handle
Enfundamos . 6.	“ “ “ Support.
Enfundaron . 7.	“ “ Shaft.
Enfundeis . . 8.	“ “ “ Bearing.

The bearings for drop plate shaft are made right and left. This should be observed in ordering duplicates.

# Plate 51



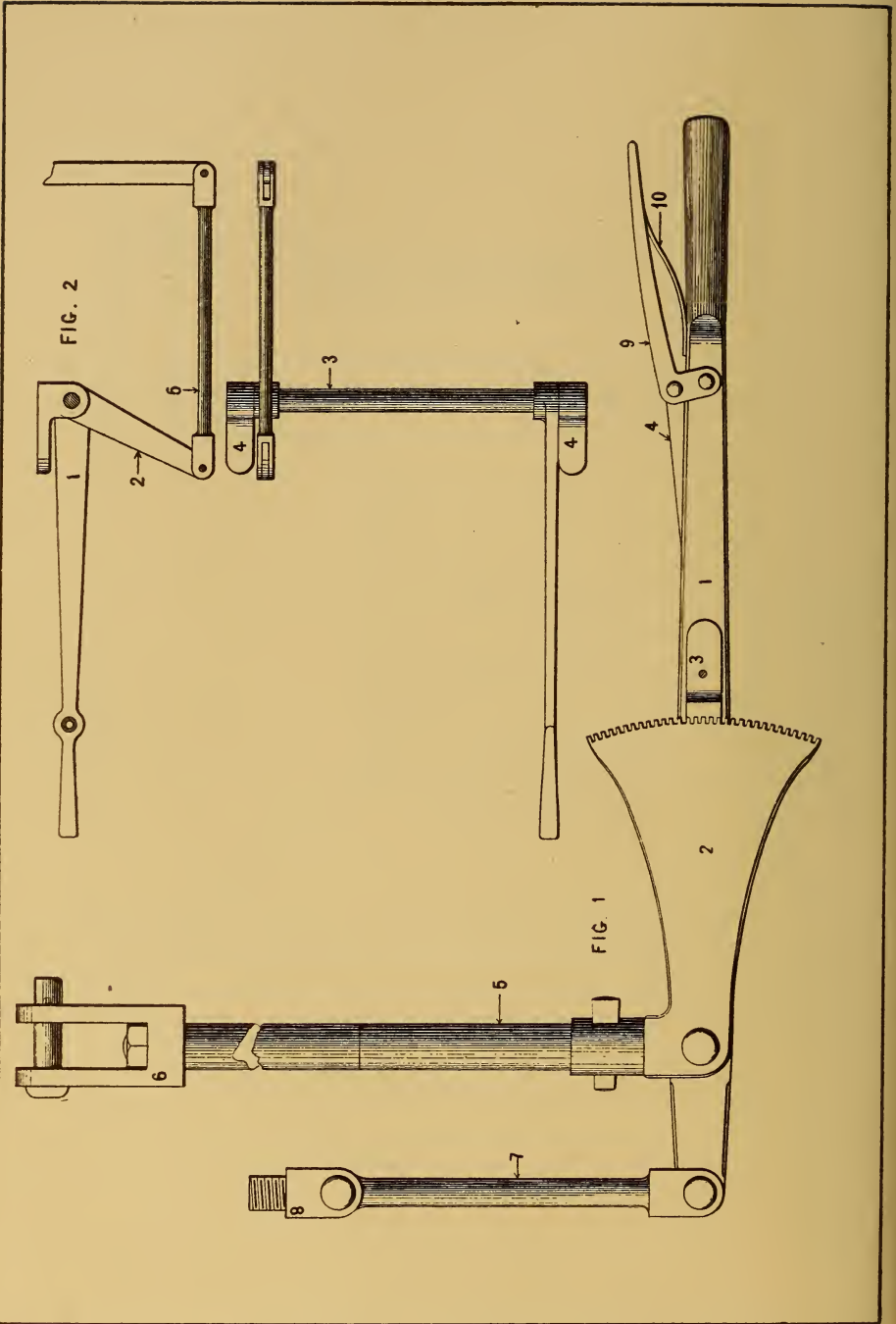
## Smokebox Fittings

## Plate 51. Enfunester

- 
- Enfunilado . . 1. Exhaust Nozzle.  
Enfunilar . . 2. Netting.  
Enfurece . . 3. Deflecting Plate.  
Enfurecida . 4. " " Slide.  
Enfurecio . . 5. Spark Ejector.  
Enfurezca . . 6. Cleaning Hole and Cap.  
Enfuriar . . 7. Exhaust Thimbles.

In ordering these parts, if any change is required from original fittings, especially with reference to nozzle, the order should specify whether single or double opening is wanted. Thimbles always include three sizes to a set, and the particular size wanted, when not in full sets, should be given.

# Plate 52



## Throttle and Whistle Work

## Plate 52. Enfusa

Enfuscado . . FIG. 1.—Throttle Work.

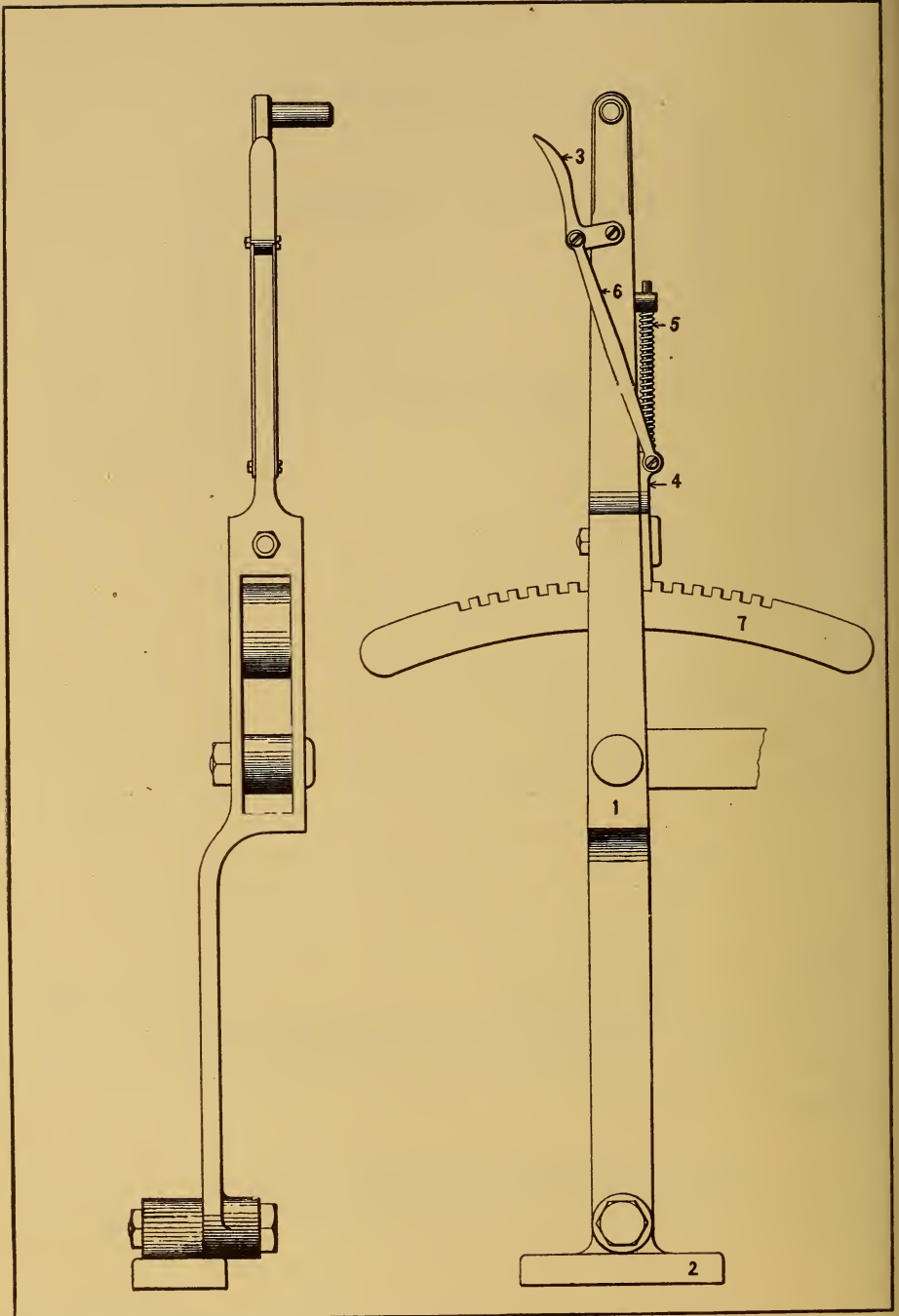
Enfuscar . . .	1.	Lever.
Enfuster . . .	2.	Quadrant.
Enfutage . . .	3.	Latch.
Enfuyais . . .	4.	“ Link.
Enfuyant . . .	5.	Rod.
Enfuyiez . . .	6.	Jaw.
Enfuyons . . .	7.	Link.
Engabanado . .	8.	“ Stud.
Engabelar . . .	9.	Handle.
Engacar . . .	10.	“ Spring.

Engachsig . . FIG. 2.—Whistle Work.

Engaco . . .	1.	Lever.
Engageais . . .	2.	Arm or Crank.
Engageante . .	3.	Shaft.
Engagedly . . .	4.	“ Bearing.
Engagiste . . .	5.	Link.

In ordering Link No. 5, Fig. 2, the distance from center to center of jaw should be given.

# Plate 53

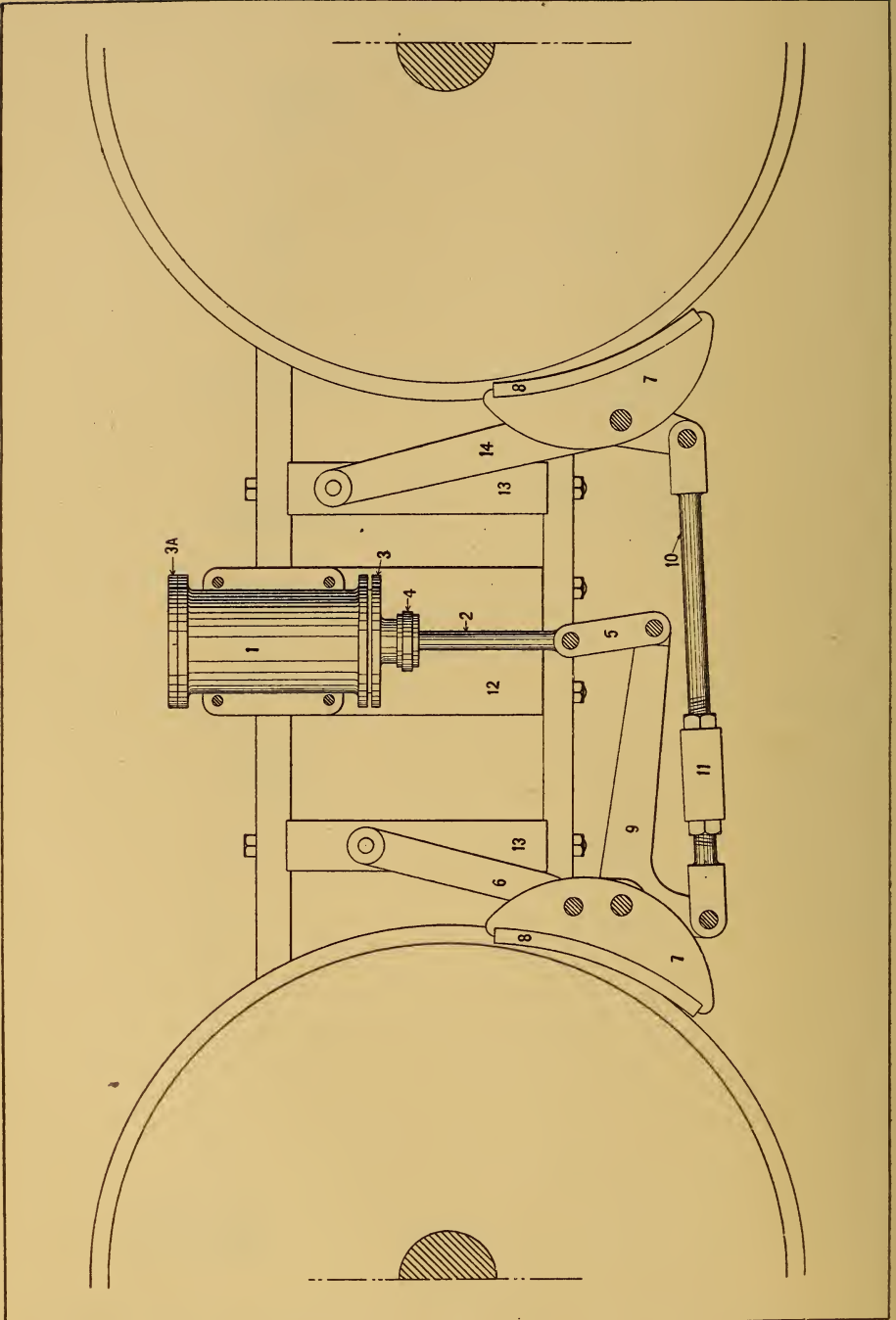


## Reverse Lever and Attachments

## Plate 53. Engaillage

- 
- Engainant . . 1. Lever.  
Engaineras . . 2. Fulcrum.  
Engainiez . . 3. Handle.  
Engainons . . 4. Latch.  
Engaiolar . . 5. " Spring.  
Engaitadas . . 6. " Rod.  
Engaitado . . 7. Catch.

# Plate 54





Steam Brake Work (Spread Style)

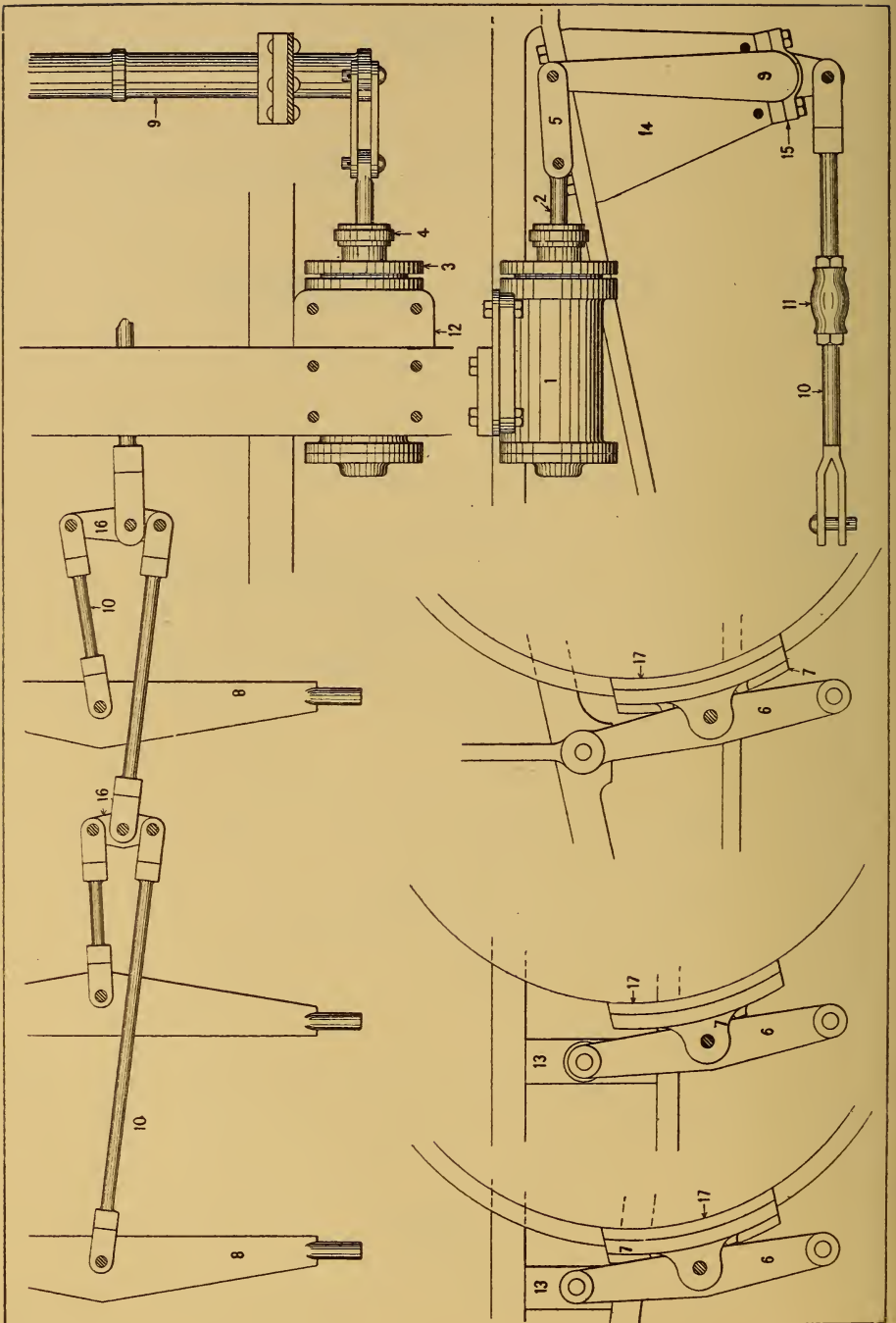
Plate 54. Engajar

---

Engalado . . .	1.	Brake Cylinder.
Engalanar . . .	2.	“ Piston Rod.
Engalgaban . . .	3.	“ Cylinder Head, Bottom.
Engalgada . . .	3A.	“ “ “ Top.
Engalgados . . .	4.	“ “ Stuffing Box Nut.
Engalla . . .	5.	“ Connecting Link.
Engallador . . .	6.	“ Hanger Link.
Engallarse . . .	7.	“ Head.
Enganabais . . .	8.	“ Shoe.
Enganadico . . .	9.	“ Bell Crank.
Enganamos . . .	10.	“ Rod.
Enganaron . . .	11.	“ “ Adjusting Nut.
Enganchado . . .	12.	“ Cylinder Support.
Engancheis . . .	13.	“ Hanger “
Engancho . . .	14.	“ Lever.

Separate catalogues of patented power brakes may be obtained by applying to the makers.

# Plate 55



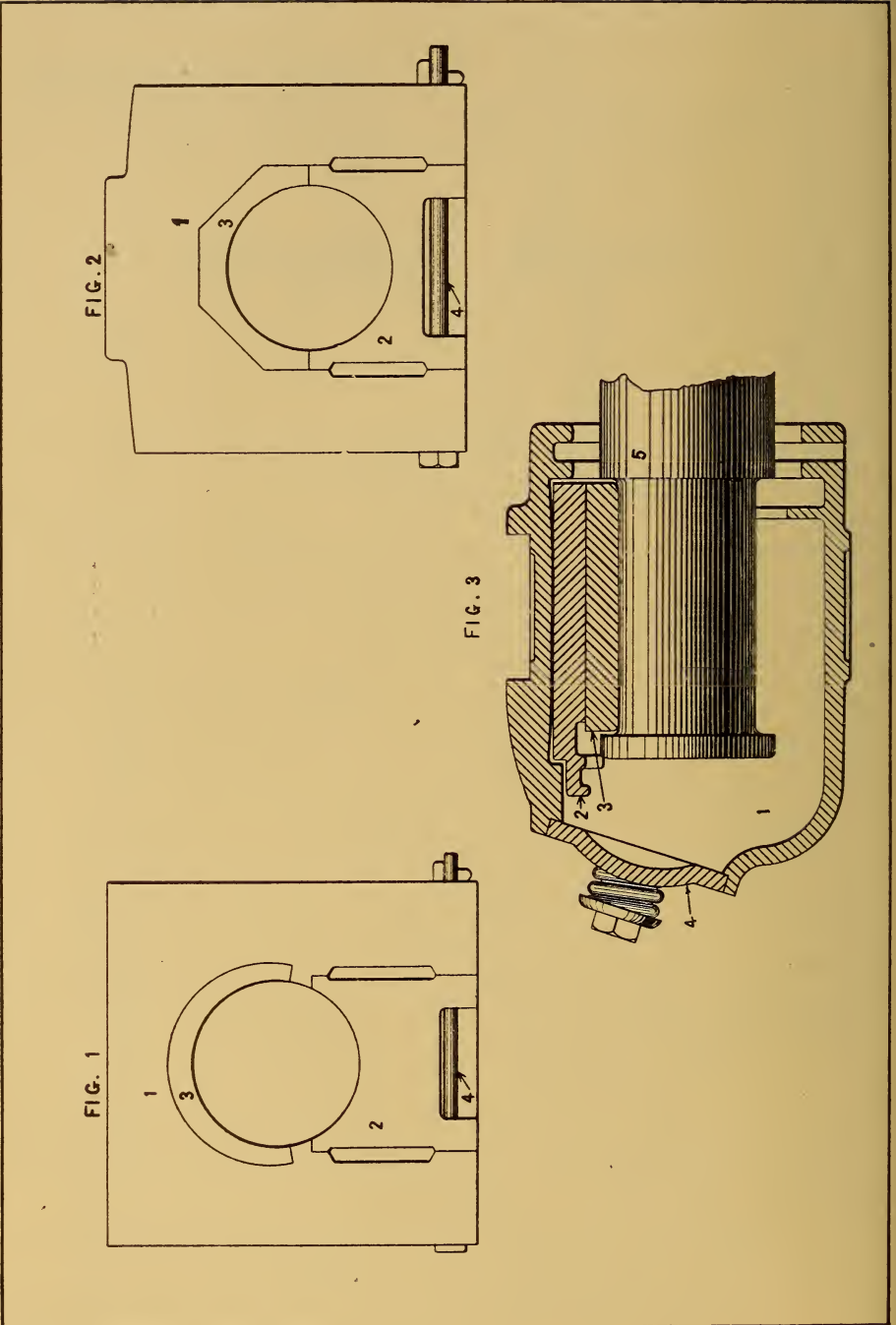
## Steam Brake Work (Equalized Style)

## Plate 55. Engandujo

Enganeis . . .	1.	Brake Cylinder.
Engangento . . .	2.	" Piston Rod.
Enganifa . . .	3.	" Cylinder Head.
Enganosas . . .	4.	" " Stuffing Box Nut.
Enganoso . . .	5.	" Connecting Link.
Engantant . . .	6.	" Lever.
Enganzar . . .	7.	" Head.
Engaols . . .	8.	" Beam.
Engarabato . . .	9.	" Shaft.
Engaraire . . .	10.	" Rod.
Engarampar . . .	11.	" " Adjusting Nut.
Engarbaba . . .	12.	" Cylinder Support.
Engarbadas . . .	13.	" Hanger.
Engarboil . . .	14.	" Shaft Support.
Engarce . . .	15.	" " Bearing.
Engaritado . . .	16.	" Rod Lever.
Engariteis . . .	17.	" Shoe.

Separate catalogues of patented power brakes may be obtained by applying to the makers.

# Plate 56



Journal Boxes

Plate 56. Engarland

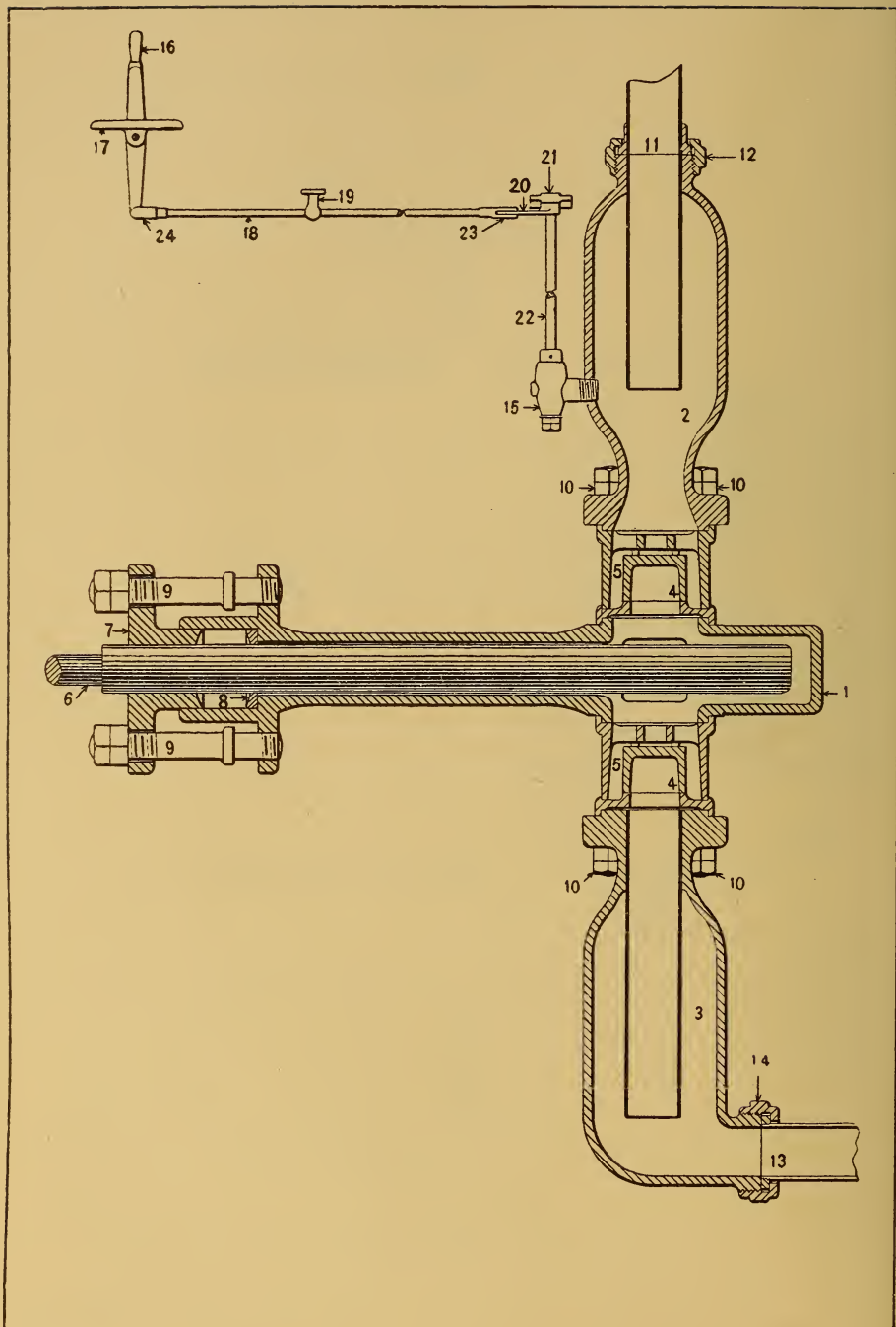
Engarrafar . . FIG. 1.—Driving Box.  
 Engarrafo . . . . . “ 2.—Truck Box.

Engarrison . . 1. Box.  
 Engarzamos . . 2. Cellar.  
 Engarzaron . . 3. Brass.  
 Engarzases . . 4. Cellar Bolt.

Engarzeis . . . FIG. 3.—Tender Box.

Engarzo . . . . 1. Box.  
 Engasgado . . 2. Wedge.  
 Engastaban . . 3. Brass.  
 Engastada . . . 4. Lid.  
 Engasto . . . . 5. Axle.

# Plate 57



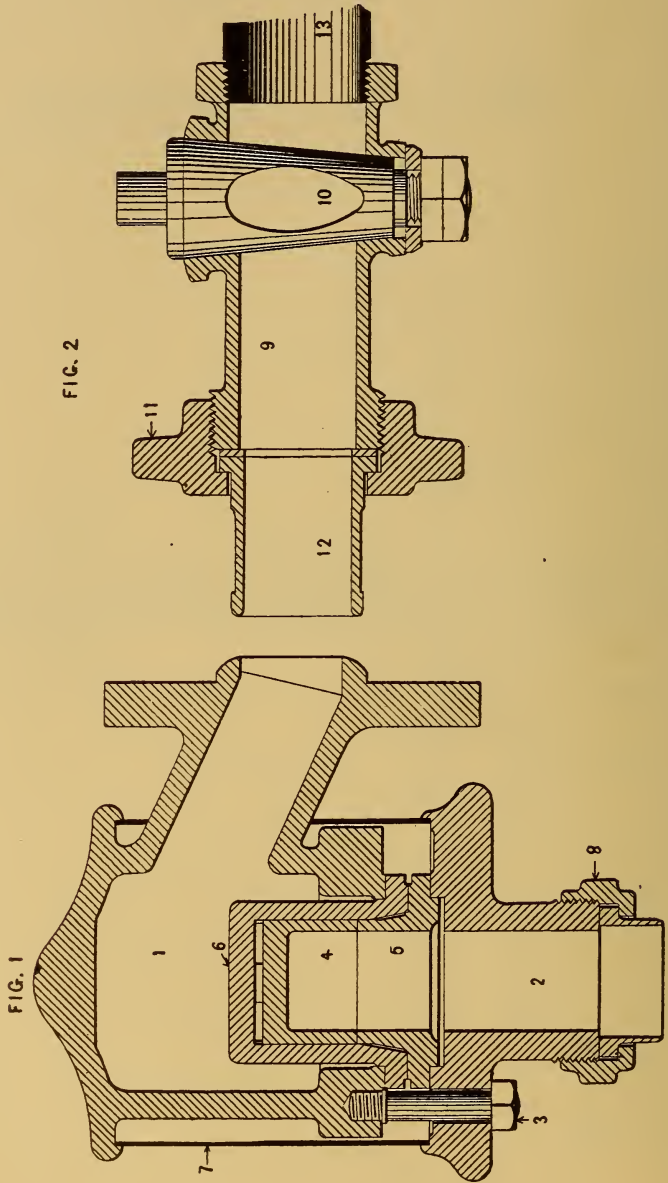
## Pump Work

## Plate 57. Engathmig

Engatillo . . .	1.	Pump Barrel.
Engatinhar . . .	2.	Top Chamber.
Engatusado . . .	3.	Bottom Chamber.
Engatusar . . .	4.	Valve.
Engatuseis . . .	5.	“ Cage.
Engaver . . .	6.	Plunger.
Engazonner . . .	7.	Gland.
Engbloem . . .	8.	“ Bottom Ring.
Engbloemen . . .	9.	“ Studs
Engborstig . . .	10.	Chamber Studs.
Engance . . .	11.	Check Pipe.
Engaigner . . .	12.	“ “ Coupling Nut.
Engeira . . .	13.	Feed Pipe.
Engeitado . . .	14.	“ “ Coupling Nut.
Engel . . . .	15.	Pet Cock.
Engelbert . . .	16.	“ “ Lever in Cab.
Engelbild . . .	17.	“ “ “ Fulcrum.
Engelblume . . .	18.	“ “ “ Rod.
Engelfried . . .	19.	“ “ “ “ Guide
Engelgras . . .	20.	“ “ Crank.
Engelhar . . .	21.	“ “ “ Hanger.
Engelknabe . . .	22.	“ “ “ Rod.
Engelkruid . . .	23.	“ “ “ Jaw.
Engelmesse . . .	24.	“ “ Lever.

In ordering pump barrel, the side wanted for should be indicated in the order.

# Plate 58





Pump Check and Feed Cock

Plate 58. Engelmiene

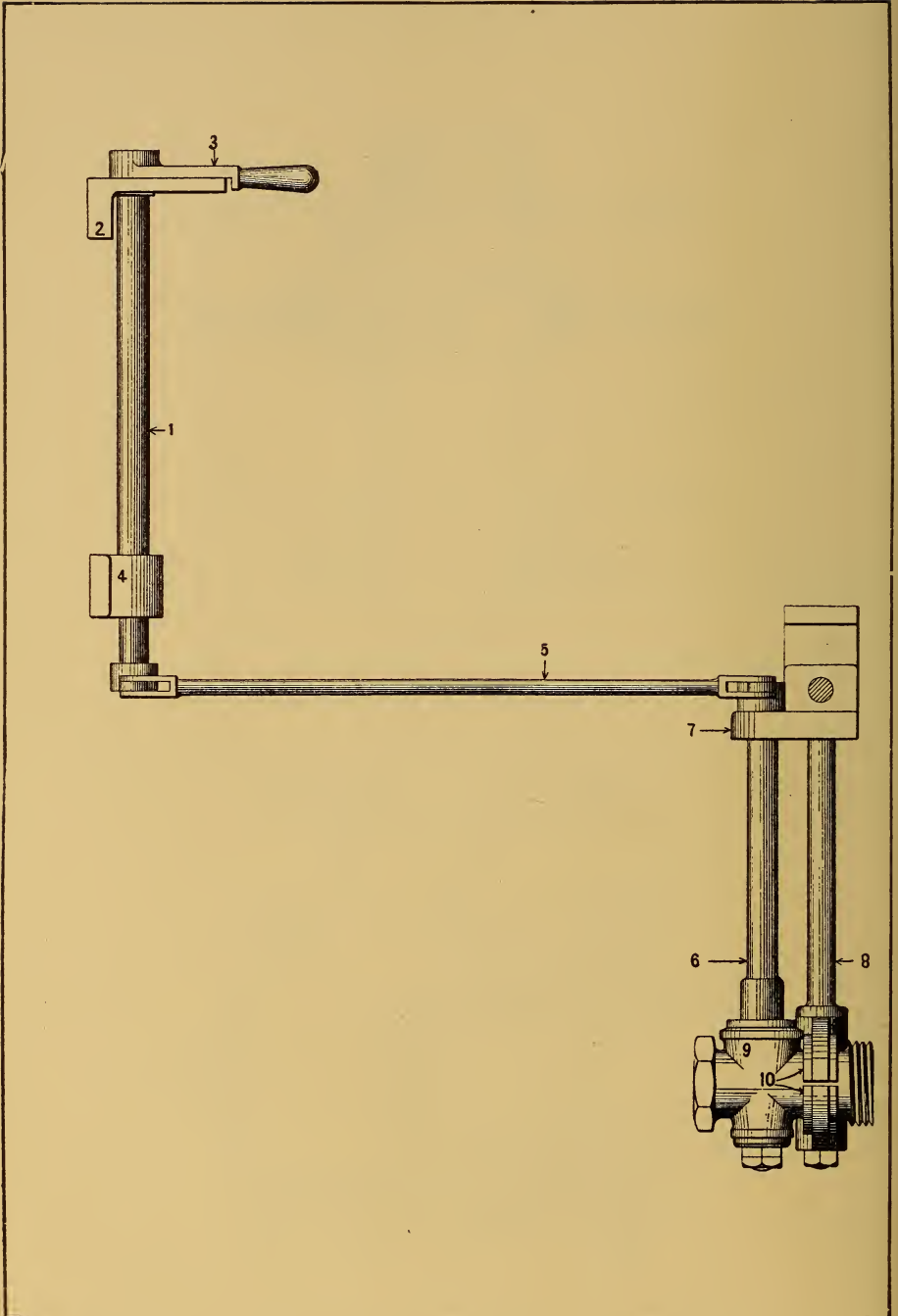
Engelmund . . . FIG. 1.—Pump Check.

- Engelname . . 1. Check Body.
- Engelrein . . 2. “ Flange.
- Engelroche . . 3. “ “ Studs.
- Engelsauge . . 4. Valve.
- Engelsch . . 5. “ Seat.
- Engelschar . . 6. “ Cage.
- Engelseele . . 7. Casing.
- Engelkind . . 8. Check Pipe Coupling Nut.

Engelskopf . . . FIG. 2.—Feed Cock.

- Engelstand . . 9. Feed Cock Body.
- Engelstill . . 10. “ “ Plug and Nut.
- Engelsweib . . 11. Hose Coupling Nut.
- Engelthal . . 12. “ Swivel.
- Engeltrude . . 13. Feed Pipe.

# Plate 59

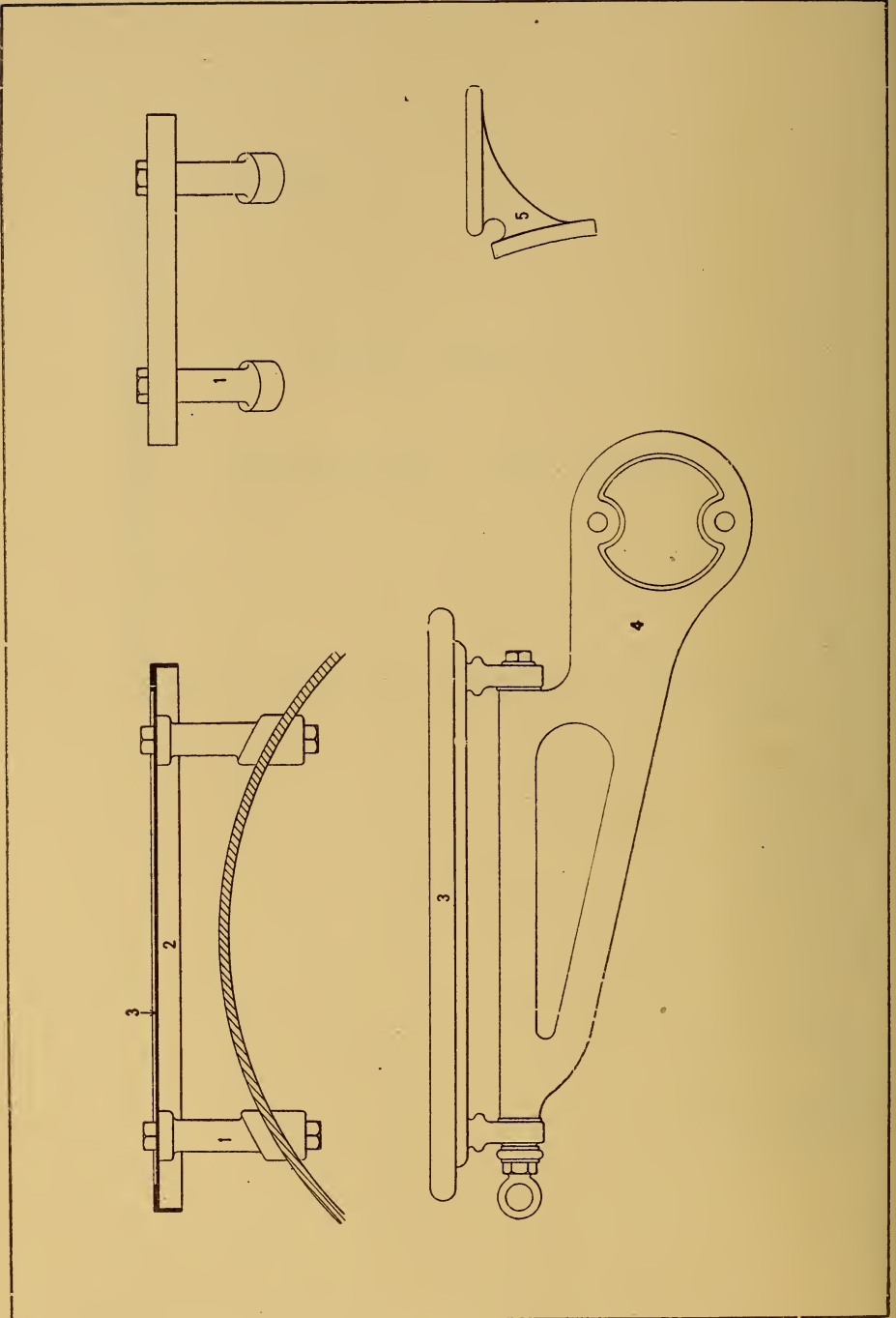


Feed Water Work

Plate 59. Engelure

- 
- Engelwelt . . 1. Shaft.
  - Engelzoet . . 2. " Quadrant.
  - Engenceant . . 3. " Handle.
  - Engendered . . 4. " Hanger.
  - Engendrais . . 5. " Rod.
  - Engendrer . . 6. Cock Shaft.
  - Engendriez . . 7. " " Bearing.
  - Engendront . . 8. " Hanger.
  - Engenhador . . 9. Cock.
  - Engenharia . . 10. Pipe Clamp.

# Plate 60



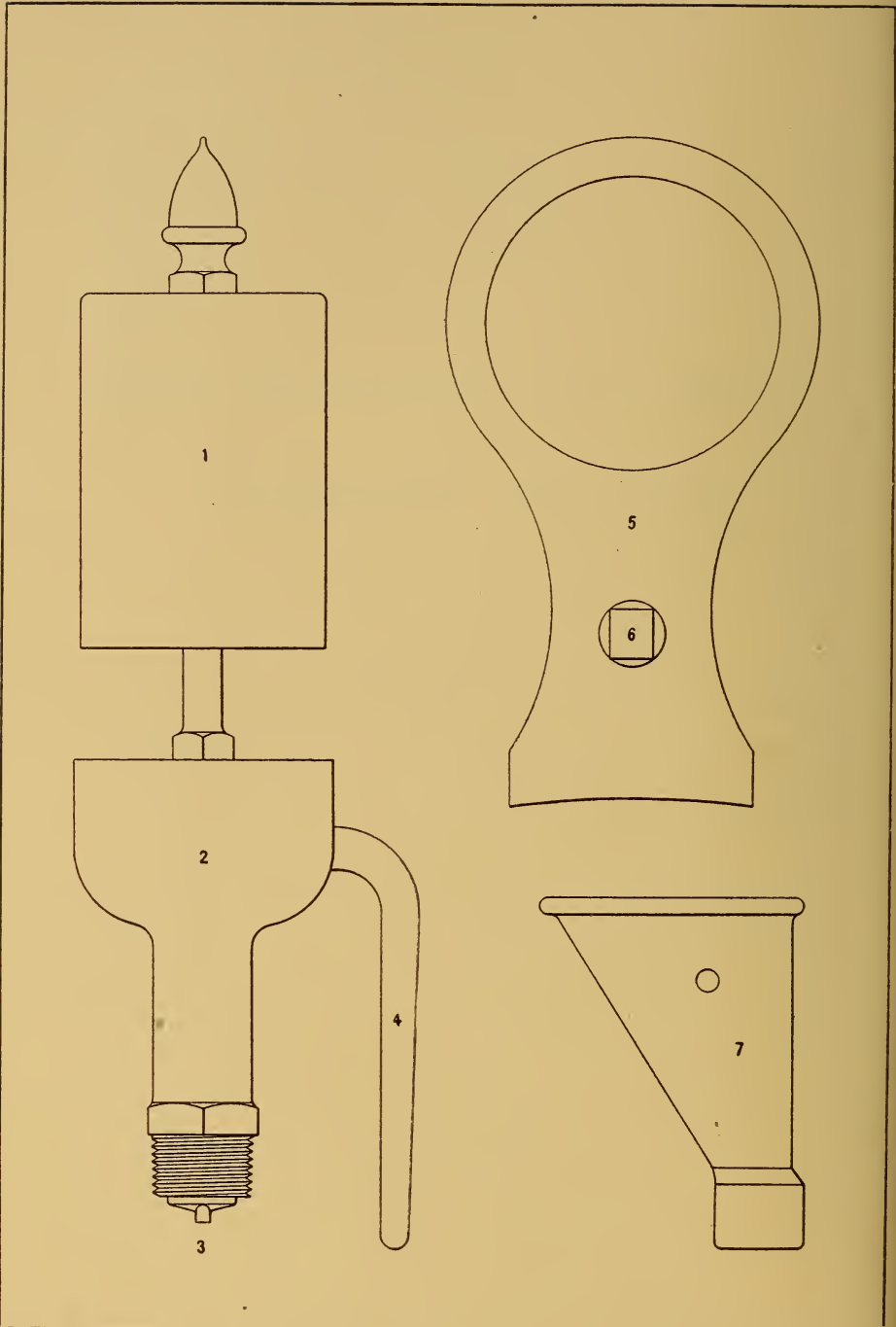
## Headlight Shelves and Signal Light Bracket

## Plate 60. Engenheiro

- 
- Engenho . . 1. Headlight Shelf Column.  
Engenhoso . 2.       "       "   Edge.  
Engeoleur . . 3.       "       Shelf.  
Engeray . . . 4.       "       Bracket.  
Engerbage . . 5. Signal Light Bracket.

Headlight brackets are made right and left, and orders for single brackets should specify the side.

# Plate 61

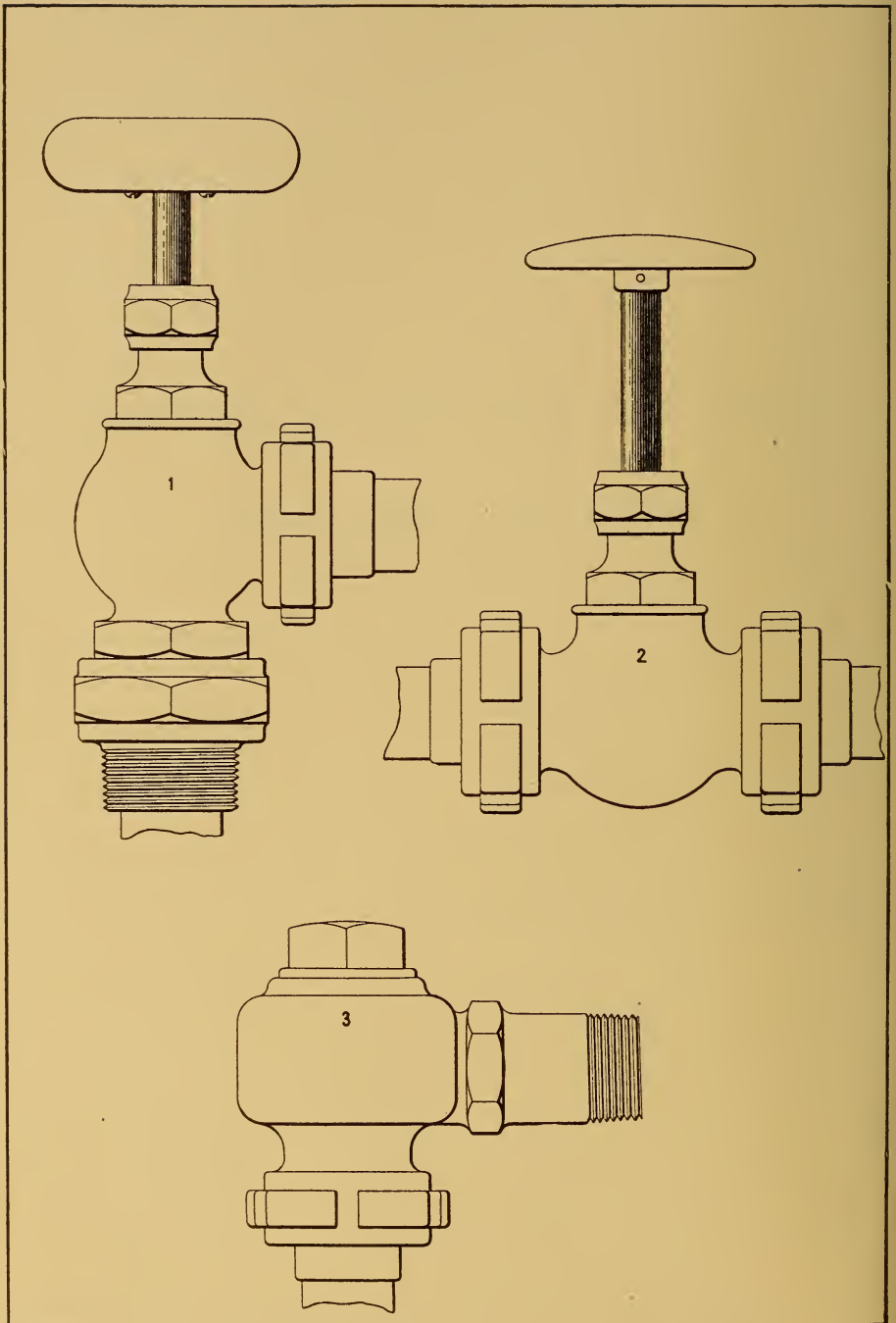


## Whistle, Steam Gauge Stand, and Drip Funnel

**Plate 61. Engerber**

- 
- Engessar . . 1. Whistle Bell.  
Enggasse . . 2. " Bowl.  
Engherzig . . 3. " Valve.  
Engibate . . 4. " Lever.  
Engibatis . . 5. Steam Gauge Stand.  
Engihoul . . 6. Cab Lamp " "  
Engimelgar . 7. Gauge Cock Drip Funnel.

# Plate 62





## Injector Valves

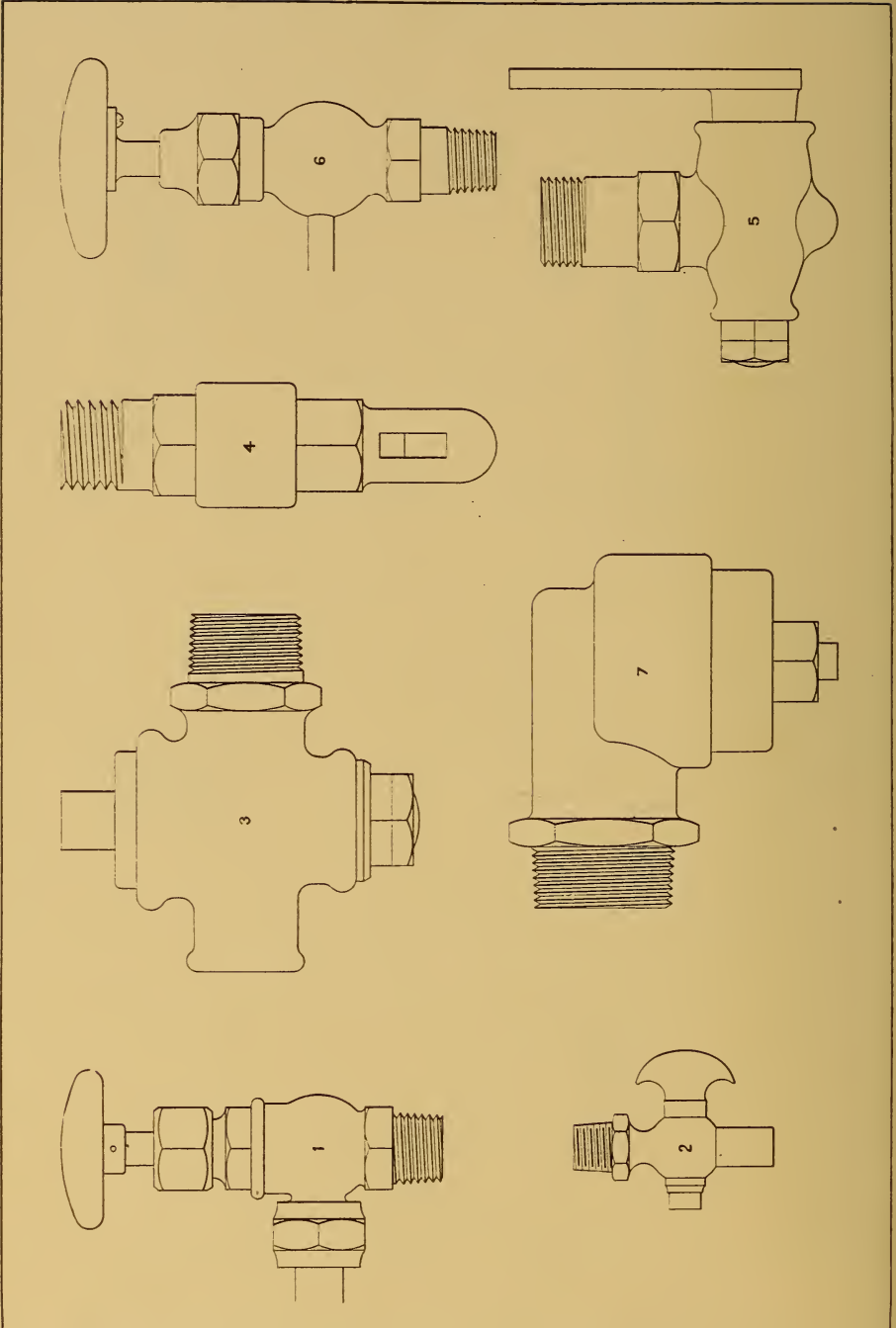
## Plate 62. Engimelgo

---

Enginadure . 1. Steam Valve.  
Engineers . . 2. Feed “  
Engineman . 3. Check “

In ordering these parts, if they are required for any change from original dimensions, or are additional to what was first put on the engine, the size and kind of pipes to be used should be specified.

# Plate 63



## Valves and Cocks

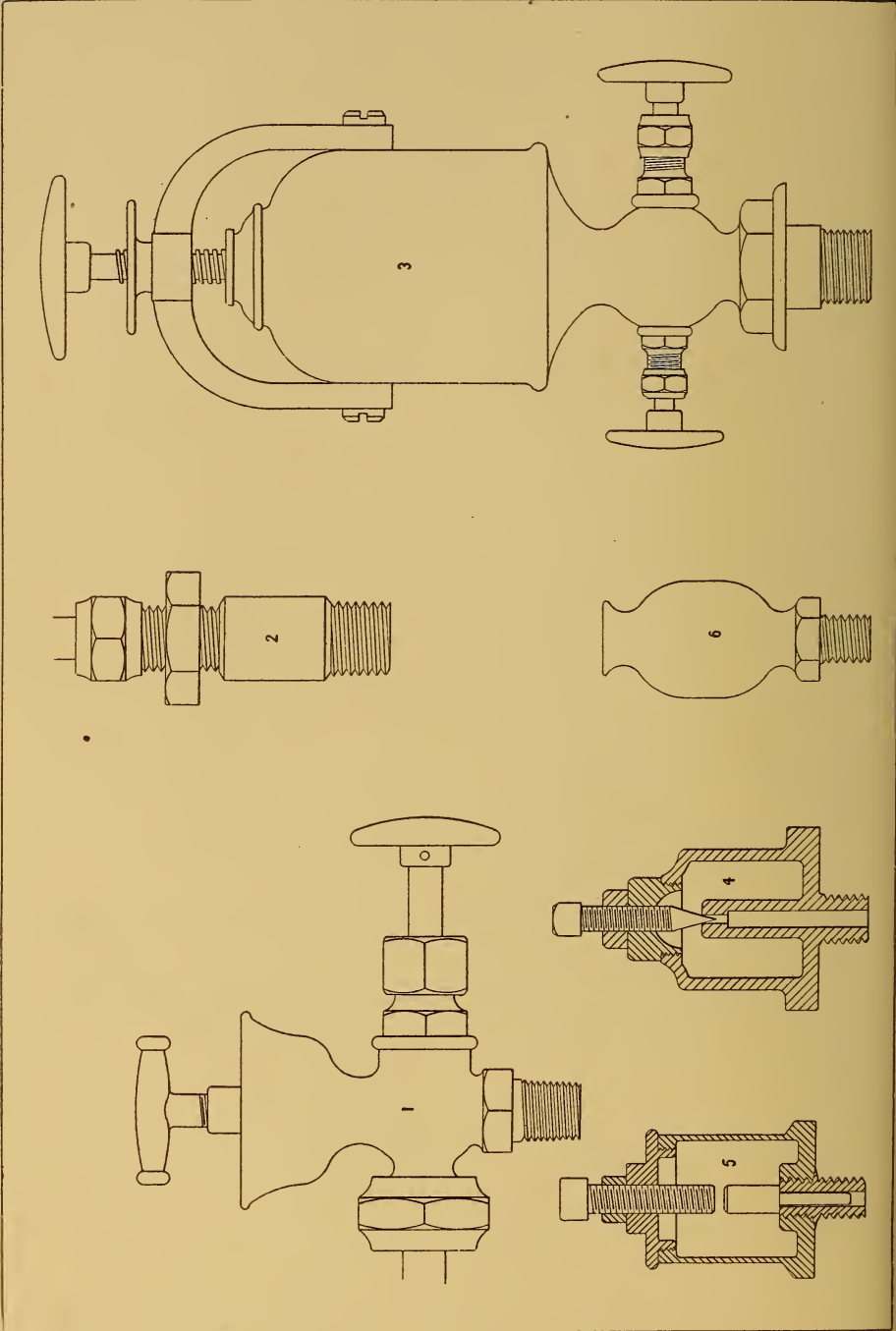
## Plate 63. Enginery

- Engines . . . 1. Blower, Heater, Steam Brake Stop Valve or Spark  
Ejector Valve.
- Enginous . . . 2. Drip Cock.
- Engirdle . . . 3. Blow-off Cock.
- Engirdling . . . 4. Cylinder Cock (Buchanan style.)
- Engiscopio . . . 5. " Cock.
- Engisome . . . 6. Gauge "
- Engisop . . . 7. Steam Chest Relief Valve.

In ordering cylinder cocks when not in full sets, the side they are wanted for must invariably be specified.

In ordering valves covered by number 1 above, specify the name of the valve wanted, as these valves are of different sizes, though of the same type.

# Plate 64



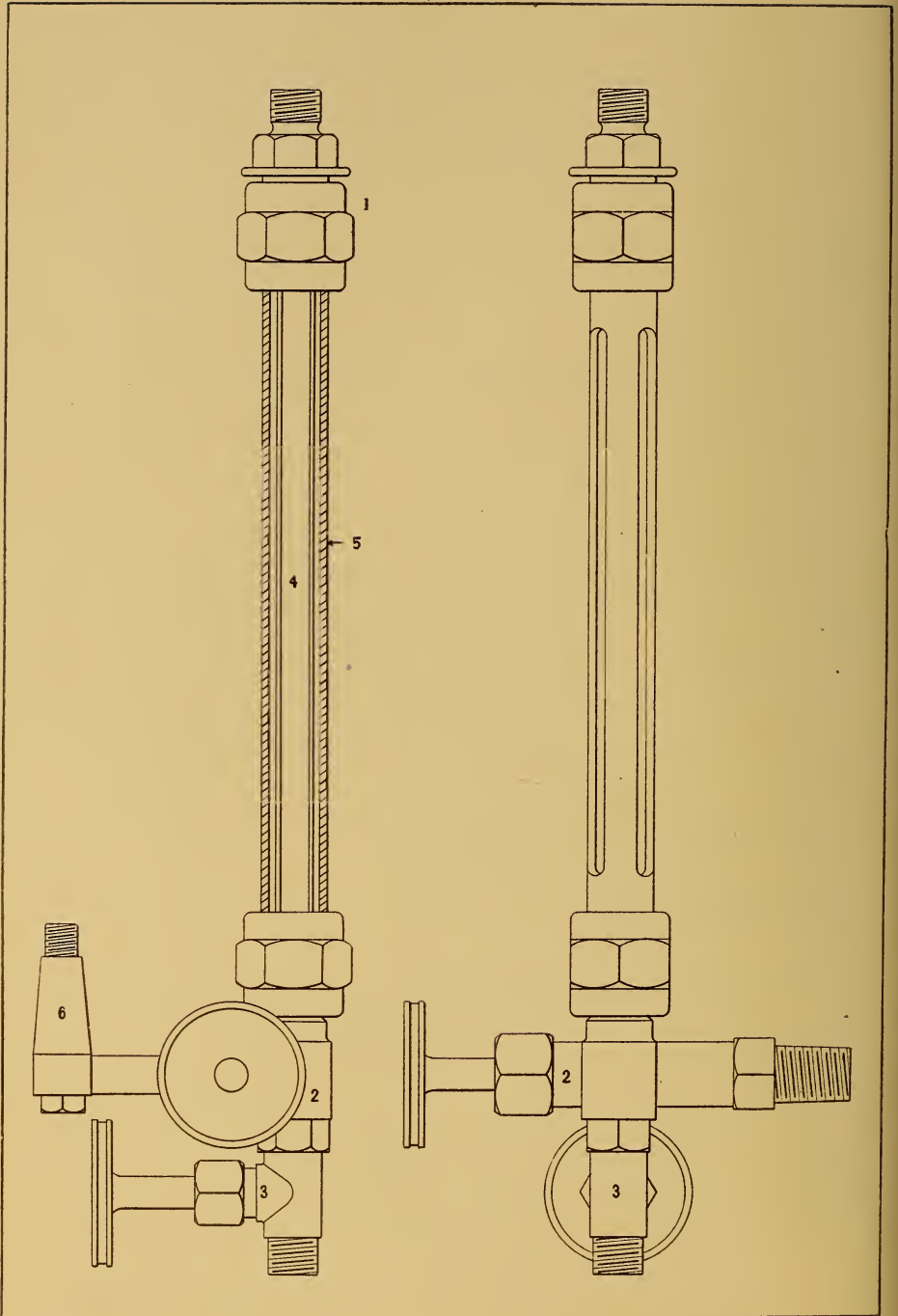
## Oil Cups

## Plate 64. Englad

- Engladded . 1. Cylinder Oiler in Cab, Baldwin style. (See Plates 87, 88, 89 and 90 for Sight Feed Cylinder Lubricators).
- Engladding . 2. Oil Pipe Connection on Steam Chest.
- Englaender . 3. Condensing Oil Cup “ “ “
- Englaine . . 4. Crosshead, Guide, or Connecting Rod Oil Cup (Needle style).
- English . . . 5. Crosshead, Guide, or Connecting Rod Oil Cup (Plunger style).
- Englishman . 6. Rock Shaft Oil Cup.

In ordering numbers 4 or 5, it will be necessary to specify whether they are wanted for crossheads, guides, or rods.

# Plate 65

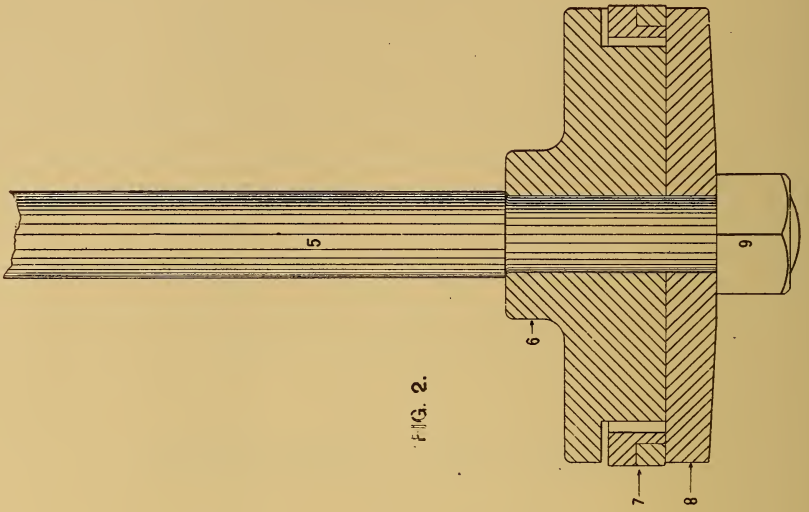
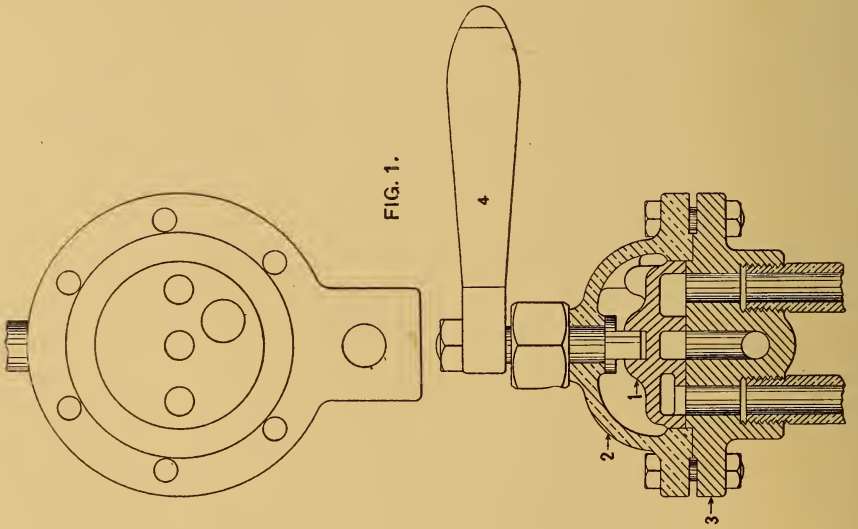


## Glass Water Gauge

## Plate 65. Englishry

- 
- Englobar . . 1. Upper Fitting.  
Engloom . . 2. Lower “  
Engloomed . 3. Drain Valve.  
Englooming . 4. Glass.  
Engloutir . . 5. Guard.  
Engluage . . 6. Water Gauge Lamp Bracket.

# Plate 66





Engineer's Brake Valve, and Steam Brake Piston

Plate 66. Englued

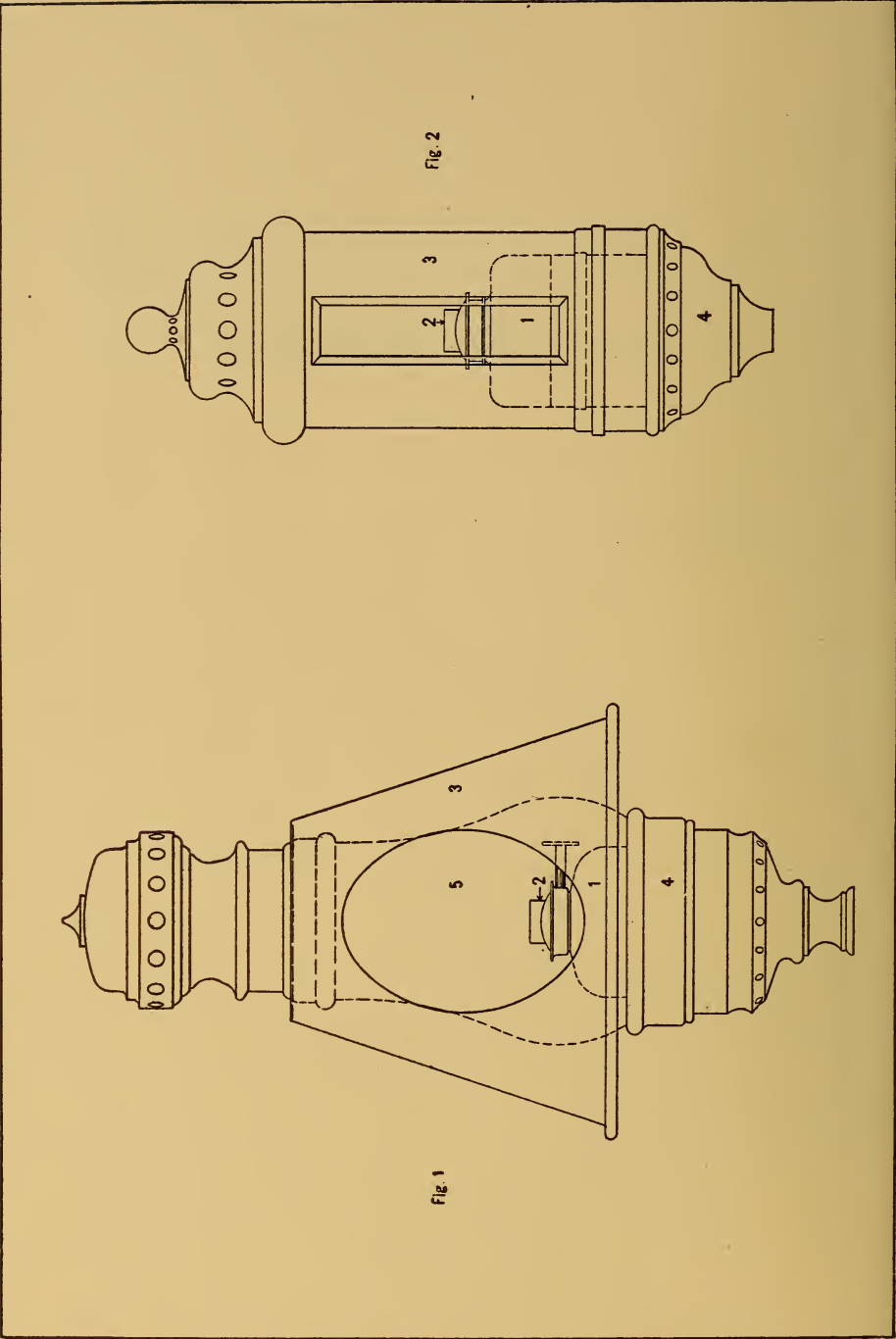
Engluement . . . FIG. 1.—Engineer's Brake Valve.

- Engluing . . . 1. Disc Valve.
- Englut . . . 2. Valve Cover.
- Engmaschig . 3. " Body.
- Engnetz . . . 4. Handle.

Engobage . . . FIG. 2.—Steam Brake Piston.

- Engodado . . 5. Steam Brake Piston Rod.
- Engodar . . . 6. " " Piston.
- Engodativo . 7. " " " Packing Rings.
- Engolfaba . . 8. " " " Follower.
- Engolfamos . 9. " " " Nut.

# Plate 67



Steam Gauge Lamp, and Water Gauge Lamp

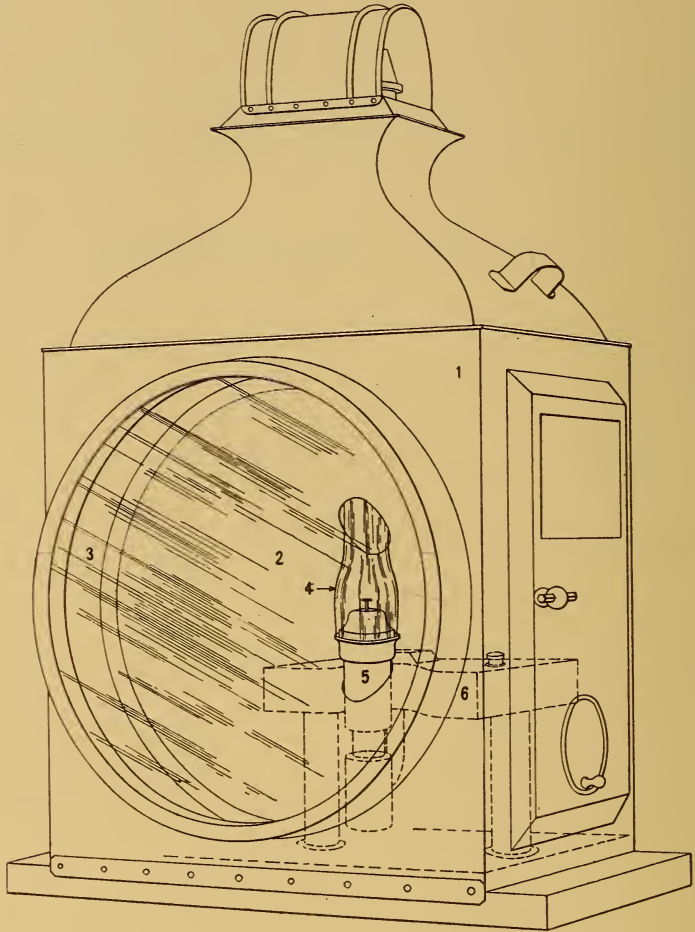
Plate 67. Engolfando

Engolfaron . . . FIG. 1.—Steam Gauge Lamp.

Engolfases . . . FIG. 2.—Water Gauge Lamp.

- Engolfeis . . 1. Reservoir.
- Engolosino . . 2. Burner.
- Engomaba . . 3. Shade.
- Engomabais . . 4. Base.
- Engomadas . . 5. Globe.

# Plate 68

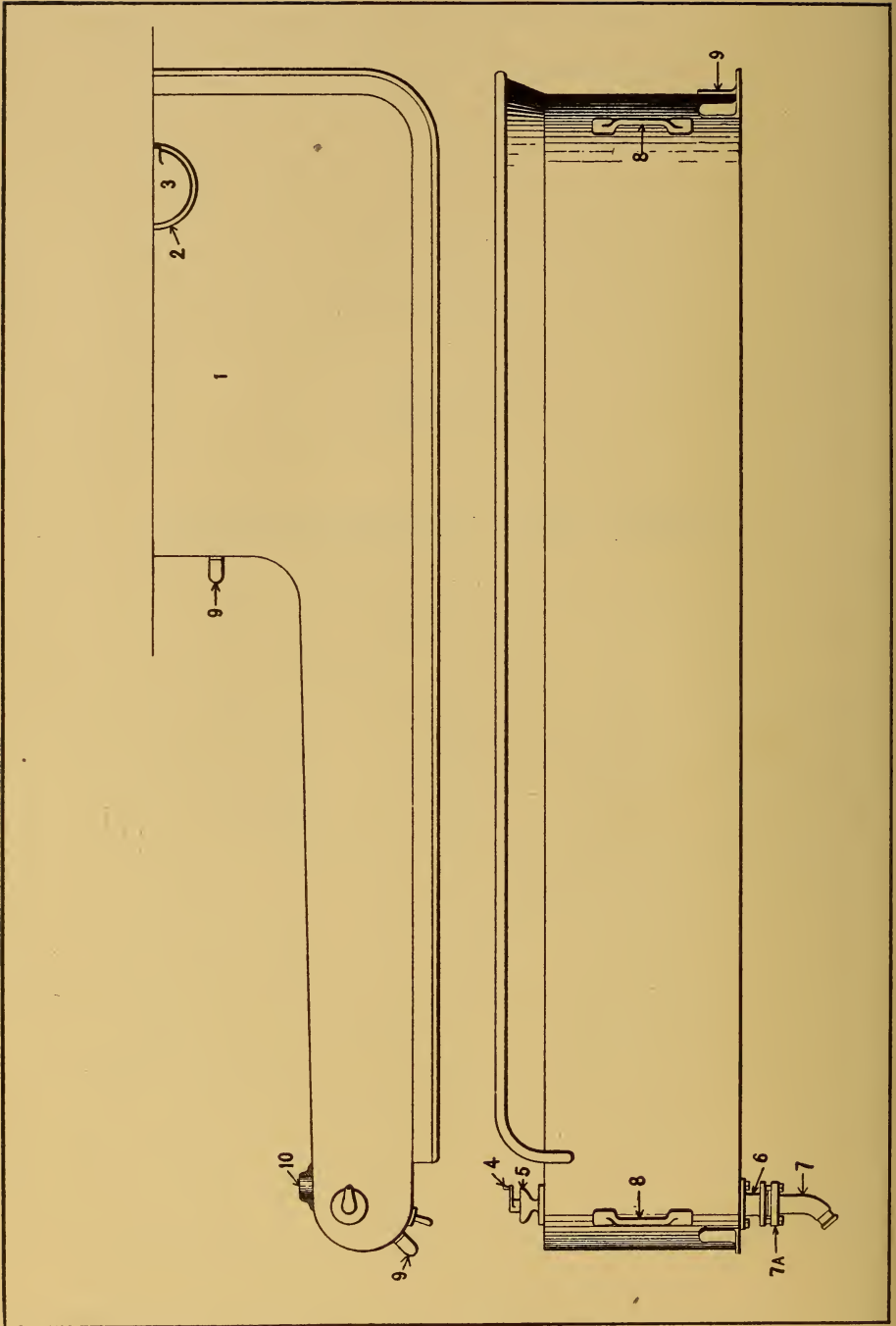


## Headlight

## Plate 68. Engomadura

- 
- Engomamos . 1. Case.  
Engomarian . 2. Reflector.  
Engomaron . 3. Glass.  
Engomeis . . 4. Chimney.  
Engommant . 5. Burner.  
Engonasi . . 6. Reservoir.

# Plate 69



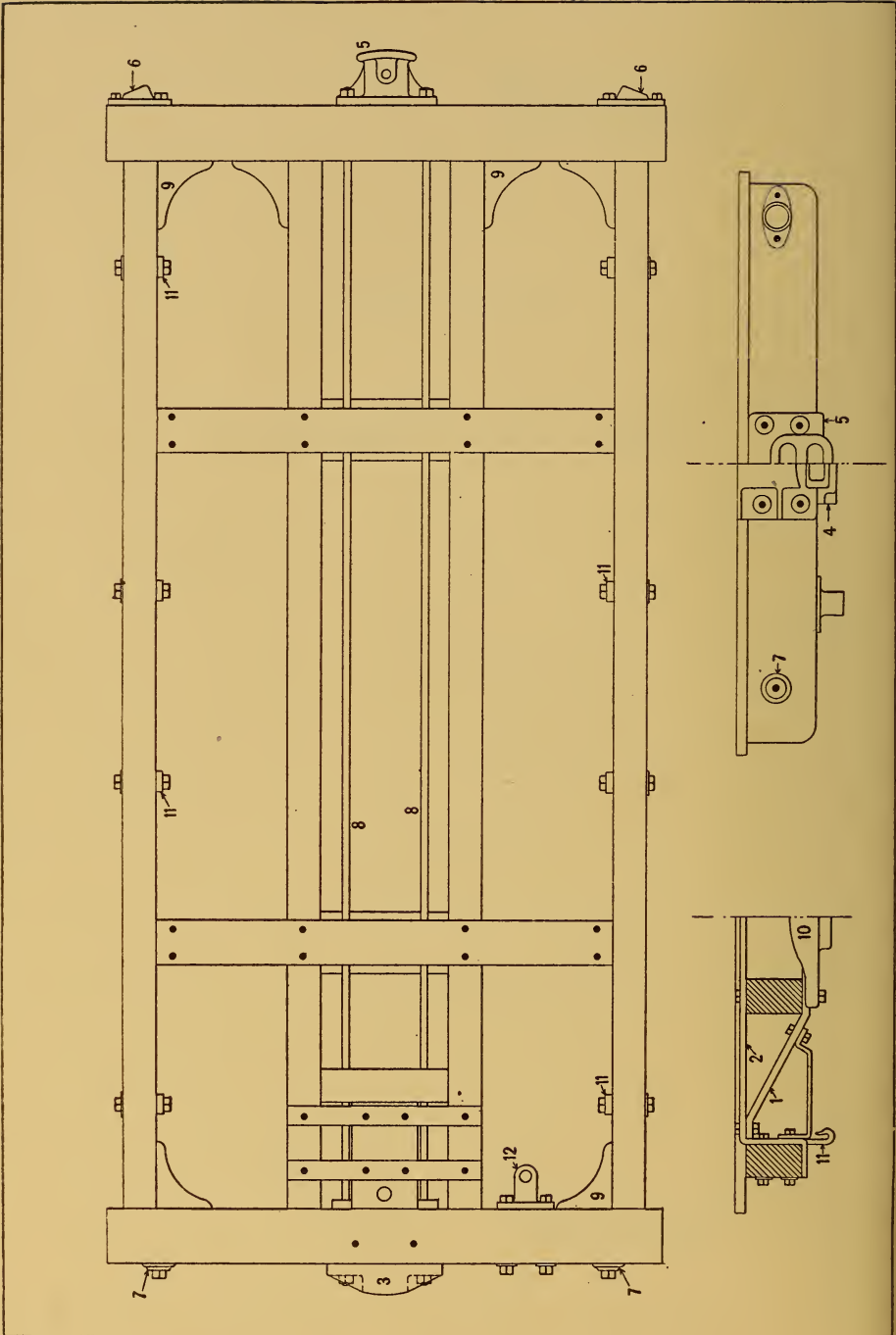
## Water Tank

## Plate 69. Engoncar

---

Engordaron . . .	1.	Tank.
Engordasen . . .	2.	Filling Funnel.
Engordurar . . .	3.	Funnel Lid.
Engorgeant . . .	4.	Valve Lifter.
Engorgeth . . .	5.	“ Wheel.
Engorgitar . . .	6.	“ Body.
Engorlador . . .	7.	“ Gooseneck.
Engorlar . . .	7A.	“ “ Flange.
Engorroso . . .	8.	Handles.
Engouant . . .	9.	Lugs.
Engouffre . . .	10.	Fuel Board Angle Iron.

# Plate 70





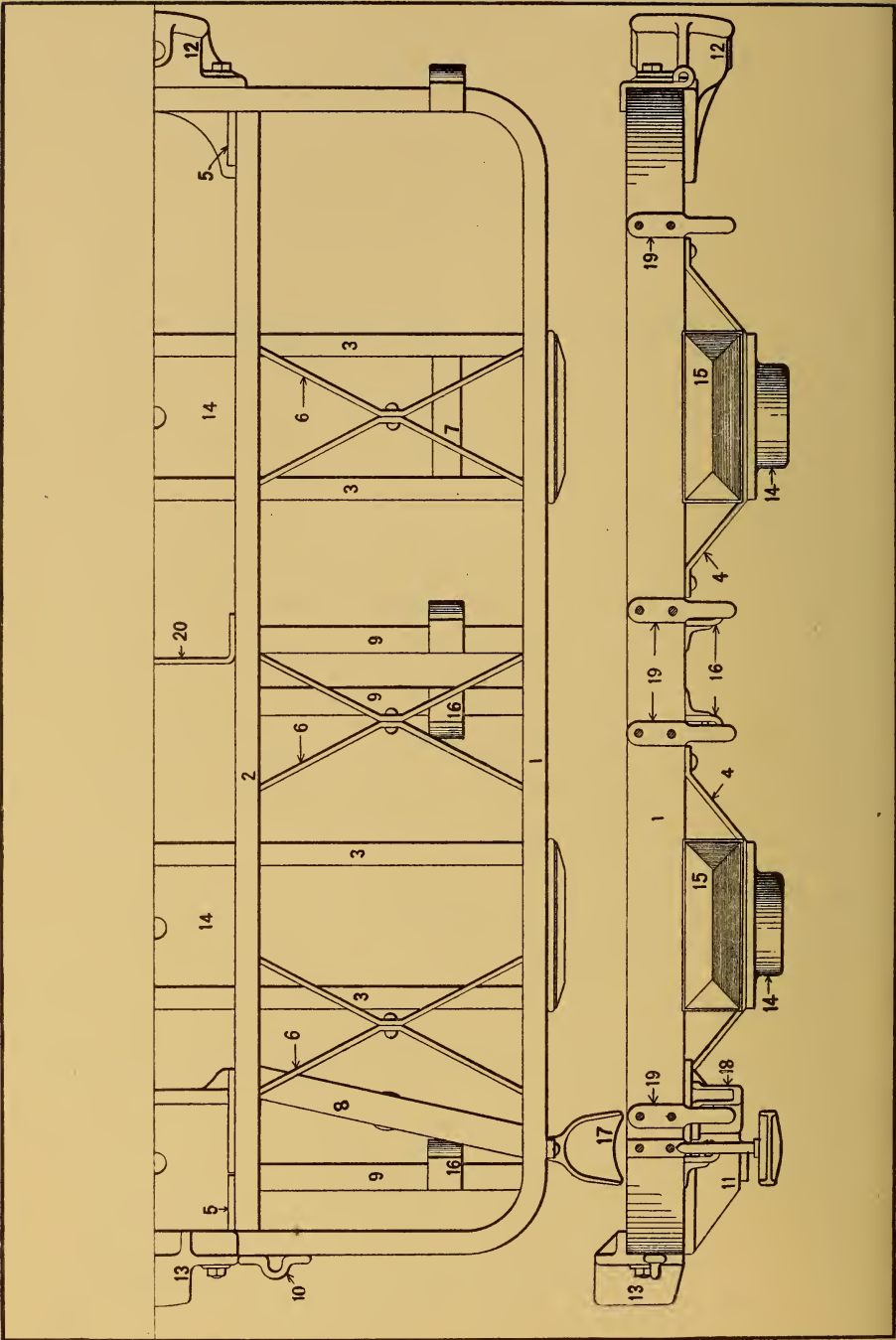
## Tender Frame, Wood

## Plate 70. Engourdir

- 
- |                  |     |                                 |
|------------------|-----|---------------------------------|
| Engoznabas . . . | 1.  | Truss Bar.                      |
| Engoznado . . .  | 2.  | “ “ Crosstie.                   |
| Engoznaran . . . | 3.  | Wedge Block or Chafing Casting. |
| Engoznas . . .   | 4.  | Front Draw Casting.             |
| Engpaessen . . . | 5.  | Back “ “                        |
| Engpass . . .    | 6.  | Pushing Shoe.                   |
| Engracado . . .  | 7.  | Frame Washer.                   |
| Engracante . . . | 8.  | Longitudinal Draw Casting Bolt. |
| Engrachar . . .  | 9.  | Corner Bracket.                 |
| Engracia . . .   | 10. | Center Pin.                     |
| Engradecer . . . | 11. | Safety Chain Hook.              |
| Engrailing . . . | 12. | Brake Shaft Guide.              |

Orders for center pins should specify whether front or back are required when not for full sets.

# Plate 71



Tender Frame, Iron

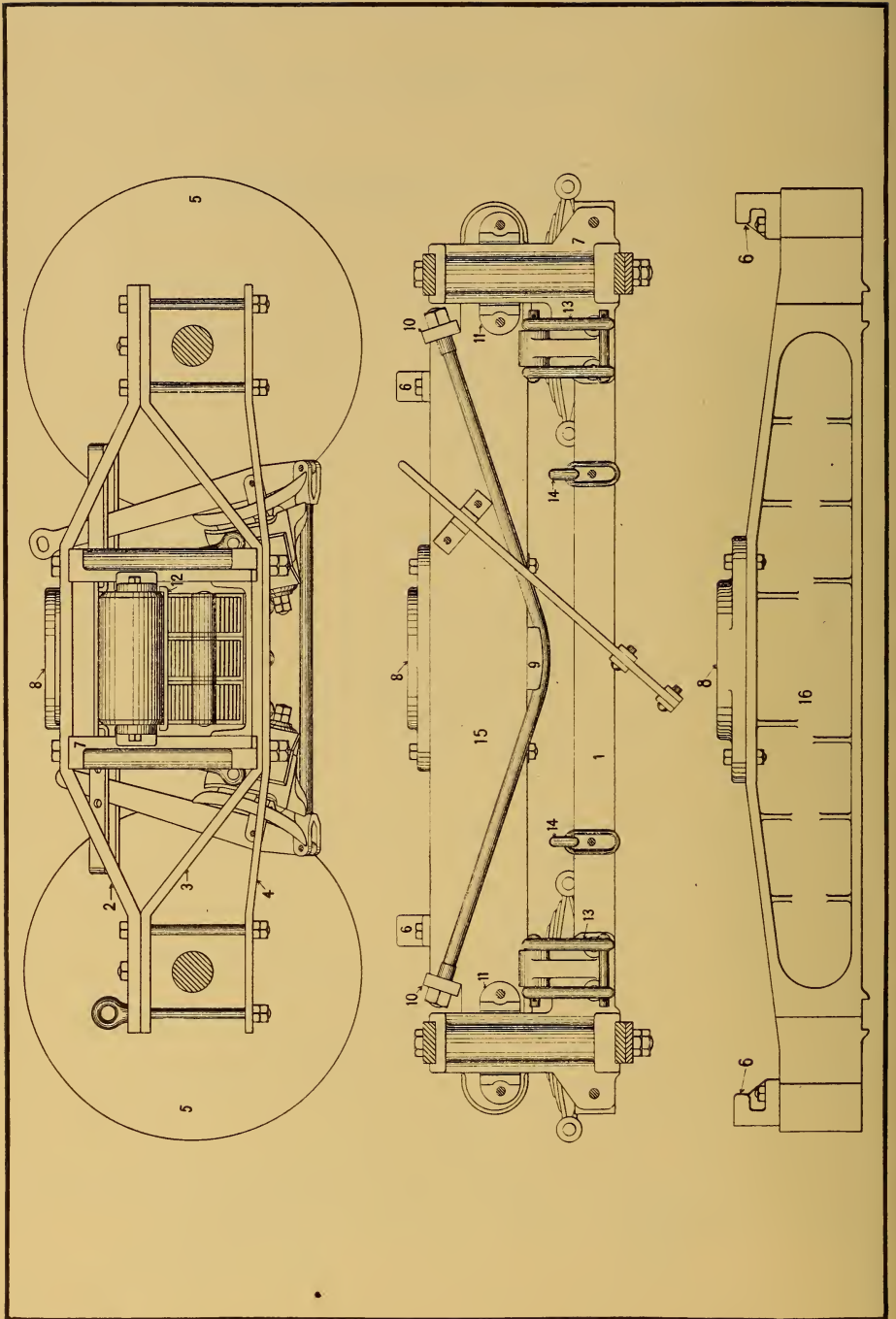
Plate 71. Engrainage

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Engraisser . . .	1.	Side Channel Bar.
Engraixar . . .	2.	Longitudinal Channel Bar.
Engranaje . . .	3.	Transverse " "
Engrandeci . . .	4.	" " " Strap.
Engranero . . .	5.	Corner Plate.
Engranger . . .	6.	Brace.
Engranizar . . .	7.	Side Bearing.
Engrapador . . .	8.	Brake Shaft Crosstie.
Engraparas . . .	9.	" Hanger Angle Iron.
Engrapas . . .	10.	Safety Chain Hanger.
Engrapasen . . .	11.	Front Draw Casting.
Engrapped . . .	12.	Back " "
Engrasais . . .	13.	Chafing Casting.
Engrasando . . .	14.	Center Pin.
Engrasaran . . .	15.	Bolster Cap.
Engrasaria . . .	16.	Brake Clevis.
Engrases . . .	17.	Tender Step.
Engrasped . . .	18.	Brake Shaft Step.
Engrasping . . .	19.	Safety Chain Hook.
Engratie . . .	20.	Brace.

Orders for center pins should specify whether front or back are required when not for full sets.

# Plate 72



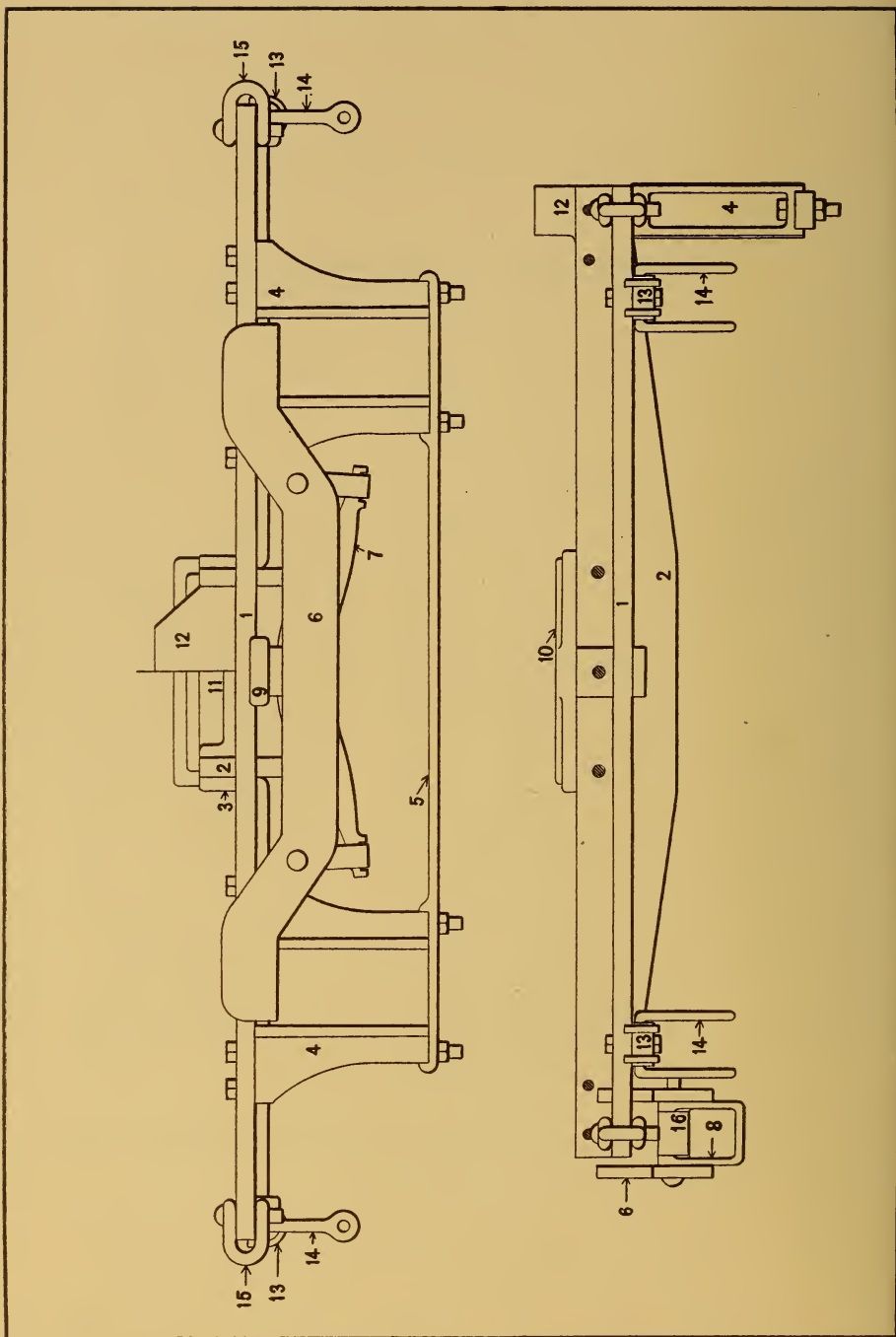
Tender Truck, Arch Bar

Plate 72. Engraulis

- 
- Engrave . . . 1. Channel Bar.
  - Engravery . . 2. Top Bar of Frame.
  - Engravure . . 3. Truss " " "
  - Engreaten . . 4. Bottom " " "
  - Engreecer . . 5. Wheel.
  - Engregge . . 6. Side Bearing.
  - Engreimos . . 7. Frame Filling Piece.
  - Engreiran . . 8. Center Plate.
  - Engreireis . . 9. Truss "
  - Engrelar . . 10. " Washer.
  - Engrenhar . 11. Bolster Guide.
  - Engrescado . 12. Spring Seat.
  - Engrescar . . 13. Brake Clevis.
  - Engresques . 14. " Beam Safety Chain.
  - Engret . . . 15. Bolster, Wood.
  - Engreter . . 16. Bolster, Cast Steel.

In ordering parts for a single truck, the order should specify whether they are wanted for front or back truck.

# Plate 73



## Tender Truck, Wrought Iron

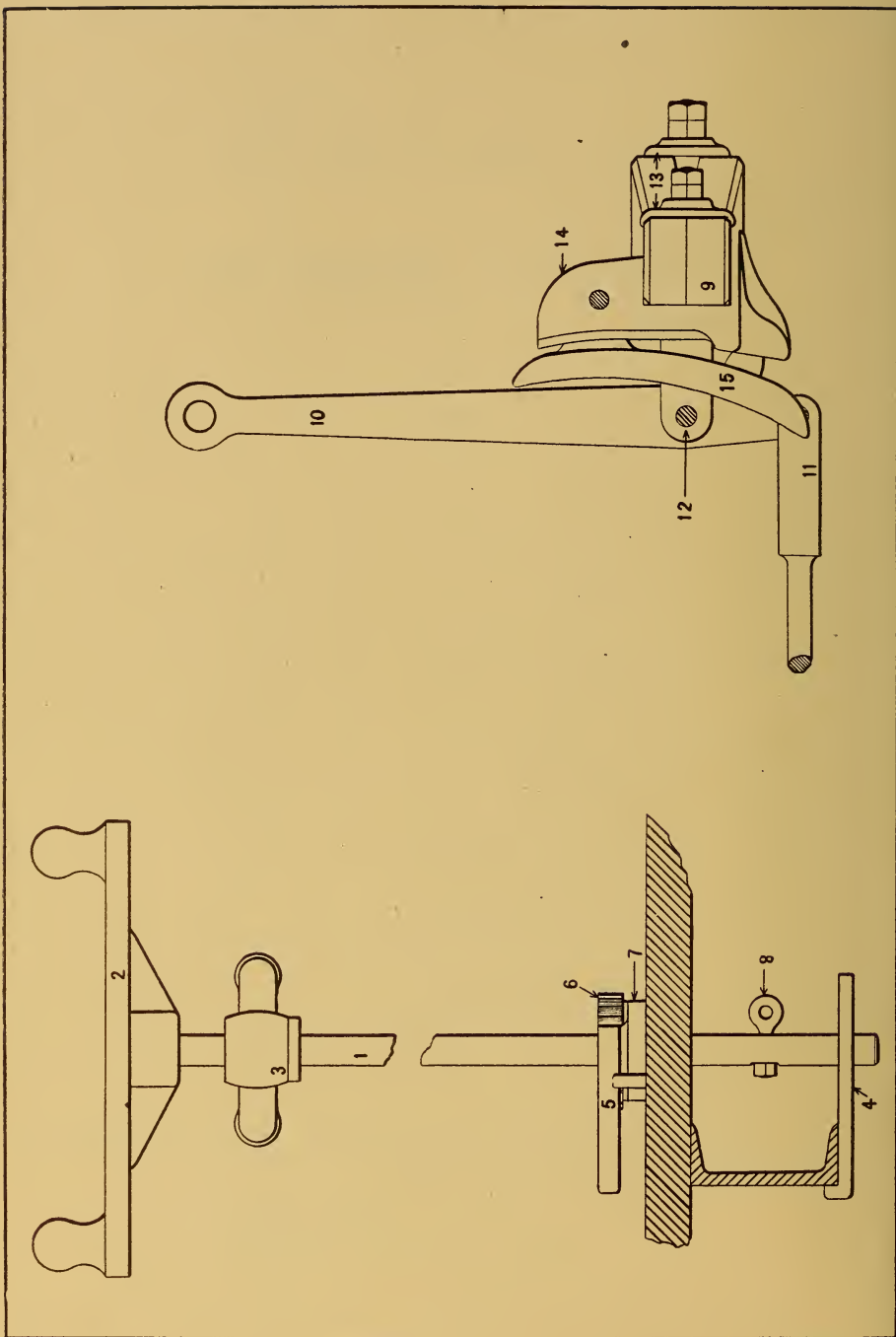
## Plate 73. Engrieves

---

Engrimanco . . .	1.	Frame.
Engrogne . . .	2.	Crosstie.
Engrosado . . .	3.	“ Brace.
Engrosamos . . .	4.	Pedestal.
Engrossed . . .	5.	“ Cap.
Engrossing . . .	6.	Equalizing Beam.
Engrotar . . .	7.	Spring.
Engrudabas . . .	8.	“ Link.
Engrudador . . .	9.	“ Seat.
Engrudara . . .	10.	Center Plate.
Engrueso . . .	11.	Frame Filling Piece.
Engrumecer . . .	12.	Side Bearing.
Engrumecio . . .	13.	Brake Hanger.
Engrumele . . .	14.	“ Clevis.
Engsichtig . . .	15.	Safety Chain Clevis.
Engsinn . . .	16.	Spring Link Washer.

In ordering parts for a single truck, the order should specify whether they are wanted for front or back truck.

# Plate 74





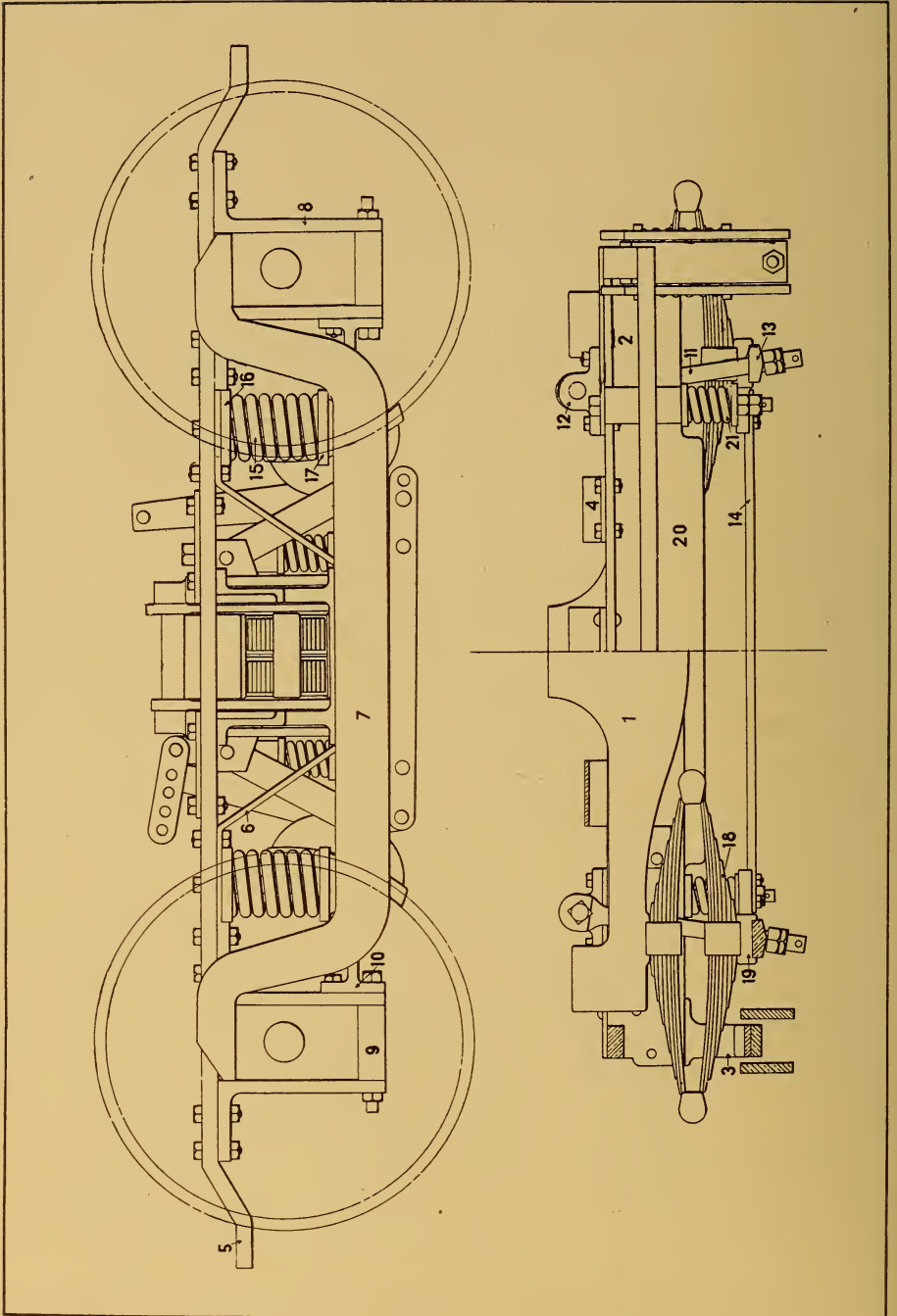
## Tender Brake Work

## Plate 74. Engsinnige

---

Engualdado . . .	1.	Shaft.
Engualdar . . .	2.	Handle.
Engualdeis . . .	3.	Hanger.
Engualdo . . .	4.	Step.
Enguantada . . .	5.	Pawl.
Enguantes . . .	6.	Ratchet.
Enguard . . .	7.	Plate.
Enguarding . . .	8.	Eye Bolt.
Enguenille . . .	9.	Beam.
Engueuser . . .	10.	Lever.
Enguia . . .	11.	“ Rod.
Enguicador . . .	12.	“ Jaw.
Enguicar . . .	13.	Washer.
Enguichado . . .	14.	Head.
Enguiche . . .	15.	Shoe.

# Plate 75

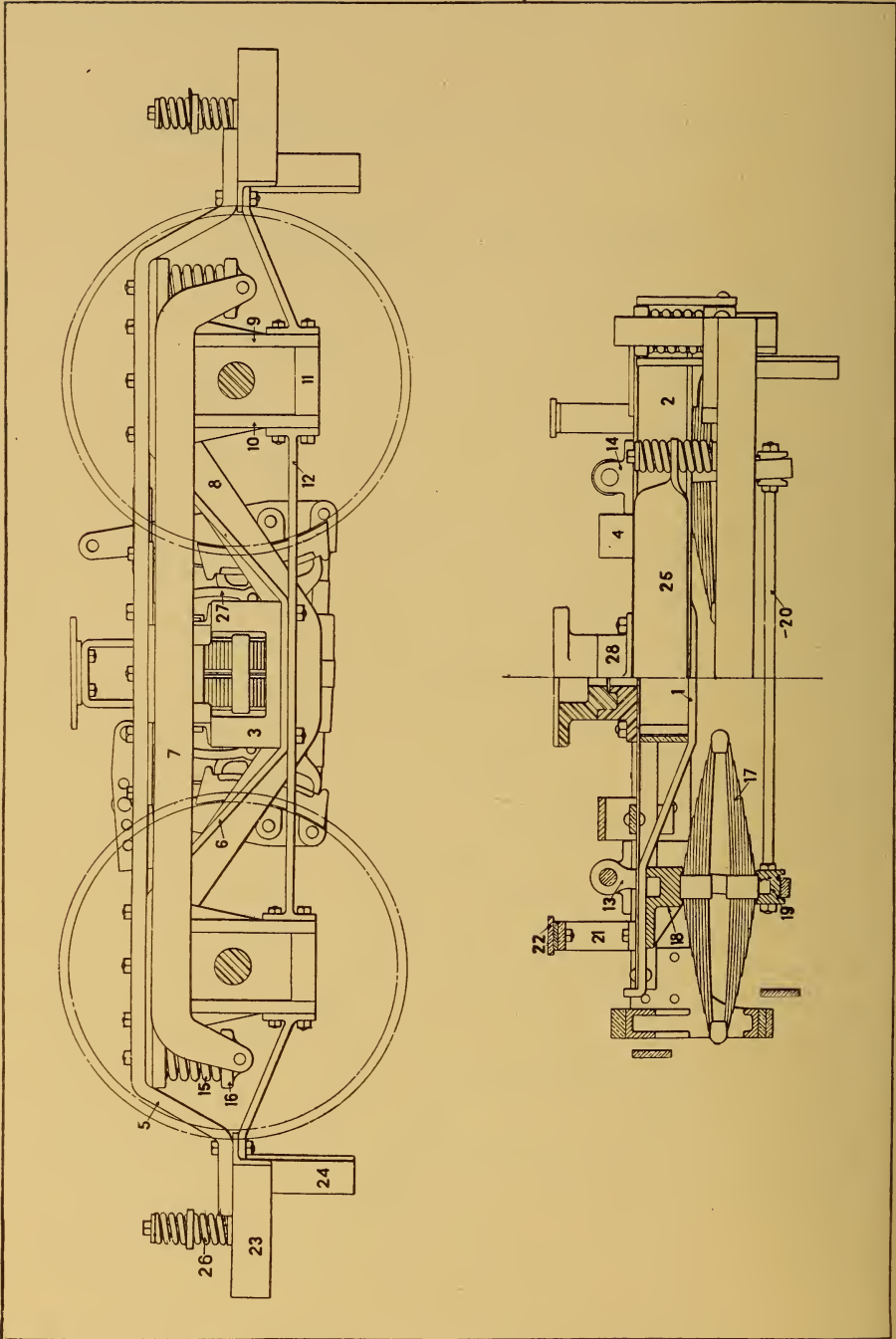


## Electric Truck for Inside Hung Motors

## Plate 75. Enguico

Enguijarro . . .	1.	Bolster.
Enguinos . . .	2.	Transom.
Enguizgado . . .	3.	“ End Filling Piece.
Enguizgo . . .	4.	“ Tie Plate.
Enguizgue . . .	5.	Truck Frame.
Engulfed . . .	6.	Truss Bar.
Engulfing . . .	7.	Equalizing Beam.
Engulfment . . .	8.	Pedestal.
Engulho . . .	9.	“ Cap.
Engulidor . . .	10.	“ Tie Bar.
Engulipar . . .	11.	Swing Link.
Engulir . . .	12.	“ “ Bearing.
Engulliais . . .	13.	“ Beam.
Engullidas . . .	14.	“ “ Crosstie.
Engulliste . . .	15.	Equalizing Beam Spring.
Engurria . . .	16.	“ “ “ Seat (Top).
Engweg . . .	17.	“ “ “ “ (Bottom).
Engyi . . .	18.	Bolster Spring.
Engyon . . .	19.	“ “ Seat.
Engyscope . . .	20.	Motor Suspension Bar.
Engystome . . .	21.	“ “ Spring.

# Plate 76

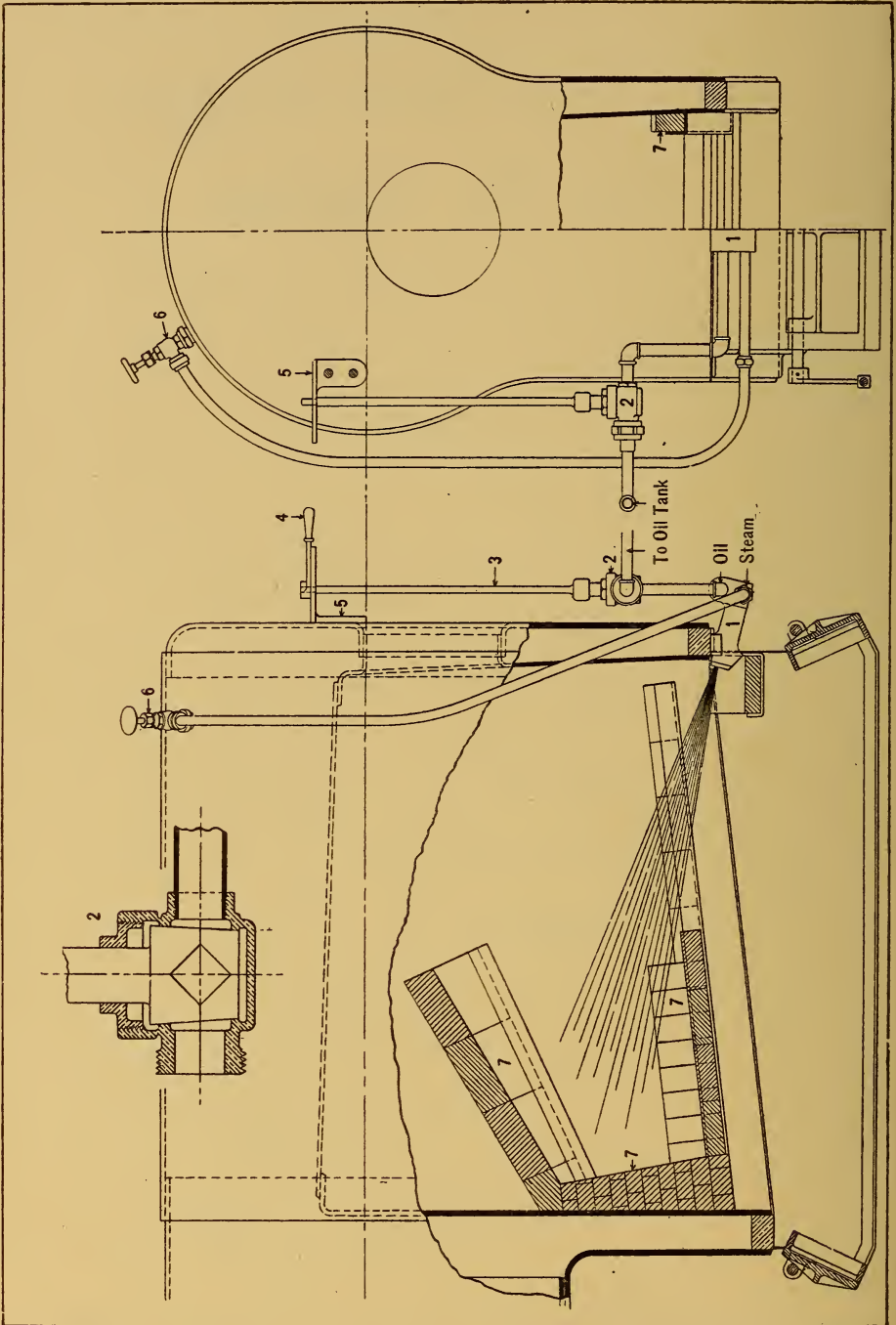


Electric Truck for Outside Hung Motors

Plate 76. Engyum

- 
- Enhable . . . 1. Bolster.
  - Enhabling . . . 2. Transom.
  - Enhache . . . 3. " End Filling Piece.
  - Enhaemon . . . 4. " Tie Plate.
  - Enhale . . . 5. Truck Frame.
  - Enhalsing . . . 6. Truss Bar.
  - Enhanced . . . 7. Equalizing Beam (Outside).
  - Enhancing . . . 8. " " (Inside).
  - Enh harbour . . . 9. Pedestal (Outside).
  - Enh hardened . . . 10. " (Inside).
  - Enh hardimes . . . 11. " Cap.
  - Enh hardiras . . . 12. " Tie Bar.
  - Enh arinado . . . 13. Swing Link.
  - Enh arinar . . . 14. " " Bearing.
  - Enh arineis . . . 15. Equalizing Beam Spring.
  - Enh arino . . . 16. " " " Seat.
  - Enh armonic . . . 17. Bolster Spring.
  - Enh arnache . . . 18. " " Seat (Top).
  - Enh atijaba . . . 19. " " " (Bottom).
  - Enh atijar . . . 20. " " " Tie Rod.
  - Enh atijo . . . 21. Side Bearing.
  - Enh ayeur . . . 22. " " Plate.
  - Enh earten . . . 23. End Frame.
  - Enh ebradas . . . 24. Rail Guard Bracket.
  - Enh ebrado . . . 25. Motor Suspension Bar.
  - Enh ebramos . . . 26. " " Spring.
  - Enh ebrar . . . 27. Brake Clevis.
  - Enh ebraron . . . 28. Center Plate.

# Plate 77

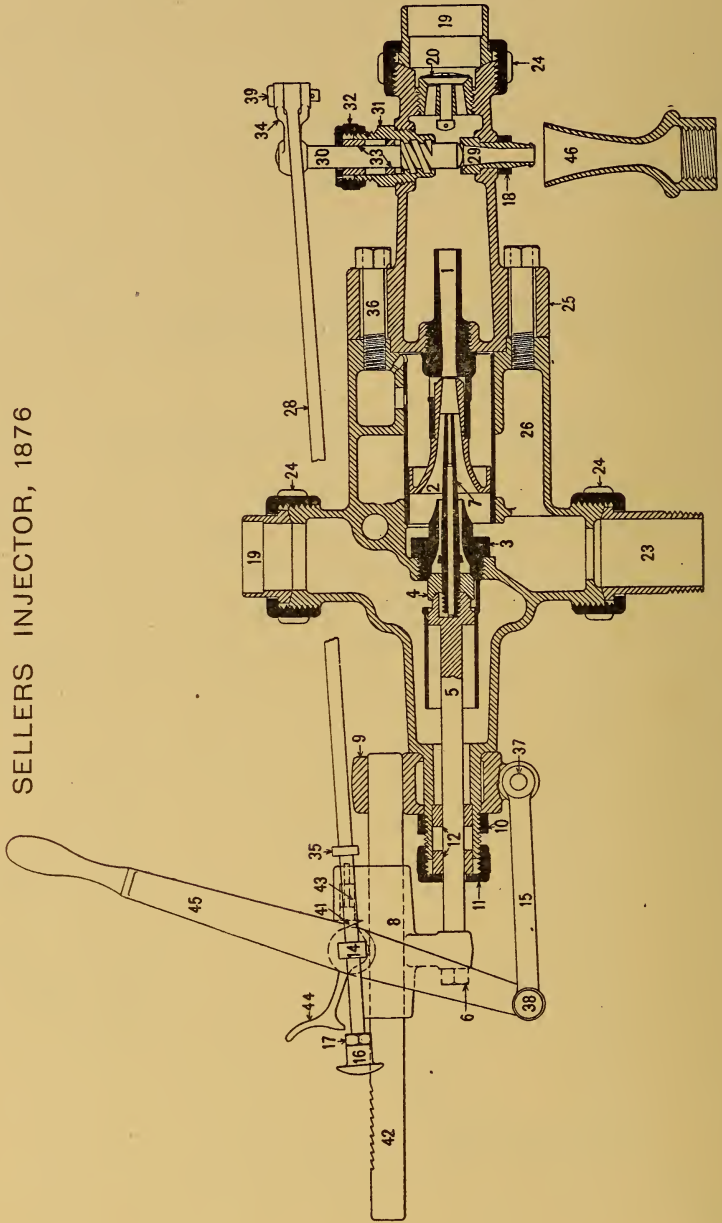


## Apparatus for Burning Fuel Oil

## Plate 77. Enhebreis

- 
- Enhedged . . 1. Oil Injector.  
Enhedging . . 2. " Cock.  
Enherbolar . . 3. " " Shaft.  
Enherbolo . . 4. " " " Handle.  
Enhestador . . 5. " " Quadrant.  
Enhestamos . . 6. " Injector Steam Valve.  
Enhestar . . 7. Fire Brick.

SELLERS INJECTOR, 1876





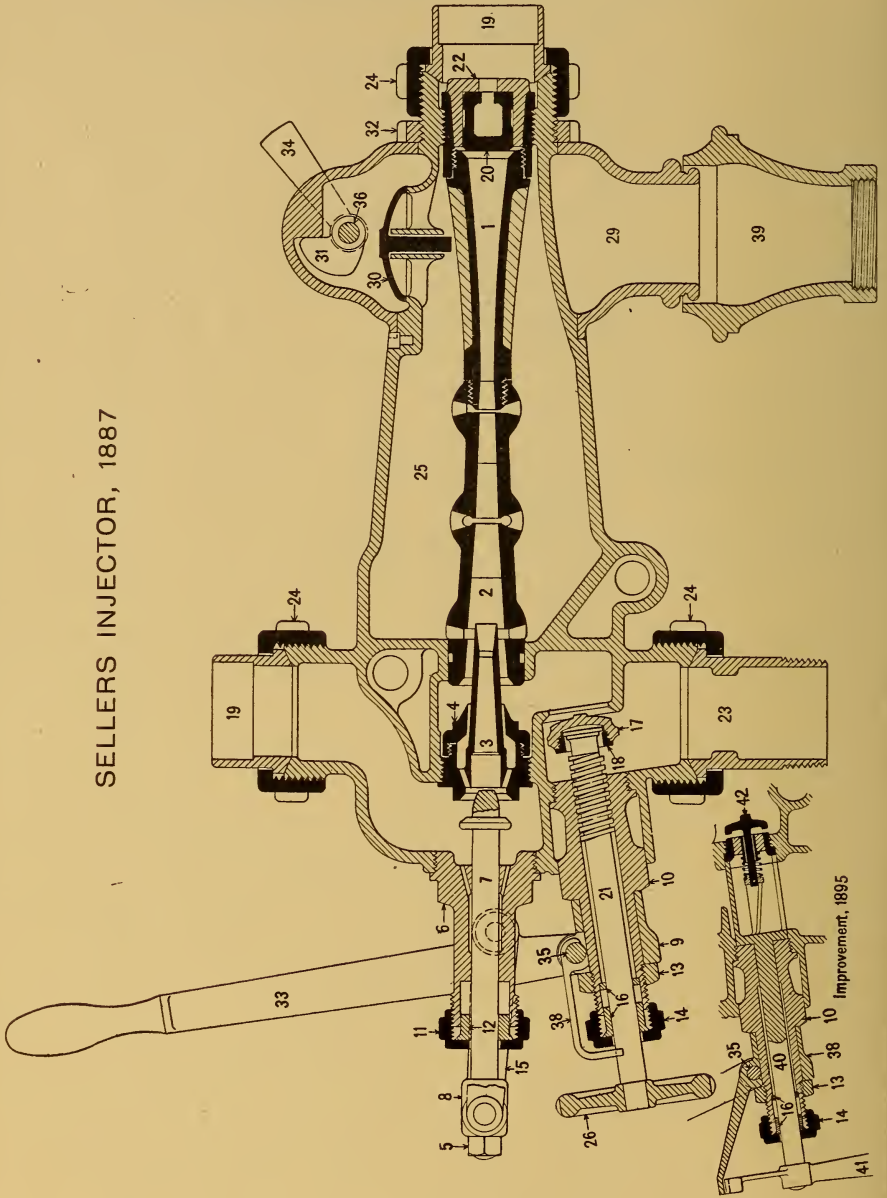
Sellers Injector, 1876  
**Plate 78. Enhestaron**

- Enhestases . . 1. Delivery Tube.
- Enheuder . . . 2. Combining Tube.
- Enhielado . . . 3. Steam Nozzle.
- Enhielar . . . 4. Valve on No. 7.
- Enhielo . . . . 5. Solid Spindle.
- Enhoramala . . 6. Nut on top of No. 5.
- Enhorta . . . . 7. Hollow Spindle.
- Enhuche . . . . 8. Crosshead.
- Enhuerado . . . 9. Collar on No. 26.
- Enhueraron . 10. Lock Nut for No. 9.
- Enhuiler . . . 11. Follower on No. 26.
- Enhunger . . . 12. Packing Rings under No. 11.
- Enhungered . 14. Fulcrum Pin.
- Enhydridem . 15. Link.
- Enhydro . . . . 16. Knob on end of No. 28.
- Enhydrobie . 17. Lock Nut for No. 16.
- Enhydrorum . 18. Nut on No. 29.
- Enhygros . . . 19. Plain Ring for Copper Pipe.
- Enicabant . . . 20. Check Valve.
- Enicabimus . 23. Union to Pipes.
- Enicocere . . . 24. Coupling Nut.
- Enicode . . . . 25. Lower Cylinder.
- Eniconette . . 26. Upper " "
- Eniconevre . 28. Connecting Rod.
- Enicostome . . 29. Waste Pipe.
- Enicotarse . . 30. Screw Valve.
- Enicure . . . . 31. Stuffing Box for No. 30.
- Enidride . . . . 32. Follower on No. 31.
- Eniellage . . . 33. Packing Rings under No. 32.
- Enigmar . . . . 34. Lever on No. 30.
- Enigmatico . . 35. Collar on No. 28.
- Enigmatist . . 36. Stud Bolts.
- Enigmatize . . 37. Pin through Nos. 9 and 15.
- Enigme . . . . 38. " " " 15 " 45.
- Enimous . . . . 39. " " " 28 " 34.
- Enimvero . . . 41. Pressure Foot.
- Eniousses . . . 42. Guide Rod.
- Enipei . . . . 43. Spring for No. 41.
- Enipeos . . . . 44. Latch.
- Enipeum . . . . 45. Starting Lever.
- Enisurorum . . 46. Funnel for Overflow.

In ordering parts for injector, give in all cases the maker's number stamped on the injector.

# Plate 79

SELLERS INJECTOR, 1887



## Sellers Injector, 1887

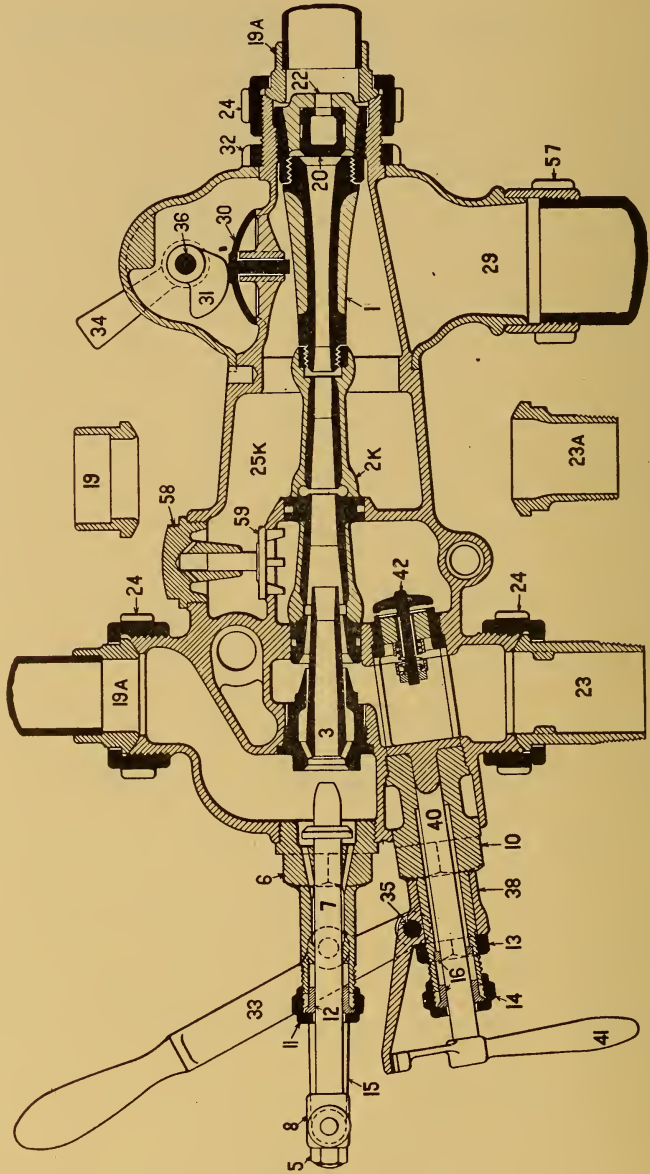
## Plate 79. Enitebatur

Enitebunt . . .	1. Delivery Tube.
Enitentem . . .	2. Combining Tube.
Enitentis . . .	3. Forcing Steam Nozzle.
Enithare . . .	4. Lifting " "
Enivrant . . .	5. Spindle Nut.
Enivrantes . . .	6. Stuffing Box for Spindle.
Enivrerais . . .	7. Spindle.
Enivriez . . .	8. Crosshead.
Enivrons . . .	9. Collar on No. 10.
Enixarum . . .	10. Stuffing Box for Water Valve.
Enixionem . . .	11. Follower for No. 6.
Enixionis . . .	12. Packing Ring in No. 6.
Enixo . . .	13. Lock Nut for No. 9.
Enjabegaba . . .	14. Follower for No. 10.
Enjabegues . . .	15. Links.
Enjabler . . .	16. Packing Ring in No. 10.
Enjabonado . . .	17. Water Valve.
Enjabonar . . .	18. Ring in No. 17.
Enjaboneis . . .	19. Plain Rings for Copper Pipe.
Enjabono . . .	20. Check Valve.
Enjaezadas . . .	21. Valve Stem for No. 17.
Enjaezado . . .	22. Guide for No. 20.
Enjaezar . . .	23. Plain Unions for Iron Pipes.
Enjaezaron . . .	24. Coupling Nuts.
Enjaezeis . . .	25. Injector Body.
Enjaezo . . .	26. Hand Wheel on No. 21.
Enjail . . .	29. Waste Pipe.
Enjailed . . .	30. Waste Valve.
Enjailing . . .	31. Cam for closing Waste Valve.
Enjalbega . . .	32. Jam Nut for No. 29.
Enjaler . . .	33. Starting Lever.
Enjalmada . . .	34. Lever on Cam Shaft.
Enjalmados . . .	35. Pin through No. 9 and No. 33.
Enjalmero . . .	36. Cam Shaft.
Enjalmo . . .	38. Index.
Enjambage . . .	39. Funnel for Overflow.
Enjamber . . .	40. Plug Water Valve.
Enjamberas . . .	41. Regulating Handle.
Enjambons . . .	42. Inlet Valve.

In ordering parts for injector, give in all cases the maker's number stamped on the injector.

# Plate 80

## SELLERS CLASS K INJECTOR FOR HOT WATER



Sellers Self-Acting Injector, Improved  
Class K for Hot Water

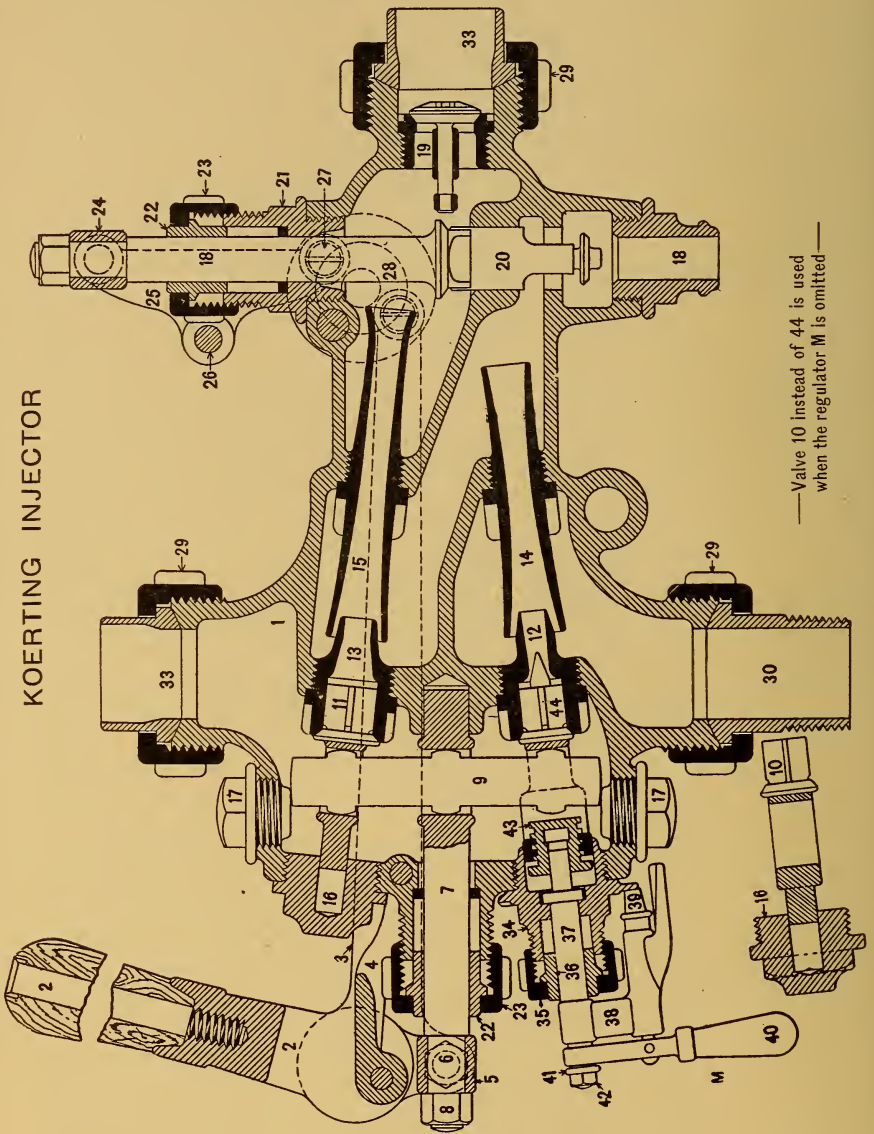
Plate 80. Enjambrado

Enjambrar . . .	1.	Delivery Tube.
Enjambreis . . .	2K.	Combining Tube.
Enjangado . . .	3.	Steam Nozzles.
Enjarcia . . .	5.	Spindle Nut.
Enjarciado . . .	6.	Steam Stuffing Box.
Enjarciara . . .	7.	Spindle.
Enjardinar . . .	8.	Crosshead.
Enjardino . . .	10.	Water Stuffing Box.
Enjaretado . . .	11.	Follower.
Enjaretar . . .	12.	Packing Ring.
Enjareteis . . .	13.	Lock Nut.
Enjarrete . . .	14.	Follower for No. 10.
Enjauger . . .	15.	Links.
Enjaulaban . . .	16.	Packing Ring.
Enjauladas . . .	19.	Plain Ring for Copper Pipe.
Enjaulado . . .	19a.	Reducing Ring for Copper Pipe.
Enjaular . . .	20.	Check Valve.
Enjaulemos . . .	22.	Guide for No. 20.
Enjaulo . . .	23.	Plain Union for Iron Pipe.
Enjeba . . .	23a.	Reducing Union for Iron Pipe.
Enjebabas . . .	24.	Coupling Nuts.
Enjebado . . .	25K.	Injector Body.
Enjebasen . . .	27.	Wrench.
Enjergaban . . .	29.	Waste Pipe.
Enjergais . . .	30.	Waste Valve.
Enjergo . . .	31.	Waste Valve Cam.
Enjergue . . .	32.	Jam Nut for No. 29.
Enjoado . . .	33.	Starting Lever.
Enjoailler . . .	34.	Cam Lever.
Enjoamente . . .	35.	Pin, No. 38 and 33.
Enjoar . . .	36.	Cam Shaft.
Enjoativo . . .	37.	Washer on 36.
Enjoignais . . .	38.	Collar and Index.
Enjoigniez . . .	40.	Plug Water Valve.
Enjoignons . . .	41.	Regulating Handle.
Enjoindras . . .	42.	Inlet Valve.
Enjoindre . . .	57.	Iron Overflow.
Enjoined . . .	57a.	Copper Overflow.
Enjoining . . .	58.	Cap over Hot Water Valve.
Enjoiment . . .	59.	Hot Water Valve.

In ordering parts for injector, give in all cases the maker's number stamped on the injector.

# Plate 81

## KOERTING INJECTOR



## Koerting Injector

# Plate 81. Enjolais

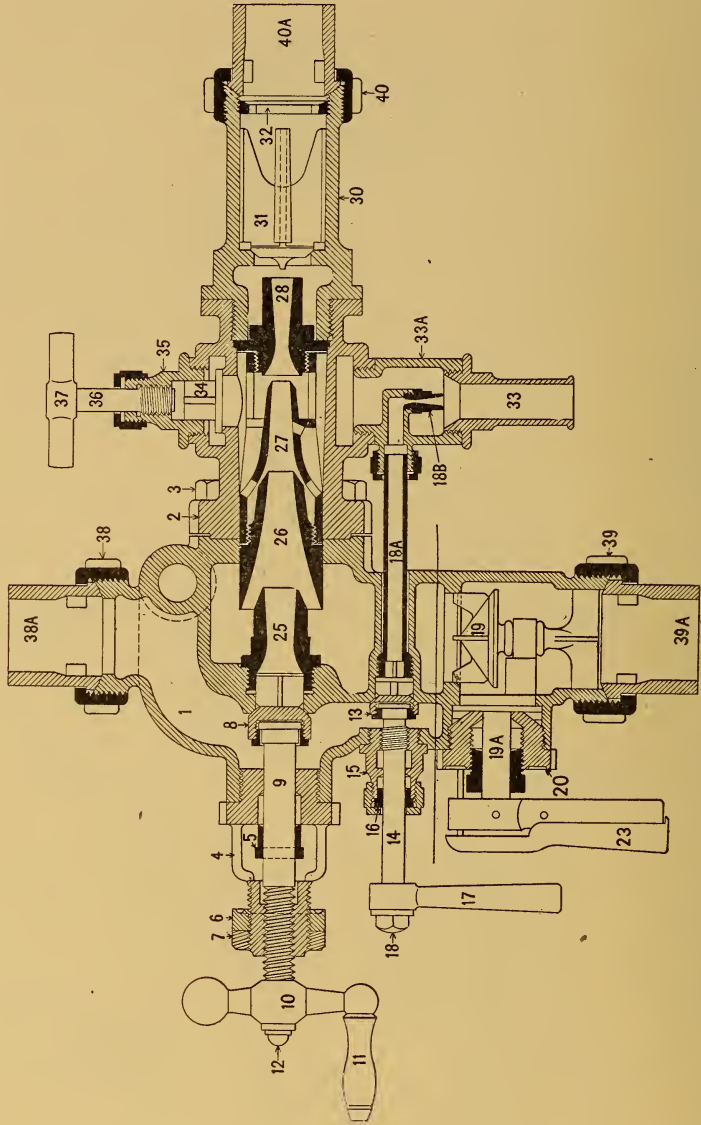
Enjolan	. . . 1.	Body.
Enjolasses	. . . 2.	Handle Lever Complete.
Enjolerai	. . . 3.	Side Rods, Right and Left.
Enjoleriez	. . . 4.	Connecting Link and Pins.
Enjoleront	. . . 5.	Crosshead for Starting Shaft.
Enjoleur	. . . 6.	Nuts for Crosshead.
Enjoliver	. . . 7.	Starting Shaft.
Enjolivre	. . . 8.	Nuts for Starting and Overflow Shafts.
Enjolons	. . . 9.	Yoke Bar.
Enjoncher	. . . 10.	Lower Steam Valve.
Enjonquer	. . . 11.	Upper " "
Enjoo . . .	. . . 12.	Lower " Nozzle.
Enjoyabais	. . . 13.	Upper " "
Enjoyamos	. . . 14.	Lower Water "
Enjoyaron	. . . 15.	Upper " "
Enjoyases	. . . 16.	" Front Body Cap. (Also Lower.)
Enjoyeis	. . . 17.	Top and Bottom Body Caps.
Enjoyelado	. . . 18.	Overflow Nozzle.
Enjoyements	. . . 19.	Check Valve Complete.
Enjoyes	. . . 20.	Overflow Valve Complete.
Enjuagado	. . . 21.	Overflow Stuffing Box.
Enjuagamos	. . . 22.	Followers for Stuffing Boxes.
Enjuagar	. . . 23.	Nuts for Stuffing Boxes.
Enjuagaron	. . . 24.	Crosshead for Overflow Valve.
Enjuagueis	. . . 25.	Connecting Links for Overflow Valve.
Enjugada	. . . 26.	Pin for Connecting Links for Overflow Valve.
Enjugadero	. . . 27.	Screws " " " " " "
Enjugadora	. . . 28.	Bell Cranks for Overflow Valve.
Enjugando	. . . 29.	Coupling Nuts.
Enjugare	. . . 30.	Unions for Iron Pipe.
Enjugaseis	. . . 31.	Spanner Wrench.
Enjugeraie	. . . 33.	Unions for Copper Pipe.
Enjugemos	. . . 34.	Throttle Valve Stuffing Box.
Enjuiciais	. . . 35.	Nut for Stuffing Box.
Enjuicie	. . . 36.	Follower for Stuffing Box.
Enjuncaban	. . . 37.	Spindle for Throttle Valve.
Enjuncado	. . . 38.	Arm for Latch on Throttle Valve.
Enjuncais	. . . 39.	Latch.
Enjundia	. . . 40.	Handle.
Enjundioso	. . . 41.	Washer.
Enjuta	. . . 42.	Nut.
Enjutos	. . . 43.	Adjusting Screw.
Enkelinnen	. . . 44.	Throttle Valve.

In ordering parts for injector, give in all cases the maker's number stamped on the injector.

If injectors do not have the regulator M, the parts including Nos. 34 to 44 are not wanted, and plain valve and cap substituted. Cap No. 16. Lower Steam Valve No. 10.

# Plate 82

## MONITOR INJECTOR





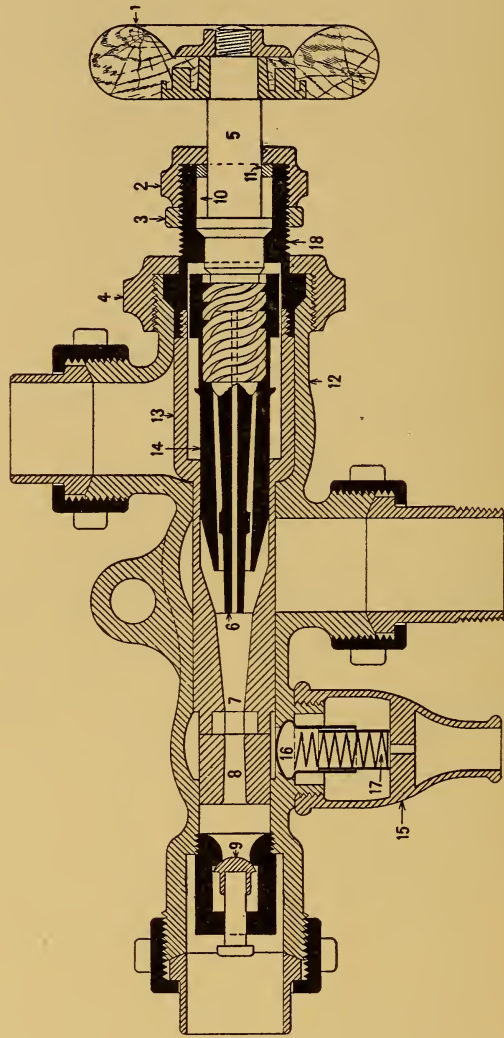
## Monitor Injector

### Plate 82. Enkels

Enkelvoud . . . . .	1.	Body (Back Part).
Enkennel . . . . .	2.	" (Front Part).
Enkernels . . . . .	3.	" Screw.
Enkindling . . . . .	4.	Yoke.
Enklauw . . . . .	5.	" Gland.
Enklauwen . . . . .	6.	" Packing Nut.
Enkratiten . . . . .	7.	" Lock Nut.
Enkrinit . . . . .	8.	Steam Valve Disc and Nut.
Enkystado . . . . .	9.	" " Spindle.
Enkyste . . . . .	10.	" " Handle.
Enlabiado . . . . .	11.	" " Rubber Handle.
Enlabiamos . . . . .	12.	" " Top Nut.
Enlabiar . . . . .	13.	Jet Valve Disc and Nut.
Enlabiaron . . . . .	14.	" " Spindle.
Enlabiases . . . . .	15.	" " Bonnet and Nut.
Enlabusar . . . . .	16.	" " Gland.
Enlacador . . . . .	17.	" " Lever Handle.
Enlacadura . . . . .	18.	" " Top Nut.
Enlacement . . . . .	18A.	" Tube.
Enlacerait . . . . .	18B.	Lifting Nozzle.
Enlacieriez . . . . .	19.	Water Valve.
Enlacons . . . . .	19A.	Eccentric Spindle.
Enladrillo . . . . .	20.	Water Valve Bonnet.
Enlaidir . . . . .	23.	" " Lever Handle.
Enlaidisse . . . . .	25.	Steam Nozzle.
Enlaidites . . . . .	26.	Intermediate Nozzle.
Enlaivar . . . . .	27.	Condensing "
Enlaminar . . . . .	28.	Delivery "
Enlangour . . . . .	30.	Line Check.
Enlapado . . . . .	31.	" " Valve.
Enlarding . . . . .	32.	Stop Ring.
Enlargedly . . . . .	33.	Overflow Nozzle
Enlarne . . . . .	33A.	" Chamber with Nut.
Enlarmure . . . . .	34.	Heater Cock Check.
Enlassurance . . . . .	35.	" " Bonnet and Nut.
Enlazadas . . . . .	36.	" " Spindle.
Enlazadora . . . . .	37.	" " T Handle.
Enlazaseis . . . . .	38.	Coupling Nut, Steam End.
Enlazasen . . . . .	38A.	Tail Piece, " "
Enlazemos . . . . .	39.	Coupling Nut, Water End.
Enleague . . . . .	39A.	Tail Piece, " "
Enleaguig . . . . .	40.	Coupling Nut, Delivery End.
Enleiar . . . . .	40A.	Tail Piece, " "

In ordering parts for injector, give in all cases the maker's number stamped on the injector.

ECLIPSE INJECTOR



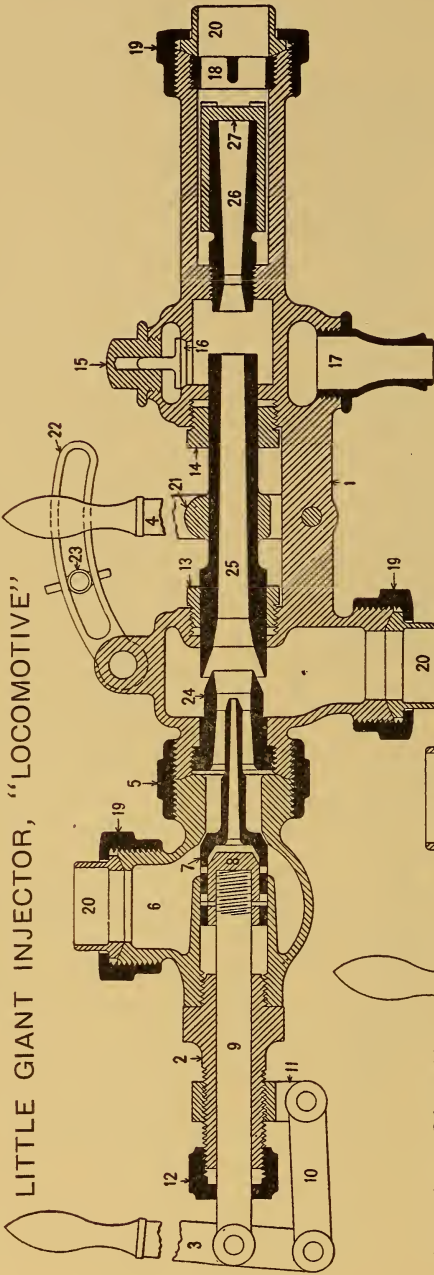
## Eclipse Injector

## Plate 83. Enleio

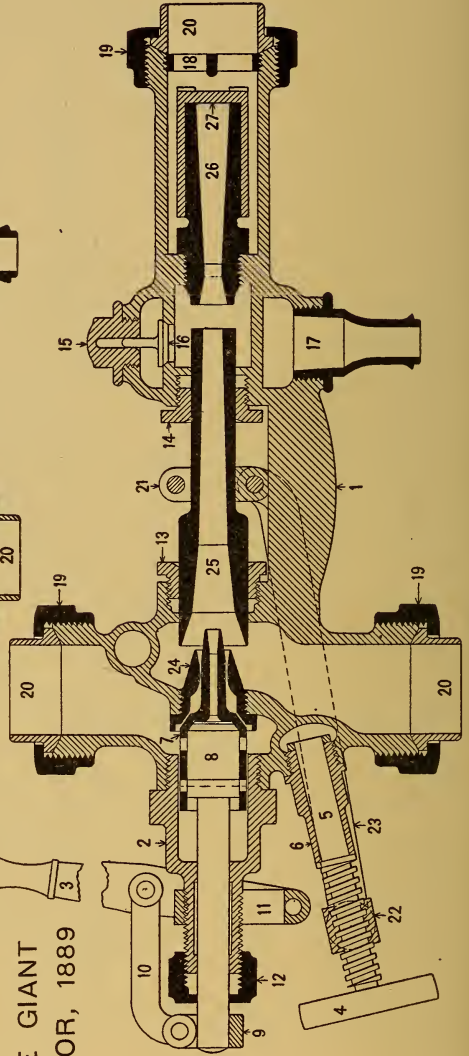
- 
- Enlengthen . . . 1. Handle of Regulating Valve.  
 Enlenzaba . . . 2. Small Nut holding in Stem.  
 Enlenzados . . . 3. Jam Nut.  
 Enlenzando . . . 4. Main Nut holding Injector in Shell.  
 Enlenzaron . . . 5. Stem.  
 Enlenzases . . . 6. Lifting Jet.  
 Enlenzeis . . . 7. Combining Tube.  
 Enlerdar . . . 8. Discharge Tube.  
 Enlevacao . . . 9. Check Valve.  
 Enlevage . . . 10. Space for Packing.  
 Enlevais . . . 11. Follower for confining Packing.  
 Enlevasses . . . 12. Shell.  
 Enlevront . . . 13. Body.  
 Enliasse . . . 14. Adjusting Tube regulating Water and Steam Supply.  
 Enlico . . . 15. Body of Overflow Valve.  
 Enlight . . . 16. Overflow Valve.  
 Enlighten . . . 17. " " Spring.  
 Enlighting . . . 18. Threaded End of Body.

In ordering parts for injector, give in all cases the maker's number stamped on the injector.

LITTLE GIANT INJECTOR, "LOCOMOTIVE"



LITTLE GIANT INJECTOR, 1889



## Plate 84.

### Little Giant Injector, "Locomotive" Enligner

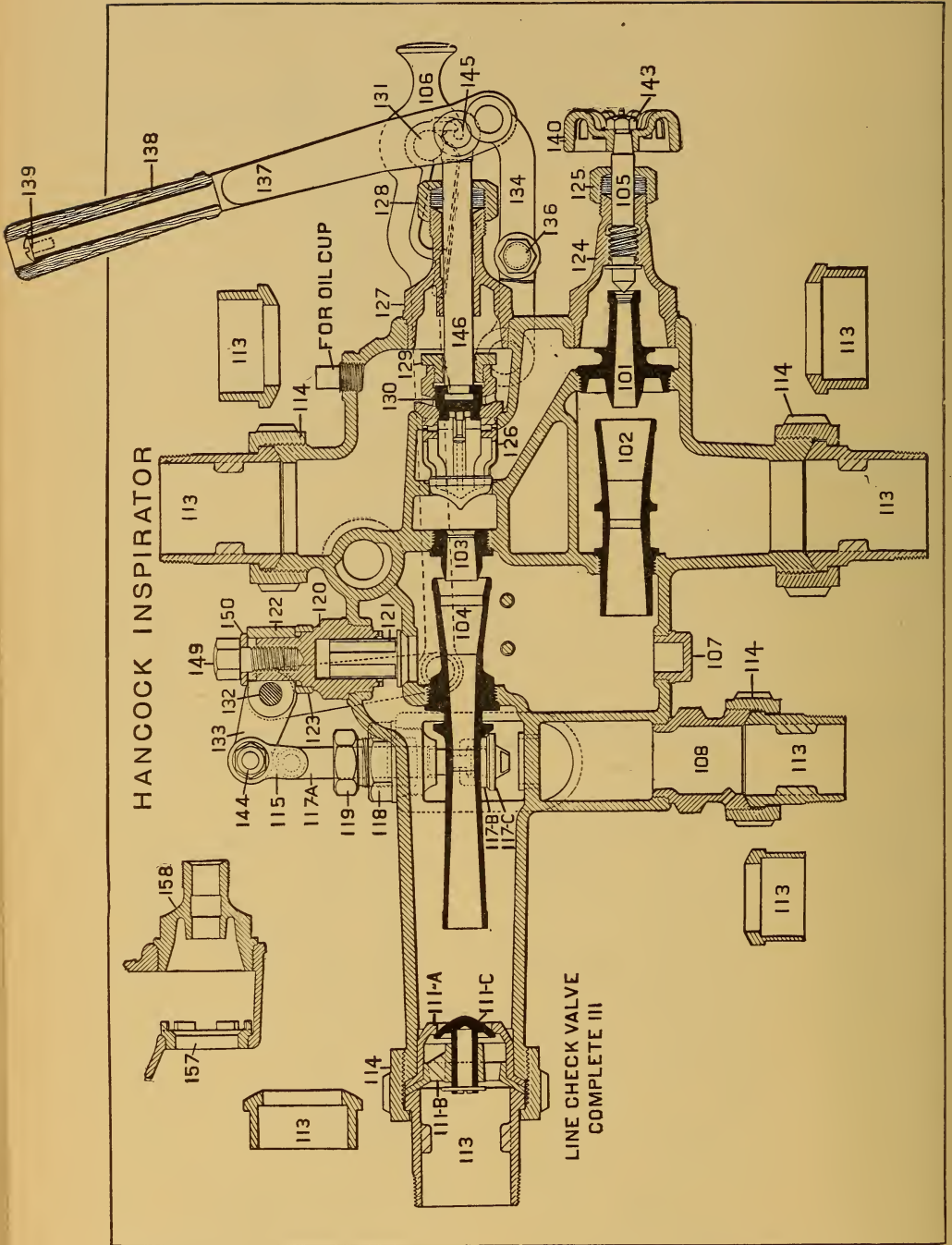
Enlink . . . . .	1.	Body.
Enlinked . . . . .	2.	Stuffing Box.
Enlinking . . . . .	3.	Starting Lever.
Enlist . . . . .	4.	Injector Lever.
Enlisting . . . . .	5.	Right and Left Nut.
Enlistment . . . . .	6.	Starting Valve Body.
Enliven . . . . .	7.	Main Steam Valve.
Enlivened . . . . .	8.	Jet Valve.
Enlivening . . . . .	9.	" " Stem.
Enlodabais . . . . .	10.	Starting Valve Link.
Enlodadas . . . . .	11.	Fulcrum.
Enlodado . . . . .	12.	Stuffing Box Nut.
Enlodamos . . . . .	13.	Large Packing Nut.
Enlodar . . . . .	14.	Small " "
Enlodarian . . . . .	15.	Overflow Cap.
Enlodaron . . . . .	16.	" Valve.
Enlodeis . . . . .	17.	" Nozzle.
Enloquecer . . . . .	18.	Check Valve Stop.
Enloquezco . . . . .	19.	Coupling Nut.
Enlosados . . . . .	20.	Swivel.
Enloso . . . . .	21.	Combining Tube Clamp.
Enlourecer . . . . .	22.	Quadrant.
Enlouzar . . . . .	23.	Thumb Screw.
Enlumineur . . . . .	24.	Steam Tube.
Enluminons . . . . .	25.	Combining Tube.
Enlutabais . . . . .	26.	Discharge Tube.
Enlutado . . . . .	27.	Check Valve.

### Little Giant Injector, 1889 Enlutamos

Enlutar . . . . .	1.	Body.
Enlutarian . . . . .	2.	Stuffing Box.
Enlutaron . . . . .	3.	Starting Lever.
Enmaderare . . . . .	4.	Adjusting Wheel.
Enmadraba . . . . .	5.	" " Stem.
Enmadrados . . . . .	6.	" Stem Holder.
Enmadraron . . . . .	7.	Main Steam Valve.
Enmagracia . . . . .	8.	Jet Valve.
Enmagrezca . . . . .	9.	" " Clamp.
Enmallaban . . . . .	10.	Starting Valve Link.
Enmallado . . . . .	11.	Fulcrum.
Enmallar . . . . .	12.	Stuffing Box Nut.
Enmallemos . . . . .	13.	Large Packing Nut.
Enmangaban . . . . .	14.	Small " "
Enmangado . . . . .	15.	Overflow Cap.
Enmangar . . . . .	16.	" Valve.
Enmantada . . . . .	17.	" Nozzle.
Enmantando . . . . .	18.	Check Valve Stop.
Enmantare . . . . .	19.	Coupling Nut.
Enmantases . . . . .	20.	Swivel.
Enmaranado . . . . .	21.	Combining Tube Clamp.
Enmaranar . . . . .	22.	Crosshead.
Enmaraneis . . . . .	23.	Side Bars.
Enmarble . . . . .	24.	Steam Tube.
Enmaromado . . . . .	25.	Combining Tube.
Enmaromar . . . . .	26.	Discharge Tube.
Enmaromeis . . . . .	27.	Check Valve.

In ordering parts for injector, give in all cases the maker's number stamped on the injector.

# Plate 85



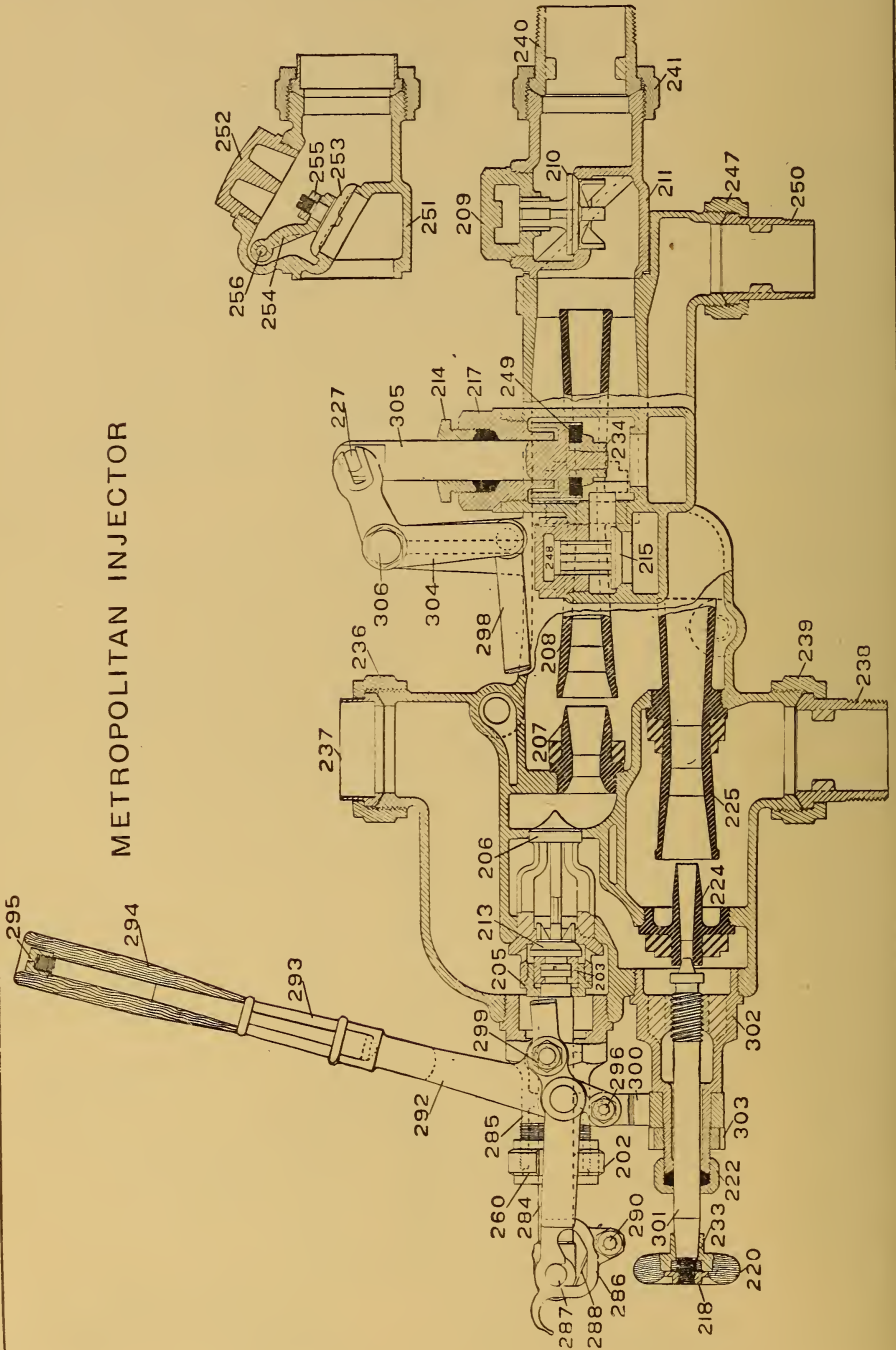
## Hancock Inspirator

# Plate 85. Enmaromo

Enmascaro . . .	101.	Lifter Steam Nozzle.	
Enmendaba . . .	102.	“ Tube.	
Enmendador . . .	103.	Forcer, Steam Nozzle.	
Enmendamos . . .	104.	“ Combining Tube.	
Enmendaron . . .	105.	Regulating Valve Spindle.	
Enmentres . . .	106.	Connecting Rod.	
Enmews . . .	107.	Clean-out Plug for Body.	
Enmienda . . .	108.	Overflow Nozzle.	
Enmities . . .	111.	Line Check Valve Complete.	
Enmoheceis . . .	111A.	Case for 111.	
Enmohecer . . .	111B.	Cage “ “	
Enmohecido . . .	111C.	Valve for 111.	
Enmoves . . .	113.	Nipple for Steam Connection,	} Furnished for Either Copper or Iron Pipe.
Enmudecias . . .	113.	“ “ Suction “	
Enmudecido . . .	113.	“ “ Delivery “	
Enmudezco . . .	113.	“ “ Overflow “	
Enmured . . .	114.	Coupling Nut Steam Connection.	
Enmuring . . .	114.	“ “ Suction “	
Ennaeorum . . .	114.	“ “ Delivery “	
Ennaeos . . .	114.	“ “ Overflow “	
Ennaeteris . . .	115.	Connecting Link for Final Overflow Valve.	
Ennaeum . . .	116.	Steel Pin for 115.	
Ennarrheur . . .	117.	Final Overflow Valve, Complete.	
Ennasser . . .	117A.	“ “ “ Stem.	
Ennastrar . . .	117B.	Nut for 117.	
Ennatar . . .	117C.	Disc “ “	
Ennation . . .	118.	Bonnet for Final Overflow Valve.	
Enneacanto . . .	119.	Packing Nut for Final Overflow Valve.	
Enneacordo . . .	120.	Bonnet for Intermediate Overflow Valve.	
Enneacruno . . .	121.	Intermediate Overflow Valve.	
Enneadici . . .	122.	Holder for Overflow Valve Crank.	
Enneadicos . . .	123.	Adjusting Ring.	
Enneaeteri . . .	124.	Bonnet for Regulating Valve.	
Enneafillo . . .	125.	Packing Nut for Regulating Valve.	
Enneagonal . . .	126.	Forcer Steam Valve.	
Enneagono . . .	127.	Bonnet for Steam Valve.	
Enneander . . .	128.	Packing Nut for Steam Valve.	
Enneandria . . .	129.	Coupling Nut for 126.	
Enneandro . . .	130.	Lifter Steam Valve.	
Enneapogon . . .	131.	Steel Stud for Connecting Rod.	
Enneapyle . . .	132.	“ “ “ 122 and 133.	
Enneatic . . .	133.	Crank for Overflow Valve.	
Enneatical . . .	134.	Side Strap, R. H.	
Ennegreco . . .	135.	“ “ L. H.	
Ennegrezco . . .	136.	Steel Bolt for 134 and 135.	
Enneige . . .	137.	Lever.	
Ennemi . . .	138.	Wood Handle for 137.	
Ennense . . .	139.	Screw for 137	
Ennensibus . . .	140.	Rubber Wheel for 105.	
Ennensis . . .	143.	Steel Screw “ “	
Ennensium . . .	144.	“ Bolt “ 115	
Enneoctone . . .	145.	“ Pin Connecting 137 and 146.	
Ennevoar . . .	146.	Steam Valve Stem.	
Ennia . . .	149.	Cap Screw for 120.	
Ennianista . . .	150.	Iron Washer for 120.	
Enniano . . .	157.	Steam Valve Seat.	
Ennianorum . . .	158.	Bonnet for Steam Valve.	

In ordering parts for injector, give in all cases the maker's number stamped on the injector.

METROPOLITAN INJECTOR





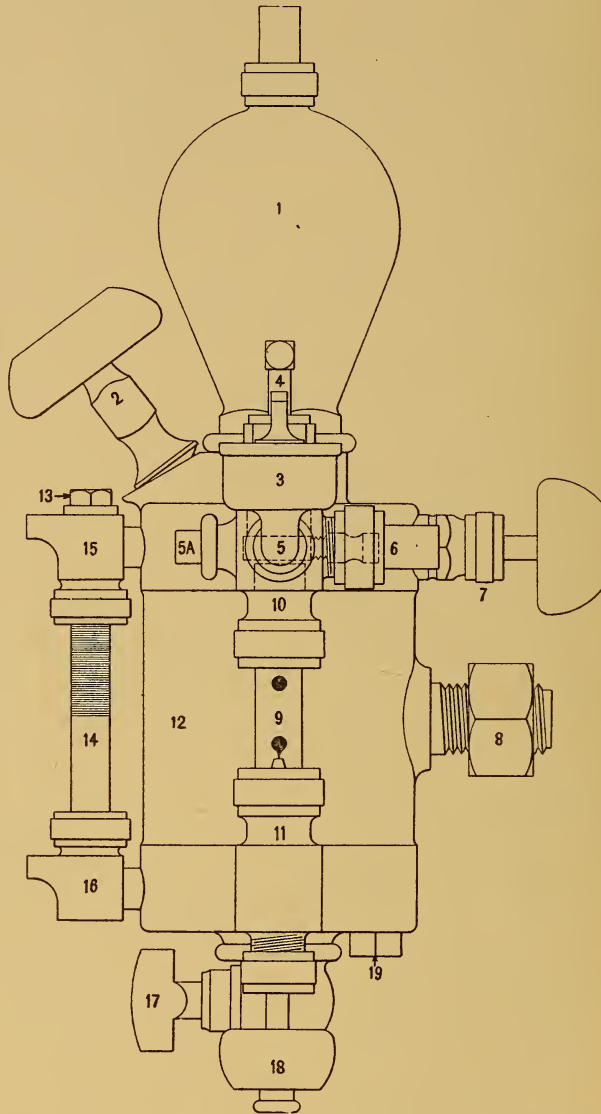
## Metropolitan Locomotive Injector Plate 86. Ennoblecer

Ennoblezco . . . . .	202.	Packing Nut for No. 285.
Ennoblir . . . . .	203.	Champ Ring.
Ennobliras . . . . .	205.	Steam Swivel Ring.
Ennoblites . . . . .	206.	Valve.
Ennodius . . . . .	207.	Forcing Steam Jet.
Ennoeme . . . . .	208.	Combining Tube.
Ennoergie . . . . .	209.	Check Valve Cap.
Ennoicye . . . . .	210.	Check Valve.
Ennoitar . . . . .	211.	Check Valve Casing.
Ennomus . . . . .	213.	Auxiliary Steam Valve.
Ennosigaeo . . . . .	214.	Packing Gland for No. 305.
Ennovelar . . . . .	215.	Overflow Valve.
Ennoyage . . . . .	217.	Center Piece.
Ennuvear . . . . .	218.	Regulating Valve Handle Nut.
Ennuvais . . . . .	220.	Wheel.
Ennuyante . . . . .	222.	Packing Nut for No. 302.
Ennuyasses . . . . .	224.	Lifting Steam Jet.
Ennuyeris . . . . .	225.	Combining Tube.
Ennuyeux . . . . .	227.	Overflow Valve Pin.
Ennuyons . . . . .	231.	Stud Bolt.
Ennychie . . . . .	233.	Regulating Valve Wheel Disc.
Enodabamus . . . . .	234.	Nut for Overflow Disc.
Enodabilis . . . . .	236.	Union Nut, Steam End.
Enodandos . . . . .	237.	Tail Pipe, Steam End.
Enodantium . . . . .	238.	Suction End.
Enodaremus . . . . .	239.	Union Nut, Suction End.
Enodation . . . . .	240.	Tail Pipe, Delivery End.
Enodator . . . . .	241.	Union Nut, Delivery End.
Enodatoris . . . . .	245.	Nut for Stud Bolts.
Enodatorum . . . . .	247.	Union Nut for Overflow Nozzle.
Enodaturam . . . . .	248.	Overflow Valve Cap.
Enodatuross . . . . .	249.	Disc for Overflow Valve.
Enodaveris . . . . .	250.	Tail Pipe for Overflow Nozzle.
Enodavero . . . . .	260.	Steam Packing Gland.
Enoding . . . . .	284.	Valve Stem.
Enodios . . . . .	285.	Center Piece.
Enoiseles . . . . .	286.	Side Links.
Enojaba . . . . .	287.	Pin for Steam Stem.
Enojabamos . . . . .	288.	Spring.
Enojadas . . . . .	289.	Outflow Valve Crank Bolt Nut.
Enojadizas . . . . .	290.	Bolt for Side Links.
Enojamento . . . . .	291.	Nut for Bolt for Side Links.
Enojamos . . . . .	292.	Lever.
Enojariasis . . . . .	293.	Handle Rod.
Enojarian . . . . .	294.	Wood Handle.
Enojaron . . . . .	295.	Handle Nut.
Enojosas . . . . .	296.	Fulcrum Bolt.
Enojoso . . . . .	297.	Nut for Fulcrum Bolt.
Enojuelo . . . . .	298.	Connecting Bar.
Enologia . . . . .	299.	Nut for Connecting Bar.
Enologista . . . . .	300.	Fulcrum Collar.
Enomancia . . . . .	301.	Regulating Steam Stem.
Enometro . . . . .	302.	Center Piece.
Enomotach . . . . .	303.	Fulcrum Nut.
Enomphalo . . . . .	304.	Overflow Valve Crank.
Enoncer . . . . .	305.	Stem.
Enonceriez . . . . .	306.	Crank Bolt.

In ordering parts for injector, give in all cases the maker's number stamped on the injector.

# Plate 87

## NATHAN SIGHT FEED CYLINDER LUBRICATOR



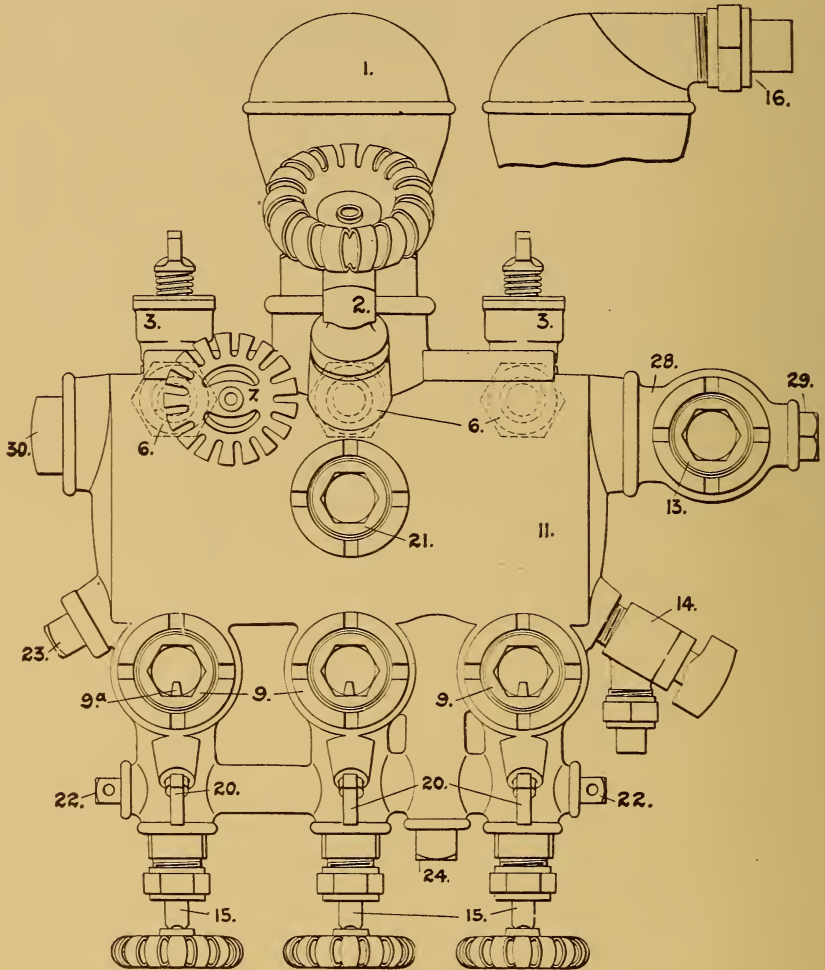
Nathan Sight Feed Cylinder Lubricator

Plate 87. Enoncerons

- Enonciatif . . . 1. Condenser.
- Enonciez . . . 2. Filling Plug.
- Enophilo . . . 3. Auxiliary Oiler.
- Enophobia . . . 4. Safety Valve.
- Enophorias . . . 5. Reducing Plug.
- Enopliens . . . 5A. Blow-off “
- Enoplocere . . . 6. Delivery Nut and Coupling.
- Enoplops . . . 7. Water Valve.
- Enopta . . . 8. Stud Nut.
- Enorchibus . . . 9. Sight Feed Glass.
- Enorme . . . 10. Upper Sight Bracket and Nut.
- Enormement, 11. Lower “ “ “ “
- Enormezza . . . 12. Body.
- Enormidade . . . 13. Gauge Glass Plug.
- Enormiorem . . . 14. “ Glass.
- Enormioris . . . 15. Upper Gauge Bracket and Nut.
- Enormity . . . 16. Lower “ “ “ “
- Enormous . . . 17. Waste Cock.
- Enormously . . . 18. Regulating Valve.
- Enoscopio . . . 19. Bottom Plug.

# Plate 88

## NATHAN TRIPLE SIGHT FEED CYLINDER LUBRICATOR BULL'S EYE TYPE 166-F-3



Nathan Triple Sight Feed Cylinder Lubricator  
Bull's Eye Type 166-F-3

Plate 88. Enostose

- 
- Enotabamur . . . 1. Condenser.  
 Enotaremur . . . 2. Filling Plug.  
 Enotatas . . . 3. Hand Oiler.  
 Enotatura . . . 5. Reducing Plug.  
 Enotaturis . . . 6. Delivery Nut and Tailpiece.  
 Enotescis . . . 7. Water Valve.  
 Enotesco . . . 8. Stud Nut.  
 Enotomies . . . 9. Sight Feed Glass and Casing.  
 Enotomy . . . 9A. Feed Nozzle.  
 Enotria . . . 11. Body.  
 Enotuerunt . . . 13. Gauge Glass and Casing  
 Enouage . . . 14. Waste Cock.  
 Enoueur . . . 15. Regulating Valve.  
 Enouricar . . . 16. Top Connection.  
 Enpatron . . . 17. Equalizing Pipe.  
 Enpatroned . . . 18. Oil Pipe.  
 Enpierces . . . 19. Water Pipe.  
 Enquerais . . . 20. Sight Feed Drain Valve.  
 Enquerant . . . 21. Reserve Glass and Casing.  
 Enquerir . . . 22. Cleaning Plug (Body).  
 Enquerriez . . . 23. Body Plug.  
 Enquerront . . . 24. Oil Pipe Plug.  
 Enquest . . . 28. Gauge Glass Bracket.  
 Enquester . . . 29. Cleaning Plug (Gauge Glass).  
 Enquesting . . . 30. Gauge Glass Cap.

# Plate 89

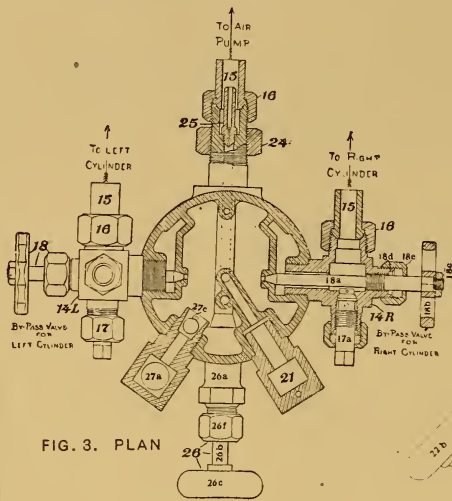


FIG. 3. PLAN

PLAN VIEW

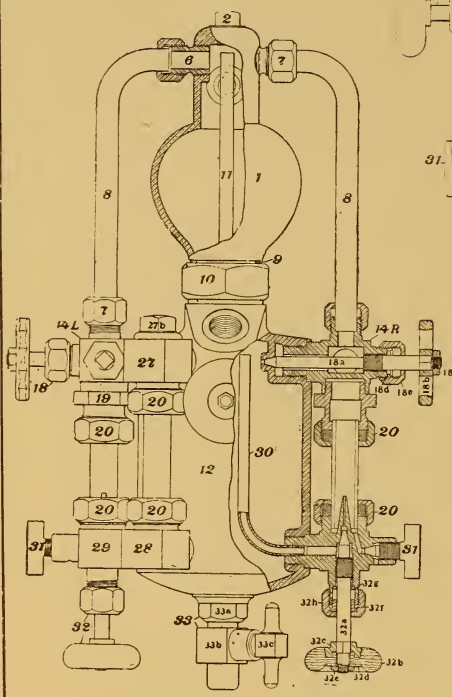


FIG. 1. FRONT ELEVATION

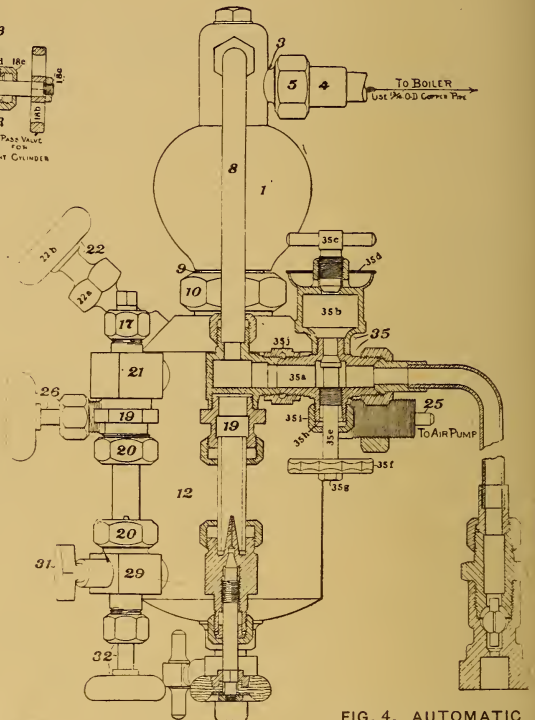


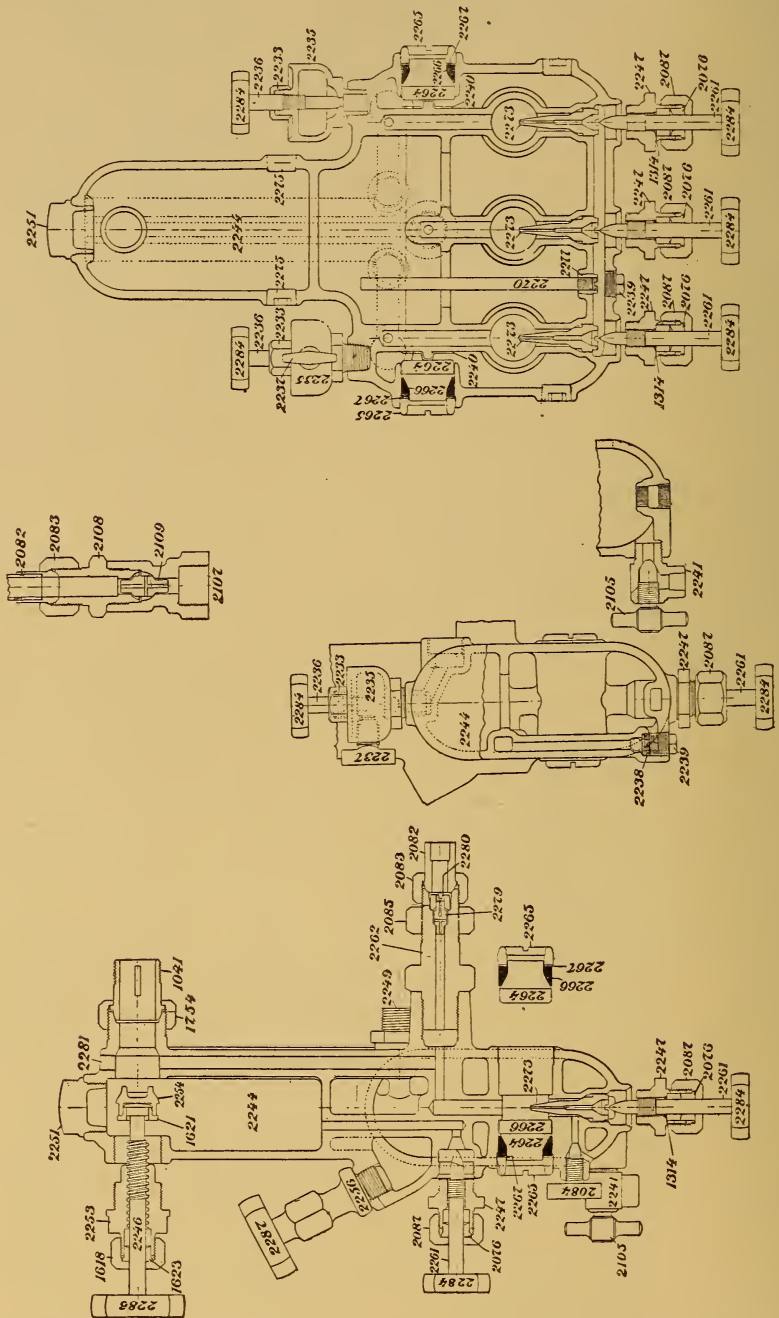
FIG. 2  
SIDE ELEVATION

FIG. 4. AUTOMATIC  
STEAM CHEST VALVE

Enquiciado . . . . .	1.	Condenser.
Enquiciar . . . . .	2.	" " Plug.
Enquicéis . . . . .	3.	Boiler Nipple
Enquicio . . . . .	4.	" " Tail Pipe.
Enquicken . . . . .	5.	" " " " Nut.
Enquiers . . . . .	6.	Equalizing Tube Nipple.
Enquimes . . . . .	7.	" " " " Nut.
Enquistado . . . . .	8.	" " Tube.
Enquistar . . . . .	9.	Condenser Tail Pipe.
Enquisto . . . . .	10.	" " " " Nut.
Enraciner . . . . .	11.	Air Brake Equalizing Tube.
Enrageais . . . . .	12.	Oil Reservoir.
Enrageant . . . . .	13.	Water Tube, complete.
Enragions . . . . .	14R.	Upper Feed Arm, Right.
Enraivecer . . . . .	14L.	" " " " Left.
Enraleceis . . . . .	15.	Tail Pipe.
Enraleci . . . . .	16.	" " Nut.
Enramabais . . . . .	17.	Automatic Safety Valve, complete.
Enramada . . . . .	17A.	Stem.
Enramados . . . . .	17B.	Check.
Enramarian . . . . .	17C.	Bush Ring.
Enramaron . . . . .	17D.	Packing Nut.
Enrameis . . . . .	18.	By-Pass Valve, R or L Cylinder, complete.
Enramer . . . . .	18A.	Stem.
Enrancar . . . . .	18B.	" Handle.
Enranciado . . . . .	18C.	" " Nut.
Enranciéis . . . . .	18D.	" " Bush Ring.
Enrancio . . . . .	18E.	" " Packing Nut.
Enrange . . . . .	19.	Extension Sleeve.
Enranked . . . . .	20.	Packing Nut.
Enranking . . . . .	21.	Upper Air Brake Arm.
Enraps . . . . .	22.	Filler Plug, complete.
Enrareces . . . . .	22A.	" Plug.
Enrarecias . . . . .	22B.	" " Handle.
Enrarecido . . . . .	23.	By-Pass Valve for Air Brake, complete.
Enrarezco . . . . .	23A.	Center Piece.
Enrastraba . . . . .	23B.	Stem.
Enrastrar . . . . .	23C.	Handle.
Enrastro . . . . .	23D.	" Nut.
Enravish . . . . .	23E.	Packing Nut.
Enravished . . . . .	24.	Support Arm Nut.
Enrayasen . . . . .	25.	Air-Brake Nozzle.
Enrayasses . . . . .	26.	Water Valve, complete.
Enrayement . . . . .	26A.	Center Piece.
Enrayemos . . . . .	26B.	Stem.
Enrayeras . . . . .	26C.	Handle.
Enrayo . . . . .	26F.	Packing Nut.
Enrayoir . . . . .	27.	Upper Gauge Arm, complete.
Enredaba . . . . .	27A.	" " Arm.
Enredadera . . . . .	27B.	" " " Packing.
Enredamos . . . . .	27C.	" " " Ball Check.
Enredarian . . . . .	28.	Lower Gauge Arm, complete.
Enredeis . . . . .	29.	" Feed Arm.
Enredijo . . . . .	30.	Oil Tube.
Enredosas . . . . .	31.	Vent Stem.
Enredoso . . . . .	32.	Regulating Valve, complete.
Enregelar . . . . .	32A.	Stem.
Enrehojaba . . . . .	32B.	Handle.
Enrehobar . . . . .	32C.	" Plate.
Enrehojeis . . . . .	32D.	" Washer.
Enrehoyo . . . . .	32E.	" " Nut.
Enrejada . . . . .	32F.	Gland.
Enrejados . . . . .	32G.	Bush Ring.
Enrejaseis . . . . .	32H.	Packing Nut.
Enrejasen . . . . .	33.	Drain Valve, complete.
Enrejemos . . . . .	33A.	" " Seat.
Enrenant . . . . .	33B.	" " Body.
Enrenoire . . . . .	33C.	" " Stem.

Detroit No. 3-C  
Locomotive  
Lubricator  
Plate 89  
Enqueter

# Plate 90





Detroit No. 21 Locomotive Lubricator

Plate 90. Enresinado

Enresinar . . . . .	1041.	1-inch Tail Pipe.
Enrestar . . . . .	1314.	Feed Stem Ring.
Enrevesado . . . . .	1618.	Steam Valve Packing Nut.
Enrheum . . . . .	1621.	" " Disc Lock Nut.
Enrheumed . . . . .	1623.	" " Gland.
Enrheuming . . . . .	1754.	1-inch Tail Nut.
Enrhumais . . . . .	2076.	Feed Valve Gland.
Enrhumiez . . . . .	2082.	Tail Pipe.
Enrhumions . . . . .	2083.	" Nut.
Enrhythmos . . . . .	2084.	Vent Stems.
Enrich . . . . .	2085.	Support Arm Jamb Nut.
Enrichetta . . . . .	2087.	Feed Valve Stem Nuts.
Enrichimes . . . . .	2105.	Drain Stem.
Enrichir . . . . .	2107.	Steam Chest Valve Body.
Enrichiras . . . . .	2108.	" " " Cap.
Enrichment . . . . .	2109.	" " " Check, $\frac{5}{64}$ inches.
Enrieldados . . . . .	2233.	Hand Oiler, Packing Nut.
Enrielaron . . . . .	2235.	" " Body.
Enrielases . . . . .	2236.	" " Stem.
Enrieleis . . . . .	2237.	" " Filler Plug.
Enripen . . . . .	2238.	Water Check Stop.
Enripened . . . . .	2239.	$\frac{1}{16}$ Plugs.
Enripening . . . . .	2240.	Gauge Glass Reflector.
Enripiadas . . . . .	2241.	Drain Valve Body.
Enripiado . . . . .	2246.	Steam Valve Stem.
Enripiar . . . . .	2247.	Feed Valve Center Piece.
Enripiasen . . . . .	2249.	Tallow Pipe " "
Enripiemos . . . . .	2251.	Condenser Plug.
Enripio . . . . .	2253.	Steam Valve Center Piece.
Enriquecer . . . . .	2254.	" " Disc.
Enriquezco . . . . .	2256.	Filler Plug.
Enriscadas . . . . .	2261.	Feed Valve Stem.
Enriscado . . . . .	2262.	Support Arm.
Enriscamos . . . . .	2264.	Sight Feed Glass.
Enrisque . . . . .	2265.	Feed Glass Packing Ring.
Enrisqueis . . . . .	2266.	Rubber Packing.
Enristreis . . . . .	2267.	Feed Glass Washer.
Enritmo . . . . .	2270.	Oil Tube.
Enrived . . . . .	2273.	Feed Nozzle.
Enriving . . . . .	2277.	Oil Tube Bushing.
Enrobage . . . . .	2279.	Air Brake Check.
Enrobing . . . . .	2280.	Check Seat.
Enrocabas . . . . .	2284.	Regulating Valve Handle.
Enrocado . . . . .	2285.	Hand Oiler Handle.
Enrocasis . . . . .	2286.	Steam Valve Handle.
Enrocher . . . . .	2287.	Filler Handle.

UNITED STATES METALLIC PACKING FOR PISTON RODS

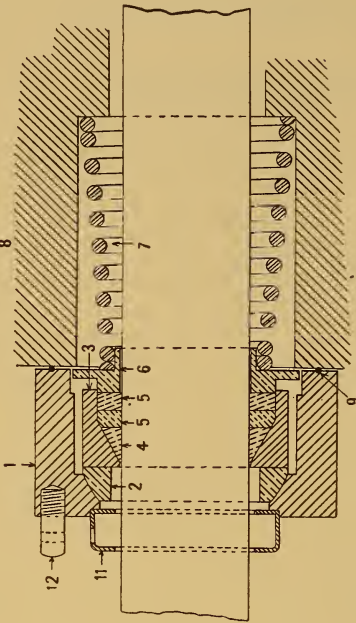


Fig. 1

JEROME METALLIC PACKING FOR PISTON RODS

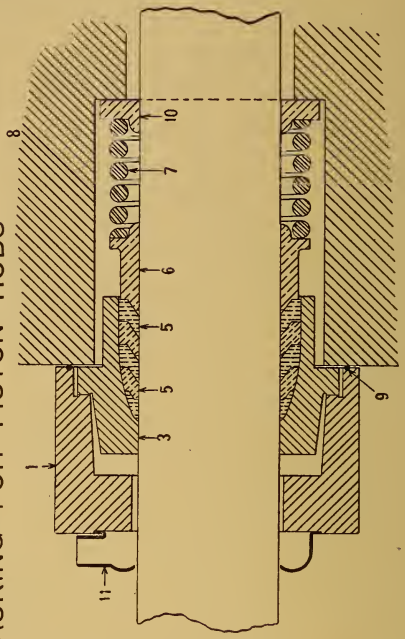
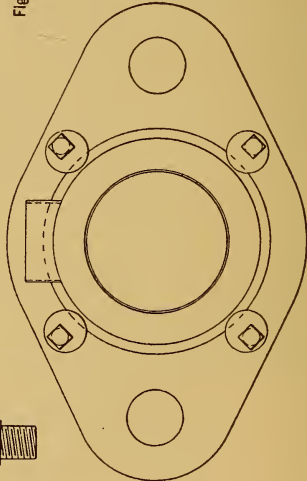
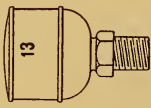
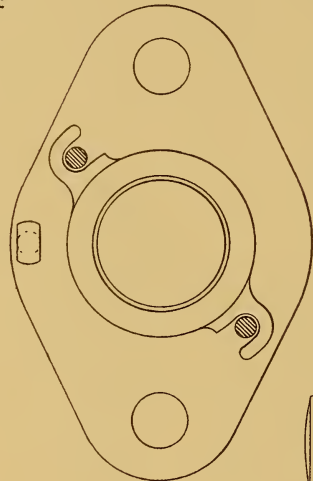


Fig. 2



Metallic Piston Rod Packing

Plate 91. Enrockment

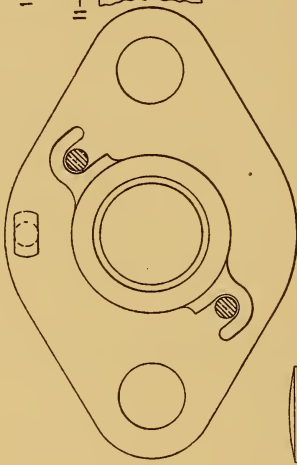
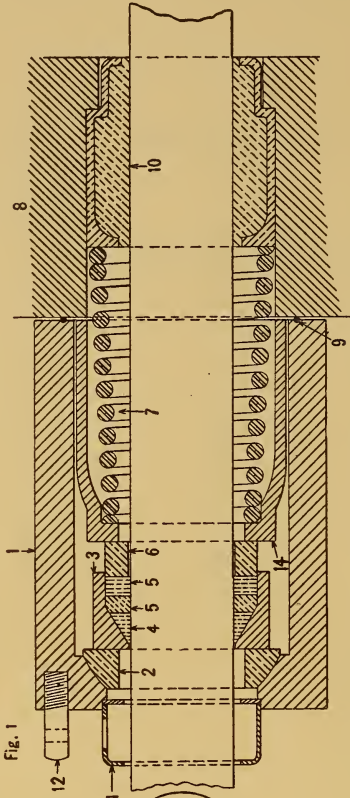
FIG. 1.—Enroco

FIG. 2.—Enrodabais

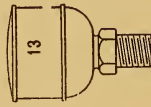
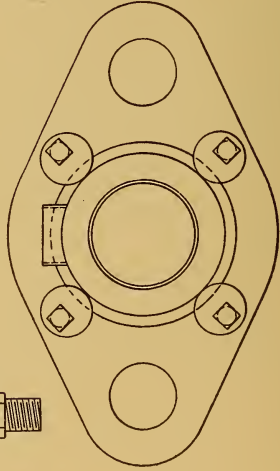
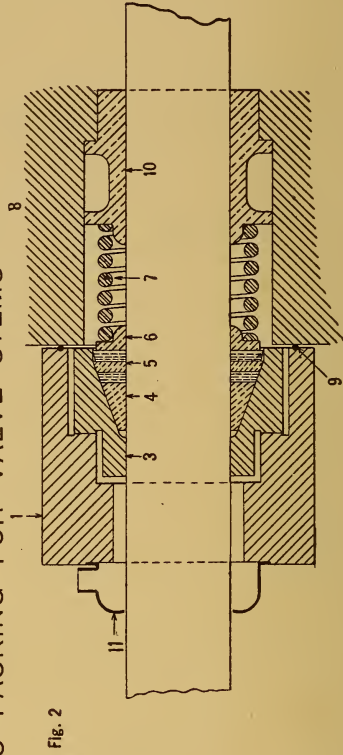
- Enrodada . . . 1. Packing Case.
- Enrodaron . . . 2. Ball Joint.
- Enrodelado . . . 3. Vibrating Cup.
- Enrodilhar . . . 4. Babbitt Ring.
- Enrodrigar . . . 5. “ “
- Enrodrigo . . . 6. Follower.
- Enrojeceis . . . 7. Coil Spring.
- Enrojecer . . . 8. Stuffing Box.
- Enrojecido . . . 9. Copper Wire Joint.
- Enrojezco . . . 10. Neck Ring.
- Enrol . . . . . 11. Swab Holder.
- Enrolar . . . . . 12. Oil Cup Bracket.
- Enroleriez . . . 13. “ Cup.

In ordering repairs, give in all cases the number stamped on packing case.

UNITED STATES METALLIC PACKING FOR VALVE STEMS



JEROME METALLIC PACKING FOR VALVE STEMS



Metallic Valve Stem Packing

Plate 92. Enroleront

FIG. 1.—Enrolions

FIG. 2.—Enrolladas

- Enrolled . . . 1. Packing Case.
- Enrolleis . . . 2. Ball Joint.
- Enrolling . . . 3. Vibrating Cup.
- Enrolment . . . 4. Babbitt Ring.
- Enronqueci . . . 5. “ “
- Enroot . . . 6. Follower.
- Enrooted . . . 7. Coil Spring.
- Enrooting . . . 8. Stuffing Box.
- Enroque . . . 9. Copper Wire Joint.
- Enroqueis . . . 10. Bushing.
- Enroquemos . . . 11. Swab Holder.
- Enroscada . . . 12. Oil Cup Bracket.
- Enroscados . . . 13. “ Cup.
- Enroscando . . . 14. Preventer.

In ordering repairs, give in all cases the number stamped on packing case.



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