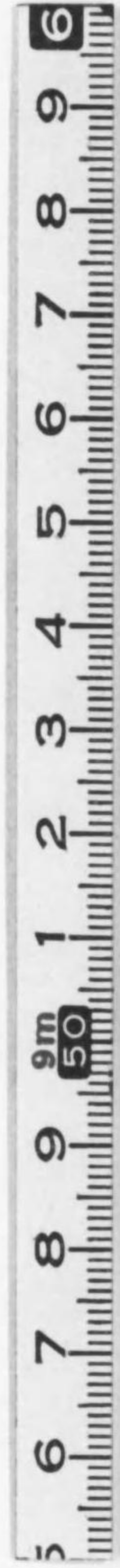
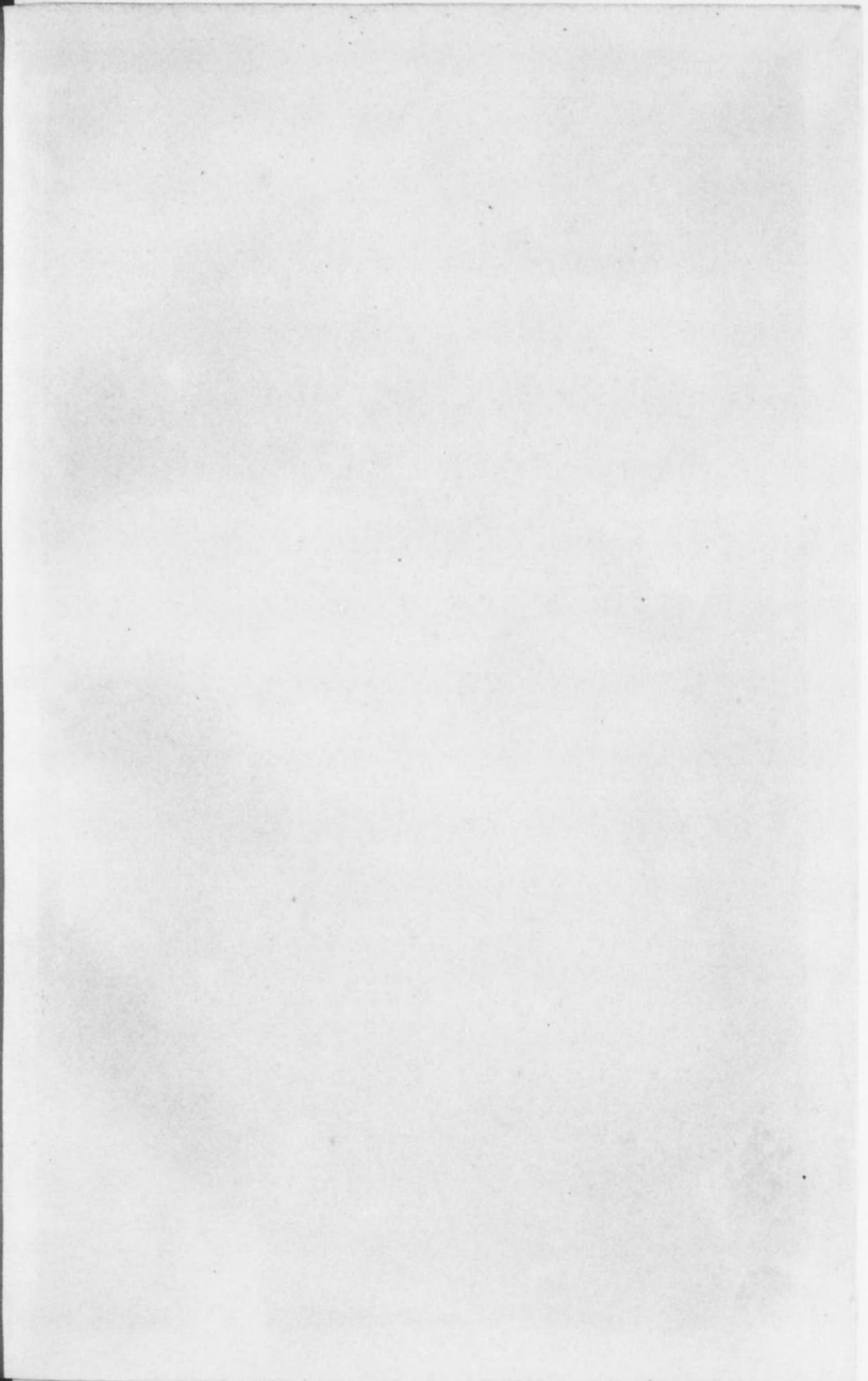
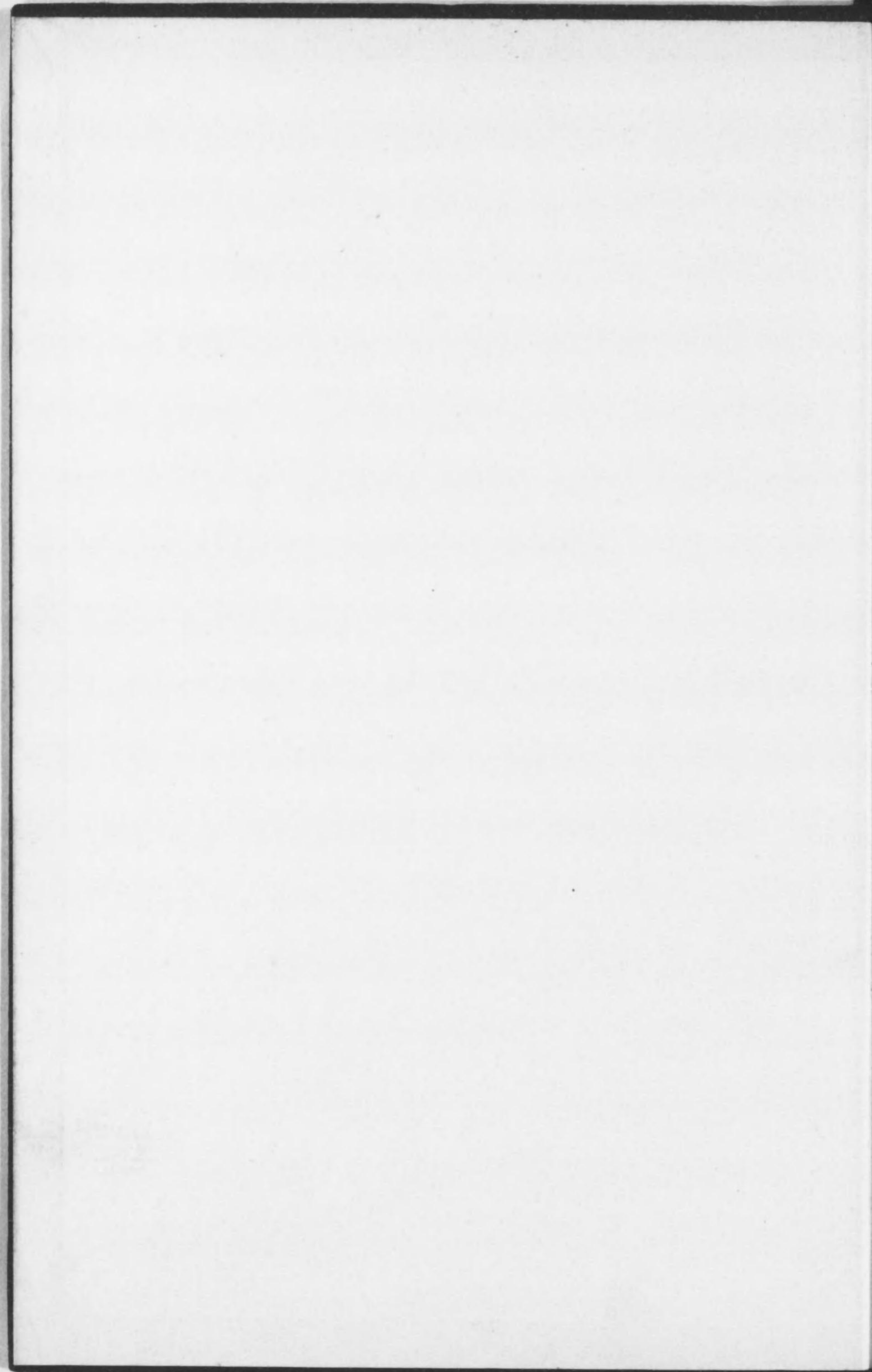
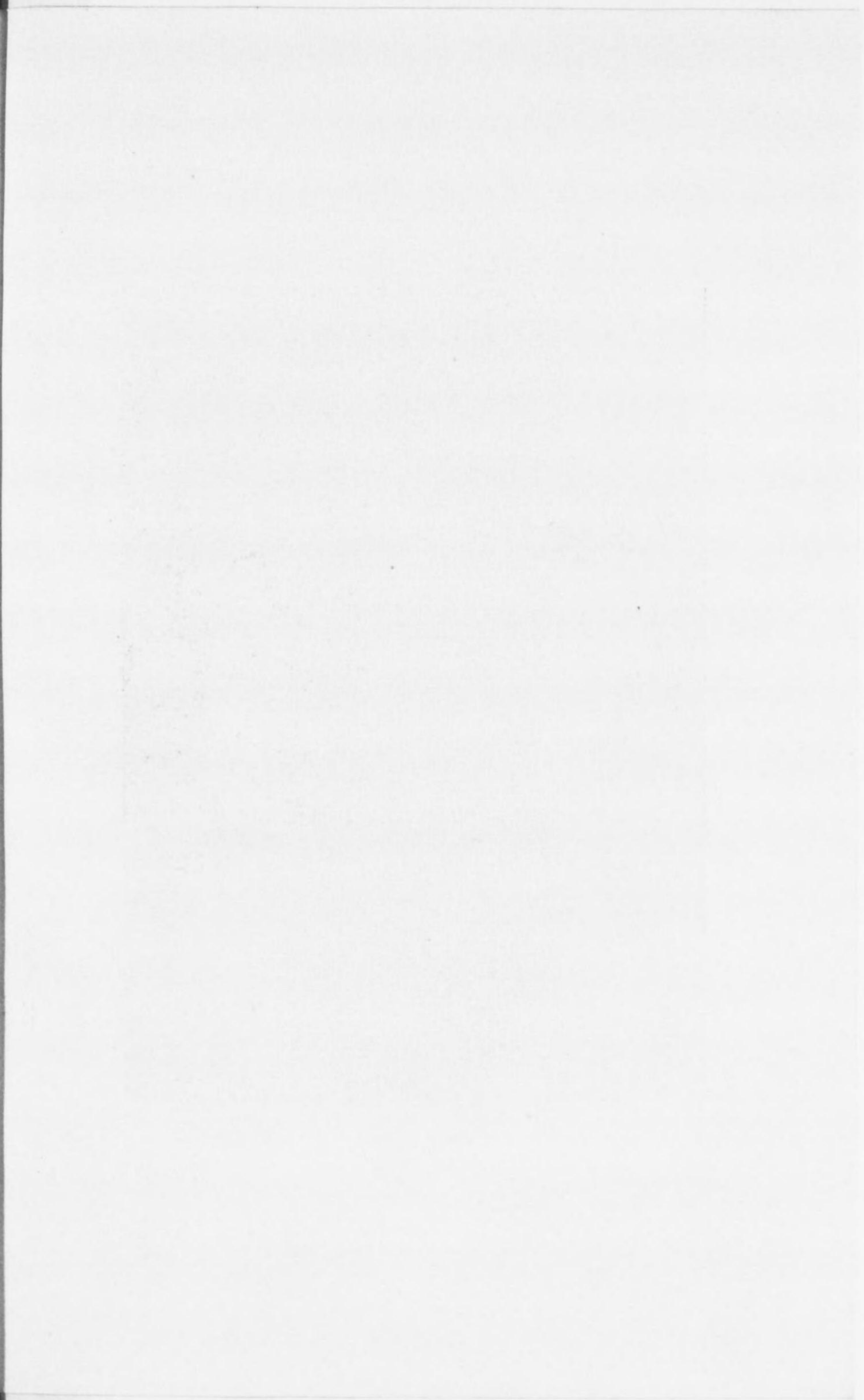
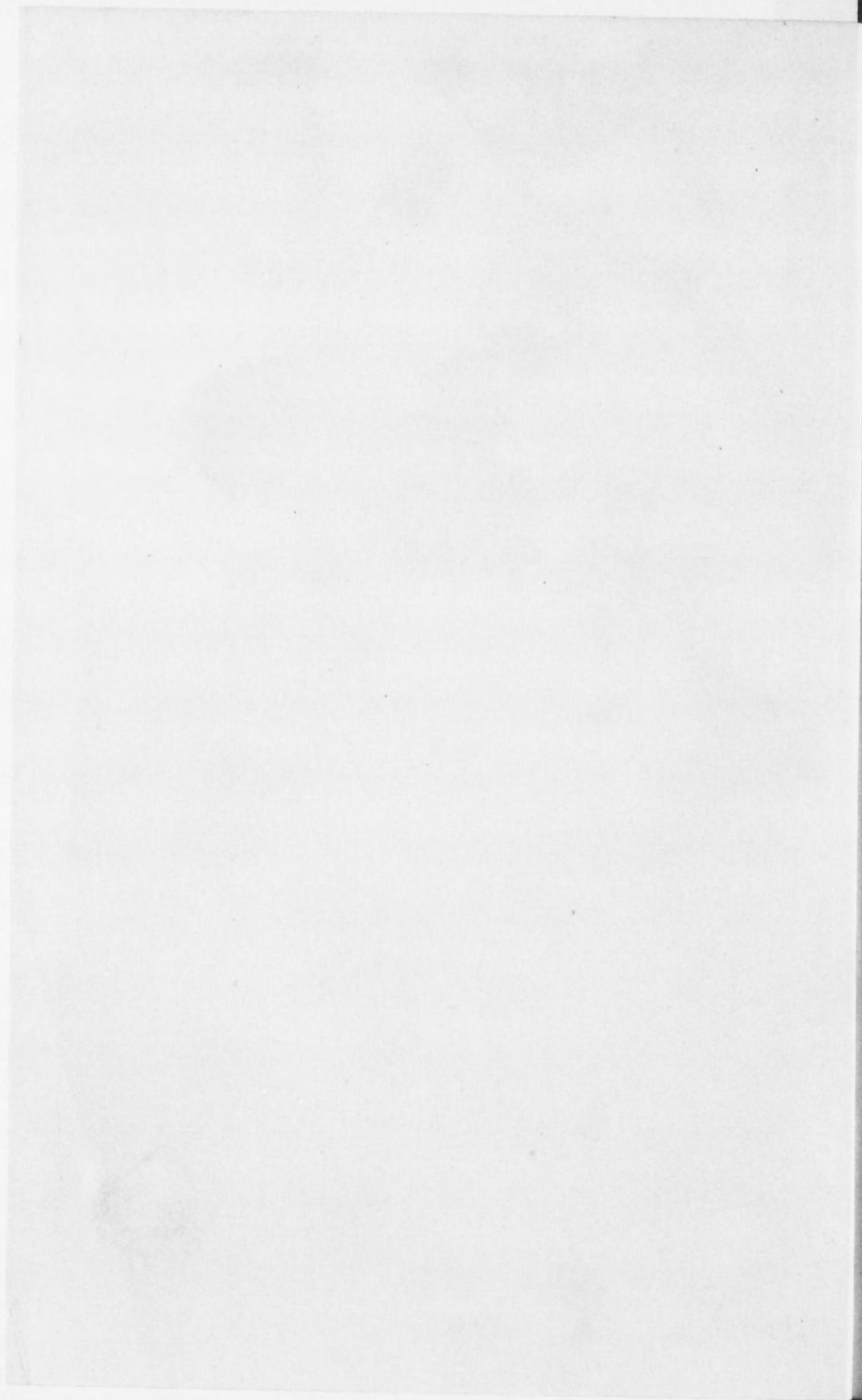


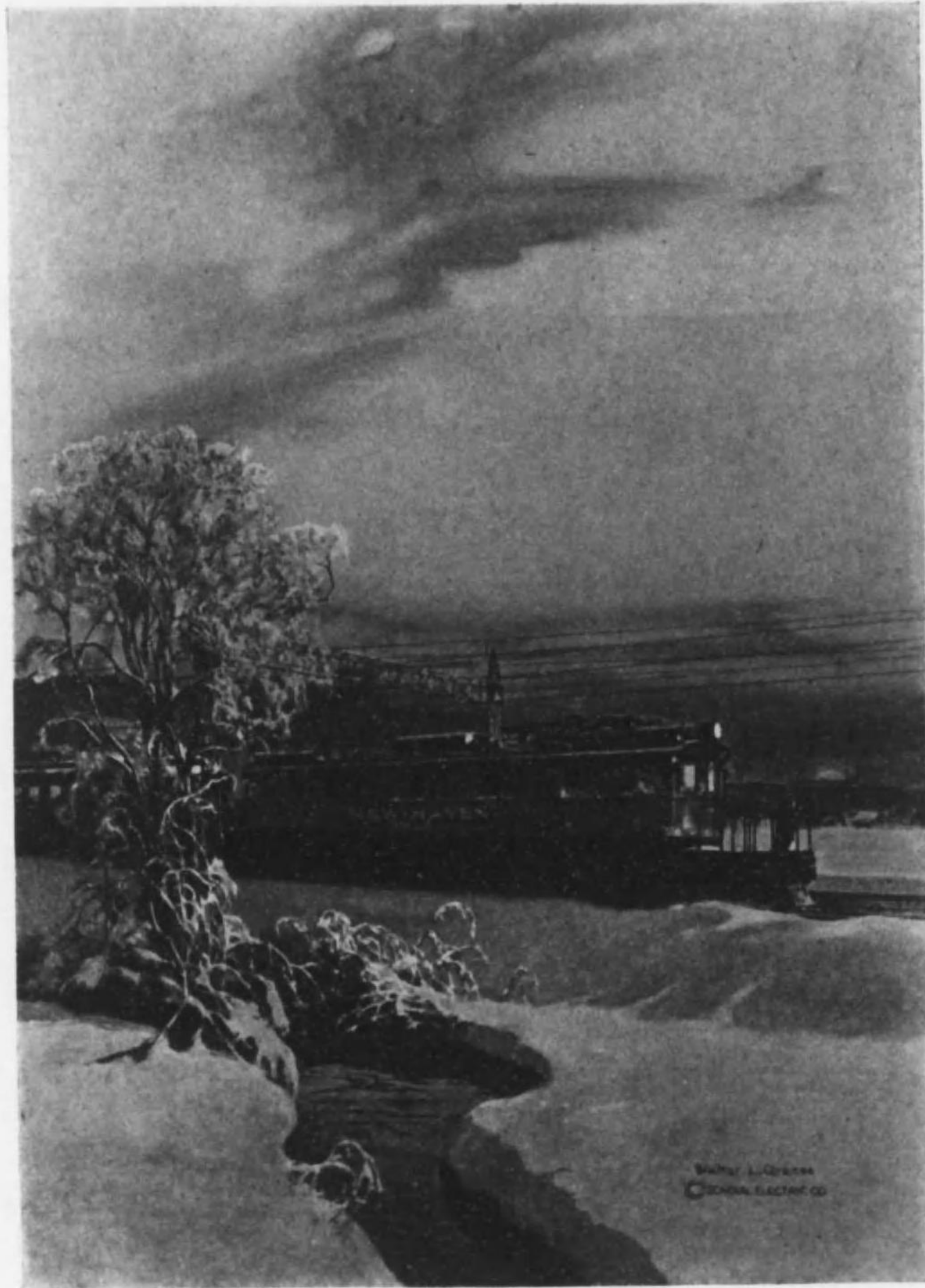
DENKI PRIMER

始









— See Lesson 47 —

DENKI PRIMER

FIRST EDITION

DENKI-GAKKÔ

(THE INSTITUTE OF ELECTRICAL & MECHANICAL TECHNOLOGY)

KANDA, TÔKYÔ

1933

DEPARTMENT OF THE ARMY

HEADQUARTERS

WASHINGTON, D. C.

1950

FORM NO. 1

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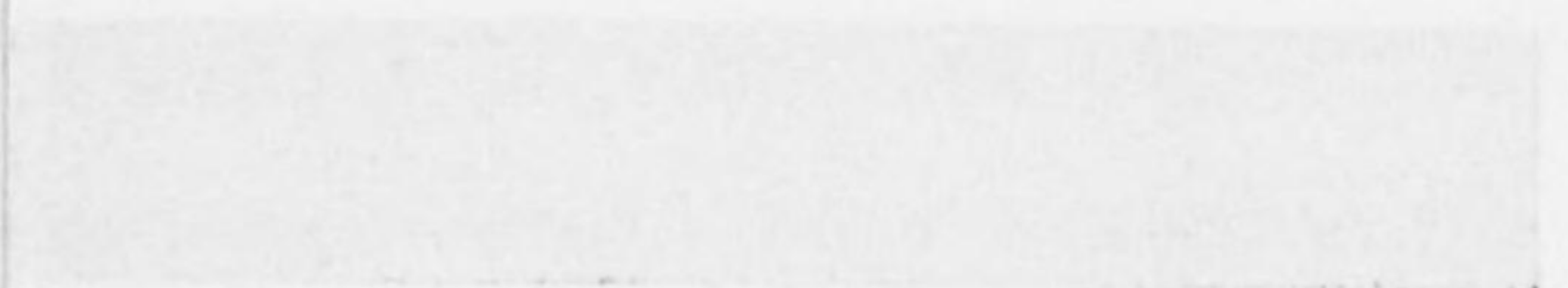
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THE

A B C D E F



G H I J K L



M N O P Q R



S T U V W X



THE ALPHABET

A B C D E F G H I J K L M

A B C D E F G H I J K L M

a b c d e f g h i j k l m

a b c d e f g h i j k l m

N O P Q R S T U V W X Y Z

N O P Q R S T U V W X Y Z

n o p q r s t u v w x y z

n o p q r s t u v w x y z

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發音練習 第一

- | | |
|-----------|-----------------|
| 1. p p p | 11. ts ts ts |
| 2. b b b | 12. ds ds ds |
| 3. t t t | 13. ch ch ch |
| 4. d d d | 14. dg dg dg |
| 5. k k k | 15. sh sh sh |
| 6. g g g | 16. zh zh zh |
| 7. f f f | 17. th th th |
| 8. v v v | 18. t-h t-h t-h |
| 9. s s s | |
| 10. z z z | |

發音練習 第二

[ei] p-a p-a pa pa pa pa
b-a b-a ba ba ba ba
[ai] t-i t-i ti ti ti ti
d-i d-i di di di di
[ju:] f-u f-u fu fu fu fu
v-u v-u vu vu vu vu
[i:] s-e s-e se se se se
z-e z-e ze ze ze ze
[ou] k-o k-o ko ko ko ko
g-o g-o go go go go

發音練習 第三

[æ] a-p a-p ap ap ap ap
a-b a-b ab ab ab ab
[i] i-k i-k ik ik ik ik
i-g i-g ig ig ig ig
[ʌ] u-s u-s us us us us
u-z u-z uz uz uz uz
[e] e-t e-t et et et et
e-d e-d ed ed ed ed
[ɔ] o-f o-f of of of of
o-v o-v ov ov ov ov

發音記號讀方

第一子音

發音記號	發音要領	近似假名
1. [p]	{兩唇にて 息にて	[フ]
2. [b]	{兩唇にて 聲にて	[ブ]
3. [t]	{舌尖を上齒莖にて 息にて	[ト]
4. [d]	{(t)と同様にして 聲にて	[ド]
5. [k]	{後舌面を口蓋にて 息にて	[ク]
6. [g]	{(k)と同様にして 聲にて	[グ]
7. [m]	{兩唇を閉ぢて 聲にて(氣流を鼻より出して)	[ム]
8. [n]	{舌尖を上齒莖につけて 聲にて(氣流を鼻より出して)	[ン]
9. [ŋ]	{鼻音にて(g)を出す	[ング]
10. [l]	{舌尖を上齒莖につけて 聲にて(氣流を舌の兩側より出して)	[ル]
11. [w]	{後出の(u:)より尙口を尖らして 聲にて(氣流稍強く)	[ウ]
12. [f]	{上齒を下唇につけて 息にて	[フ]
13. [v]	{(f)と同様にて 聲にて	[ヴ]
14. [θ]	{舌尖を上齒につけて 息にて(ス)と(ツ)の中間の如く	[ツ]

15. [ð]	{(θ)と同様にして 聲にて(ズ)と(ヅ)の中間の如く	[ヅ]
16. [s]	{舌尖を上齒莖にて 息にて	[ス]
17. [z]	{(s)と同様にして 聲にて	[ズ]
18. [ʃ]	{(s)より舌を高くして 息にて	[シュ]
19. [ʒ]	{(ʃ)と同様にして 聲にて	[ジュ]
20. [r]	{舌尖を上齒莖にて 聲にて(標準音は卷舌にあらず)	[ル]
21. [j]	{後出の(i:)より舌を高くして 聲にて(稍強く氣流を出して)	[イ]
22. [h]	{深呼吸の如く喉にて 息にて	[フ]
23. [tʃ]	{二音を早く一音の如く 息にて	[チュ]
24. [dʒ]	{二音を早く一音の如く 聲にて	[ヂュ]
















第二母音

發音記號	發音要領	近似假名
1. [i:]	國語の(イー)の如く	[イー]
2. [i]	{(i:)より舌を低くして 弱く發音する場合には(エ)に近く	[イ]
3. [e]	{(i)より尙ほ舌を低くして	[エ]
4. [æ]	{舌を押廣けて {(ア)と(エ)の中間の如くに	[ア]
5. [ɑ:]	{口を充分開いて	[アー]

6. [ɔ:]	{口を圓く開いて {口の奥の方で	[オー]
7. [ɔ]	{(ɔ:) よりも少し口を開いて	[オ]
8. [u]	{口を尖らして	[ウ]
9. [u:]	{(u) よりも少し口を尖らして	[ウー]
10. [ʌ]	{口を半開にして	[ア]
11. [ə:]	{口を僅かに開いて	[アー]
12. [ə]	{(ə:) よりも少し口を開いて {曖昧に發音す	[ア]
13. [ei]	{二音の移りを滑かに {初の音を稍強く長く	[エイ]
14. [ou]	{同 上	[オウ]
15. [ai]	{同 上	[アイ]
16. [au]	{同 上	[アウ]
17. [oi]	{同 上	[オイ]
18. [iə]	{同 上	[イア]
19. [eə]	{同 上	[エア]
20. [uə]	{同 上	[ウア]

- 備考:
1. 發音要領は、實用簡單を旨とす。
 2. 近似假名は、備忘のために掲げたり。
 3. 息=無聲音=聲帯振動せず。
 4. 聲=有聲音=聲帯振動す。
 5. 子音次の發音の時、母音を後に引かぬ様注意を要す(例へば p, b は プ, ブより其の後に引くウの音を去る事—邦語のプ, ブは pu, bu ならざり)。

發音記號練習 第一

B	bʌlb		'bætəri	
C	kɑ:		'si:lɪŋ	
D	'daiəmənd		dɔə	
F	fæn		faɪl	
G	gloub		'dʒenərəitə	
H	'hi:tə		'hæmə	
J	dʒæk		dʒɔɪnt	
K	ki:		nɔb	
L	læmp		lenz	
M	'moutə		'mi:tə	

N	nat		net	
P	pamp		poul	
Q	'kwɔ:tə	$\frac{1}{4}$	kwil	
R	reil		ri:l	
S	sprɪŋ		switʃ	
T	trein		'tikit	
V	vælv		'vækjuəm	
W	wind		'wɔ:tə	
X	'eks'reiz		'zailəfoun	
Y	jouk		jɔt	
Z	'ziərəu		'zigzæg	

發音記號練習 第二

A	bæg		hæt		kæp	
E	bel		pen		desk	
I	pin		hil		tin	
O	bɔks		dɔg		klɔk	
U	sən		kʌp		bʌs	
A	keik		seid		teip	
E	bi:		tri:		(h)wi:l	
I	paip		rais		kait	
O	houz		roup		stouv	
U	kju:b		tju:b		fju:z	

羅馬字綴

a	i	u	e	o
ka	ki	ku	ke	ko
sa	si	su	se	so
ta	ti	tu	te	to
na	ni	nu	ne	no
ha	hi	hu	he	ho
ma	mi	mu	me	mo
ya	i	yu	e	yo
ra	ri	ru	re	ro
wa	(w)i	u	(w)e	wo
ga	gi	gu	ge	go
za	zi	zu	ze	zo
da	di	du	de	do
ba	bi	bu	be	bo
pa	pi	pu	pe	po

kya	kyu	kyo
sya	syu	syo
tya	tyu	tyo
nya	nyu	nyo
hya	hyu	hyo
mya	myu	myo
rya	ryu	ryo

gya	gyu	gyo
zya	zyu	zyo
dya	dyu	dyo
bya	byu	byo
pya	pyu	pyo

kwa	gwa	tza
-----	-----	-----

gakkô Nippon
issô zassi

buttai itti

gen'in

tennen honmon

kanbun denpô

上に掲げたるは日本式羅馬綴と稱するものなり。外にへボン式羅馬綴にて舊來慣用されし方式あり。今次にこれ等兩方式の相違點を對照せん。括弧内はへボン式なり。

si (shi), ti (chi), tu (tsu), hu (fu),
wi (i), we (e), zi (ji), di (ji),
du (zu), sya (sha), syu (shu),
syo (sho), tya (cha), tyu (chu),
tyo (cho), dya (ja), dyu (ju),
dyo (jo), itti (itchi),
honmon (hommon),
kanbun (kambun),
denpô (dempô).

音を長くひくときは母音の上に
(ハ)又は(一)を附す(例, ā, byô等)

KIMIGAYO

Kimigayo wa
Tiyo ni Yatiyo ni
Sazareisi no
Iwao to narite
5 Koke no musu made

**DENKI-GAKKÔ SETURITU-SYUISYO
NO HITOKUSARI**

Saikin, Denki oyobi Kikai-kôgyô no Hattatu wa
Sekai ni okeru kôgyôzyôno Menmoku wo issinsi,
10 Wagakuni ni oitemo aruiwa Densin, Denwa ni,
aruiwa Dentô ni, aruiwa Denki-tetudô ni, aruiwa
Dôryoku ni, aruiwa Bôseki ni, masumasu ryûsei to
nari, kore ni tomonau Gizyutusya no Zyuyô wa,
mata sitagatte sono sù wo maseri.

LESSON 1

THIS IS A PIN

This is a pin.



This is a bell.



This is a cell.



This is a fan.



This is a lamp.



This is a punch.



This is a box.



This is a book.





lesson ['lesn] I = one [wan] this [ðis] is [iz] a [ei, ə]
pin [pin] bell [bel] cell [sel] fan [fæn] lamp [læmp]
punch [pʌnʃ] box [bɒks] book [buk]



LESSON 2

A PICTURE LESSON

A pen.  A nail. 

A ball.  A sail. 

A bolt.  A nut. 

A pencil.  A knife. 

A bench.  A fork. 

2 = two [tu:] pen [pen] nail [neil] ball [bɔ:l] sail [seil]
bolt [bɔult] nut [nʌt] pencil [ˈpensl] knife [naif]
bench [benʃ] fork [fɔ:k]

LESSON 3

THAT IS A FAN

That is a fan.

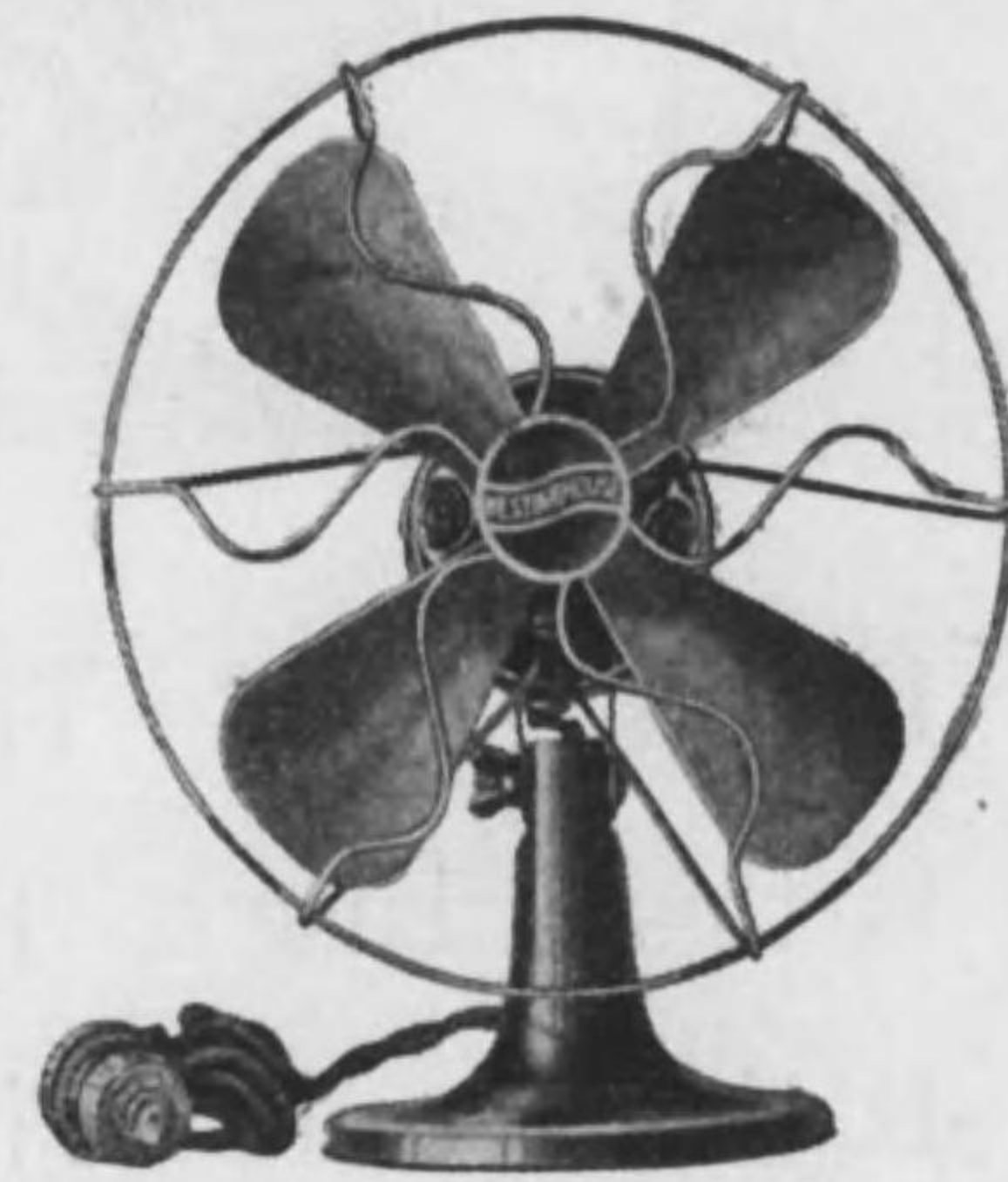
That is a plug.

That is a
base.

That is a
blade.

That is a
guard.

That is a motor. That is a
cord.

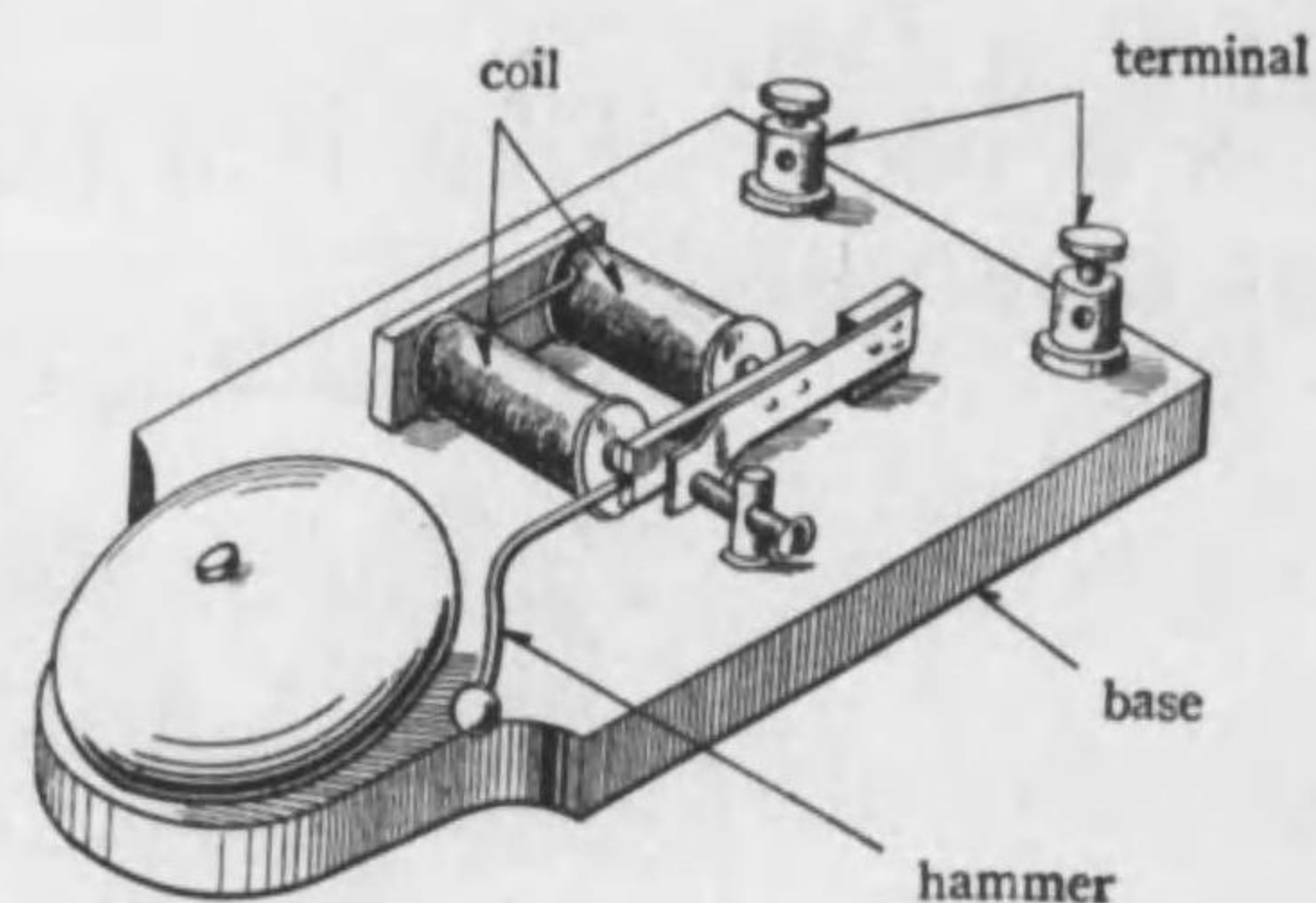


That is a fan.

3 = three [θri:] plug [plʌg] base [beis] blade [bleid]
guard [gɑ:d] motor [ˈmɔutə] cord [kɔ:d]

LESSON 4

IS THIS A BELL?



Is this a bell? That is a bell.

Is this a base? That is a base.

Is this a coil? That is a coil.

Is this a hammer? That is a
hammer.

Is this a terminal? That is a
terminal.

4 = four [fɔ:] coil [kɔil] hammer ['hæmə] terminal ['tɜ:minl]

LESSON 5

A AND AN

This is a book. That is a pencil.

This is a hat. That is a cap.

This is a bag. That is a wire.

This is an inkstand. That is an
insulator.

This is an iron. That is an
antenna.

This is an eraser. That is an
oil-switch.

This is a note-book.













5 = five [faiv] an [æn, ən] hat [hæt] cap [kæp] bag [bæg]
wire ['waɪə] inkstand ['ɪŋkstænd] insulator ['ɪnsjuleɪtə]
iron ['aɪən] antenna [æn'tenə] eraser ['ɪreɪzə]
oil-switch ['ɔilswɪtʃ] note-book ['nout-buk]

練習 第一

- A. 次の英語を読んで、且つ國語に譯しなさい。
bell, cell, lamp, box, this, punch, fan.
- B. 次の缺けた所を補充し、且つ國語に譯しなさい。
l—p, b—k, b—l, c—l, p—n, p—h, b—x.
- C. 次の國語を英語で云ひ、且つ書きなさい。
- | | | |
|-------|-------|--------|
| 1. 電池 | 2. 電線 | 3. 開閉器 |
| 4. 紐線 | 5. 電鈴 | 6. 扇座 |
| 7. 栓 | 8. 電燈 | 9. 空中線 |
- D. 次の英語の誤綴を正し、且つ國語を附記しなさい。
hammar, bel, gard, moter, blad, plag, bal, nife,
panch, pensil.
- E. 次の () 内に適語を挿入して譯をつけなさい。
- | | |
|----------------------|--------------------|
| 1. Is this () iron? | 2. That () a (). |
| 3. This () an (). | 4. () this a ()? |
- F. 次の國文を英文に譯しなさい。
- | | |
|---------------|--------------|
| 1. これは鉛筆です。 | 2. それは雜記帳です。 |
| 3. これは電動機ですか。 | 4. それは電池です。 |

LESSON 6

A PICTURE LESSON

- | | |
|---|--|
| A pump.  | A man.  |
| A motor.  | A bag.  |
| A tram-car.  | An eraser.  |
| A train.  | An inkstand.  |
| A hat.  | An insulator.  |
| A cap.  | An antenna.  |
| A bulb.  | A shade.  |
| A boy.  | An oil-switch.  |

6 = six [siks] pump [pʌmp] tram-car ['træm-kɑ:] train [trein]
bulb [bʌlb] boy [bɔi] man [mæn] shade [ʃeɪd]

LESSON 7

YES AND NO

Is this a book? Yes, it is a book.

Is this a box? No, it is not. It is a cell.

Is this a lamp? Yes, it is.

Is that a wire? No, it is not. It is a cable.

Is this a motor? No, it is a heater.

Is that a pin? No, it is a bolt.


Is this ---? That is ---.

7 = seven ['sevn] yes [jes] it [it] no [nou] not [nɒt]
cable ['keibl] heater ['hi:tə]


LESSON 8


WHAT IS IT?


Is this a knob? No, it is not.


What is it? It is  a cleat.

Is that a motor? No, it is not.

What is it? It is  a heater.

What is this? It is  a watch.

What is that? It is  a clock.

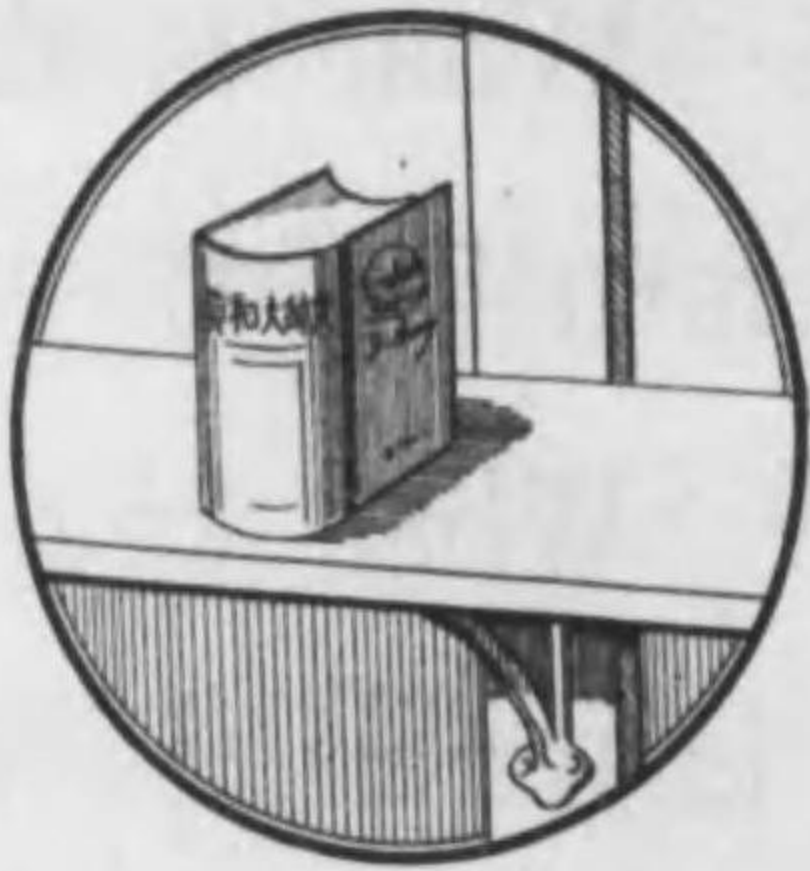
What is this? It is  a meter.

8 = eight [eit] what [(h)wɒt] knob [nɒb] cleat [kli:t]
watch [wɒtʃ] clock [klɒk] meter ['mi:tə]

LESSON 9

HERE IS A BOOK

Here is a book.
 It is on the desk.
 What book is that?
 It is an English
 5 reader. What English reader is it?
 It is the Denki Primer.



There is another book on the
 shelf. It is a dictionary. What
 dictionary is it? It is an English-
 10 Japanese dictionary.

9 = nine [nain] here [hiə] on [ɔn] the [ði, ðə] desk [desk]
 English ['iŋglɪʃ] reader ['ri:də] primer ['pr(a)imə] there [ðeə]
 another [ə'nʌðə] shelf [ʃelf] dictionary ['dɪkʃənəri]
 Japanese [dʒæpə'ni:z]

LESSON 10

THE LAMP STAND

What is that on the table? It
 is a lamp.

What kind of lamp
 is it? It is an electric
 lamp.



It is a lamp stand.
 Here is the cord for it.

The bulb is round. The shade
 is very nice.

What is that on the table?

10 = ten [ten] stand [stænd] table ['teɪbl] kind [kaind]
 electric [i'lektrɪk] for [fɔ:] round [raund]
 very ['veri] nice [nais]

LESSON 11

HAVE AND HAS

Have you a pen? Yes, I have a pen. Have you not a pencil? Yes, I have a pencil.

Have you a knife? No, I have no knife. Has he a fountain-pen? Yes, he has.

Have you a silk shade? No, I have none.

練習 第二

A. 次の國文を英譯なさい。

1. これは柱時計ですか。
2. いゝえ、さうではありません。
3. (それは) 何ですか。
4. (それは) 私の (my) 懐中時計です。

B. Lesson 9 と Lesson 10 を全部暗誦なさい。

11 = eleven [i'levn] have [hæv, həv] has [hæz, həz]
 fountain-pen ['fountin 'pen] silk [silk] none [nʌn]

LESSON 12

AM, ARE AND IS

What are you? I am a pupil.

What am I? You are a teacher.

What is he? He is a workman.

What is she? She is a telephone operator.

What are we? We are Japanese.

What are they? They are foreigners.

I am --. You are --. He is --.

12 = twelve [twelv] am [æm, əm] are [ɑ:, ə, ə] pupil ['pju:pil]
 I [ai] teacher ['ti:tʃə] you [ju:] he [hi:] workman ['wɔ:k mən]
 she [ʃi:] telephone ['telifoun] operator ['ɔ:pəreitə] we [wi:]
 they [ðei] foreigner(s) ['fɔ:riŋə(z)]

LESSON 13

WHO AND WHAT

Do you see two gentlemen in the yard? Yes, I do.

Who is that tall man? He is Mr. Brown.

5 What is he? He is our engineer.

Who is that short man? He is Mr. Smith.

10 What is he? He is a foreman of the erecting shop.



13 = thirteen ['θɜː'tiːn] who [huː] do [duː] see [siː]
 gentlemen ['dʒentlmən] in [ɪn] yard [jɑːd] tall [tɔːl]
 Mr. (Mister) ['mɪstə] Brown [braʊn] our ['aʊə]
 engineer [ˌendʒiˈniə] short [ʃɔːt] Smith [smɪθ] foreman ['fɔːmən]
 erecting [ɪ'rektɪŋ] shop [ʃɒp]

LESSON 14

NUMBERS

CARDINAL	ORDINAL
1 one	1st the first
2 two	2nd the second
3 three	3rd the third
4 four	4th the fourth
5 five	5th the fifth
6 six	6th the sixth
7 seven	7th the seventh
8 eight	8th the eighth
9 nine	9th the ninth
10 ten	10th the tenth
11 eleven	11th the eleventh
12 twelve	12th the twelfth
13 thirteen	13th the thirteenth
14 fourteen	14th the fourteenth
15 fifteen	15th the fifteenth
16 sixteen	16th the sixteenth
17 seventeen	17th the seventeenth
18 eighteen	18th the eighteenth
19 nineteen	19th the nineteenth
20 twenty	20th the twentieth

number(s) ['nʌmbə(z)] cardinal ['kɑːdɪnəl] ordinal ['ɔːdɪnəl]

LESSON 15

CALCULATION

Addition

Two and three are five.

Four and six make ten.

Seven plus two equals nine.

Subtraction

Nine minus three equals six.

Eight from ten leaves two.

練習 第三

- A. 次の英文に適語を挿入し、且つ意味をつけなさい。
 1. Has he () knife? 2. No, he () () knife.
 3. What () I? 4. You () a foreman.
- B. 次の國文を英譯しなさい。
 1. 君はあの丈高い人が見えますか。
 2. はい、見えます。
- C. 1 から 20 まで英語で、初め順に、次に逆に云ひなさい。

calculation [kælkju'leɪʃən] addition [ə'dɪʃən] and [ənd] make [meɪk]
 plus [plʌs] equal(s) ['i:kwɔ:l(z)] subtraction [səb'trækʃən]
 minus ['maɪnəs] from [frɒm, frəm] leave(s) [li:v(z)]

LESSON 16

THE CLOCK

A clock has two hands. The long hand is the minute hand. The short hand is the hour hand. This watch has a hand for the second.

Sixty seconds make a minute. Sixty minutes make an hour. There are twenty-four hours in a day.

What time is it now? It is ten minutes past nine. (It is a quarter to eleven. It is five, thirty. It is eight, fifty-four.)

hand(s) [hænd(z)] long [lɒŋ] minute ['mɪnɪt] hour ['aʊə]
 second ['sekənd] sixty ['sɪksti] twenty-four ['twenti-fɔ:]
 day [deɪ] time [taɪm] now [naʊ] past [pɑ:st] quarter ['kwɔ:tə]
 to [tu:(z)] thirty ['θɜ:ti] fifty-four ['fɪfti-fɔ:]

LESSON 17

DAYS OF THE WEEK

How many days has a week? A week has seven days.

Can you name them in order? Yes, I can.

They are Sunday, Monday, Tuesday, Wednesday, Thursday, Friday and Saturday. Sunday is a holiday and we have no school on that day. The other days are the week days or working days.

of [ɒv, əv] week [wi:k] how [hau] many ['meni] can [kæn, kən]
 name [neim] them [ðem] order ['ɔ:də] Sunday ['sʌndi]
 Monday ['mʌndi] Tuesday ['tju:zdi] Wednesday ['wenzdi]
 Thursday ['θə:zdi] Friday ['fraidi] Saturday ['sætədi] holiday ['hɒlədi]
 school [sku:l] other ['ʌðə] or [ɔ:, ə] working ['wɜ:kɪŋ]

LESSON 18

NUMBERS

CARDINAL		ORDINAL	
21	twenty-one	21st	twenty-first
22	twenty-two	22nd	twenty-second
29	twenty-nine	29th	twenty-ninth
30	thirty	30th	thirtieth
40	forty	40th	fortieth
50	fifty	50th	fiftieth
60	sixty	60th	sixtieth
70	seventy	70th	seventieth
80	eighty	80th	eightieth
90	ninety	90th	ninetieth
100	hundred	100th	hundredth
101	hundred and one	101st	hundred and first.
422	four hundred and twenty-two	422nd	four hundred and twenty-second
1,000	thousand	1,000th	thousandth
10,000	ten thousand	10,000th	ten thousandth
100,000	hundred thousand	100,000th	hundred thousandth
1,000,000	million	1,000,000th	millionth
10,000,000	ten million	10,000,000th	ten millionth.

LESSON 19

THE HUMAN BODY

This is my face. I have two eyes. I have two ears.

I have a nose and a mouth.

I have two hands. I have a thumb and four fingers on each hand.

I have two feet, and I have five toes on each foot.

My hair is black, but my teeth are white.



human ['hju:mən] body [bɒdi] face [feɪs] eye(s) [aɪ(z)] ear(s) [iə(z)]
 nose [nəʊz] mouth [maʊθ] thumb [θʌm] finger(s) ['fɪŋgə(z)]
 feet [fi:t] toe(s) [təʊ(z)] foot [fʊt] hair [hɛə]
 black [blæk] teeth [ti:θ] white [(h)waɪt]

LESSON 20

BODILY FUNCTIONS

I see with my eyes.

I hear with my ears.

I smell with my nose.

I taste with my mouth.

I speak with my mouth, too.

I grasp with my hands.

I walk and run with my legs.

I can not fly, for I have no wings.

I can sing with my mouth.

with [wɪð] hear [hɪə] smell [smel] my [maɪ]
 speak [spi:k] taste [teɪst] grasp [grɑ:sp] walk [wɔ:k]
 run [rʌn] leg(s) [leg(z)] fly [flaɪ]
 wing(s) [wɪŋ(z)] sing [sɪŋ]

練習第四

A. 次の英文の誤を正し、次に譯しなさい。

1. A clock have two hand.
2. How many day have a week?
3. I have five finger on each hand.
4. You can smell with your ears.

B. 七曜の名を順次に云ひ且つ書きなさい。

C. 次の数の讀方を書きなさい。

85, 125, 753, 10,000

21 番 35 番 216 番

D. 次の間に英文で答へなさい。

1. What is the second day of the week?
2. How many toes have you on each foot?
3. What time is it now?

E. 次の英文の順序を訂正して譯をつけなさい。

I wings have no for, I fly can not.

LESSON 21

THE FAMILY



This is my house. There live my father, mother, brother and sister.

My elder brother is married. My younger sister is a pet of the family.

I am fourteen years old. My parents are old, but we are young.

house [haus] live [liv] father ['fa:ðə] mother ['mʌðə]
brother ['brʌðə] sister ['sistə] elder ['eldə] married ['mærɪd]
younger ['jʌŋgə] pet [pet] family ['fæmili] year(s) [jə:(z)]
parent(s) ['pɛərənt(s)] old [ould] but [bat] young [jʌŋ]

LESSON 22

COMPARISON

Who is he? He is Tarô, my elder brother.

How tall is he? He is a hundred and sixty centimeters tall.

How tall are you, Zirô? I am just a hundred and fifty centimeters tall.

Oh, I see, you are taller than I, for I am only a hundred and forty centimeters tall.

Now we know that Tarô is the tallest of us all.

comparison [kəm'pærɪsn] centimeter(s) ['senti,mɪ:tə(z)] just [dʒʌst]
 oh [ou] taller ['tɔ:lə] than [ðæn] only ['ounli] know [nou]
 tallest ['tɔ:lɪst] us [ʌs] all [ɔ:l]

LESSON 23

SINGULAR AND PLURAL

I have a neon tube in my hand. You have two neon tubes in your hands.

He has a slide rule in his vest pocket. The merchant has many slide rules in his shop.

I see a train run across the field. See the two trains in the station.

Many boys are playing in the playground, and one of them is running after a ball.

singular ['sɪŋɡjʊlə] plural ['pluərəl] neon ['ni:ɒn] tube [tju:b]
 your [jɔ:, juə] slide [slaid] rule(s) [ru:l(z)] vest [vest]
 pocket ['pɒkɪt] merchant ['mɜ:tʃənt] his [hɪz]
 across [ə'krɔ:s] field [fi:ld] station ['steɪʃən]
 play(ing) [pleɪ(ɪŋ)] playground ['pleɪgraʊnd]
 running ['rʌnɪŋ] after [ɑ:ftə]

THE CLASS ROOM



This is our class room. It has many windows and two sliding doors. The electric lamps hang from the ceiling.

There are pupils' desks and benches on the floor. The teacher's

class [kla:s] room [rum] window(s) ['windou(z)]
 sliding ['slaidiŋ] door(s) [dɔ:(z)] hang [hæŋ] ceiling ['si:liŋ]
 floor [flɔ:] teacher's ['ti:tʃə(z)]

table stands by the platform.

Our teachers write on the blackboard with a piece of chalk.

練習第五

A. 次の國文を英譯しなさい。

- あなたは東京に (in Tôkyô) 住んでゐますか。
- いゝえ、私は大阪 (Ôsaka) に住んでゐます。
- 私は少年の走るのを見ます。

B. 次の空所に適語を挿入して譯しなさい。

- Which (どちら) is (), you or Tarô?
- Tarô is () () I.
- Tarô is () oldest boy () our class.

C. 英文和譯 (暗誦して御互に問答しなさい)。

- How many neon tubes have you in your hand?
- I have three neon tubes in my hand.
- What has he in his vest pocket?
- He has a watch in his vest pocket.

by [bai] platform ['plætfo:m] write [rait] blackboard ['blækbɔ:d]
 piece [pi:s] chalk [tʃɔ:k]

A YEAR

A year has twelve months.

The first month is January.

The second month is February.

The third month is March.

The fourth month is April. The fifth month is May.

The sixth month is June. The seventh month is July.

The eighth month is August.

The ninth month is September.

The tenth month is October. The eleventh month is November.

January [ˈdʒænjuəri]	February [ˈfebruəri]	March [mɑːtʃ]
April [ˈeɪprəl]	May [meɪ]	June [dʒuːn]
August [ˈɔːɡəst]	September [səpˈtembə]	October [ˌɒkˈtəʊbə]
	November [noʊˈvembə]	

The twelfth month is December.

We divide a year into four seasons, too.

They are spring, summer, autumn and winter.

練習第六

A. 次の國文を英譯しなさい。

1. あの方は僕等の先生です。
2. 机の上に三冊の本があります。
3. 僕等の教室には窓が六つあります。
4. この室には電燈が一つしか (only) ありません。

B. 次の單語を含む英文を作りなさい。

教室, 窓, 天井, 教壇, 黒板

C. 月の名を順逆色々に反復し, 次に英語で書きなさい。

December [dɪˈsembə]	divide [dɪˈvaɪd]	into [ˈɪntu]
season(s) [ˈsiːzn(z)]	too [tuː]	spring [sprɪŋ]
summer [ˈsʌmə]	autumn [ˈɔːtəm]	winter [ˈwɪntə]

LESSON 26

THE RADIO

What is that on the desk?
It is a radio set. I listen
in to the radio every day.



My brother made this radio set.
That radio set in a cabinet is of
German make.

Have you ever seen
a microphone? No, I
have never seen one.
Do you wish to be a
radio engineer? Yes,
I wish to be an able one.



radio ['reɪdiəʊ]	set [set]	listen ['lɪsn]	every ['evri]
made [meɪd]	cabinet ['kæbɪnɪt]	German ['dʒɜ:mən]	ever ['evə]
seen [si:n]	microphone ['maɪkrəfoʊn]	never ['nevə]	
wish [wɪʃ]		able ['eɪbl]	

LESSON 27

AN AUTOMOBILE



Look at this picture. There is
an automobile in it.

What do you see in the car? I
see two gentlemen in the car.
What do you see in front of the
gentlemen? I see a driver.

An automobile is made up of an
engine, a car-body, two shafts, four
wheels and many other accessories.

automobile ['ɔ:təməbi:l]	look [lʊk]	picture ['pɪktʃə]
front [frʌnt]	driver ['draɪvə]	up [ʌp]
engine ['endʒɪn]	shaft(s) [ʃɑ:ft(s)]	wheel(s) [(h)wi:l(z)]
	accessories [æk'sesərɪz]	

LESSON 28

CAN, MAY AND MUST

Can you play baseball? Yes, I can.

Can your brother play baseball, too? No, he can not. He is very good at rowing.

What can your sister play, then? She can play tennis very well, and is a champion of her school.

May I go to see the game? Yes, you may.

Must I come back before dark? Yes, you must.

may [mei] must [mast] play [plei] baseball ['beisbɔ:l]
 good [gud] at [æt] rowing ['rouɪŋ] hen [ðen] tennis ['tenɪs]
 well [wel] champion ['tʃæmpjən] go [gou] game [geɪm]
 come [kʌm] back [bæk] before [bɪ'fɔ:] dark [dɑ:k]

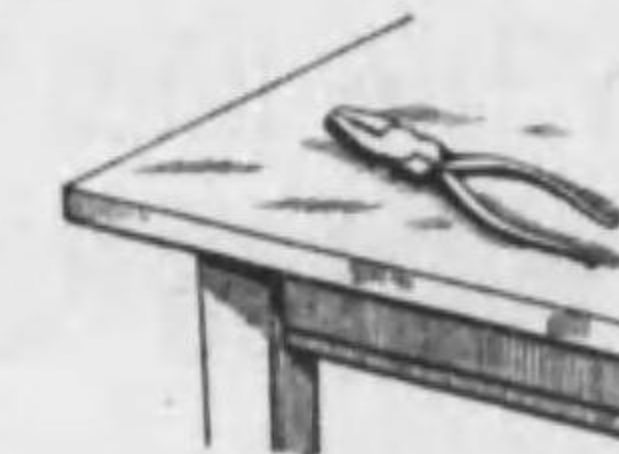
LESSON 29

MINE, YOURS AND HIS

Here is a screw-driver on the chair, and there is a pair of pliers on the table there.

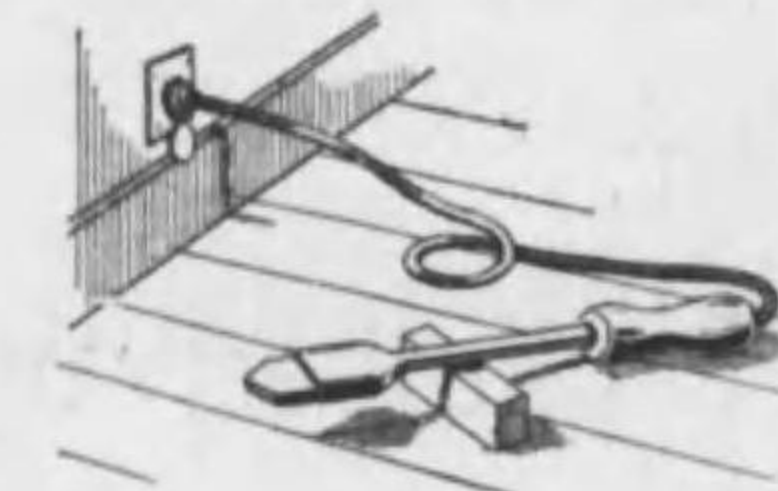


Are the pliers yours? No, they are not mine.



Whose screw-driver is it? It is his.

Whose soldering iron is this? I don't know whose it is.



mine [maɪn] yours [jɔ:z] screw-driver ['skru: ,draɪvə]
 pair [peə] pliers ['plaiəz] whose [hu:z]
 soldering ['sɒldərɪŋ] don't [dəʊnt]

SOME PREPOSITIONS

There is an automobile by the gate.

I see a bicycle
at the door.

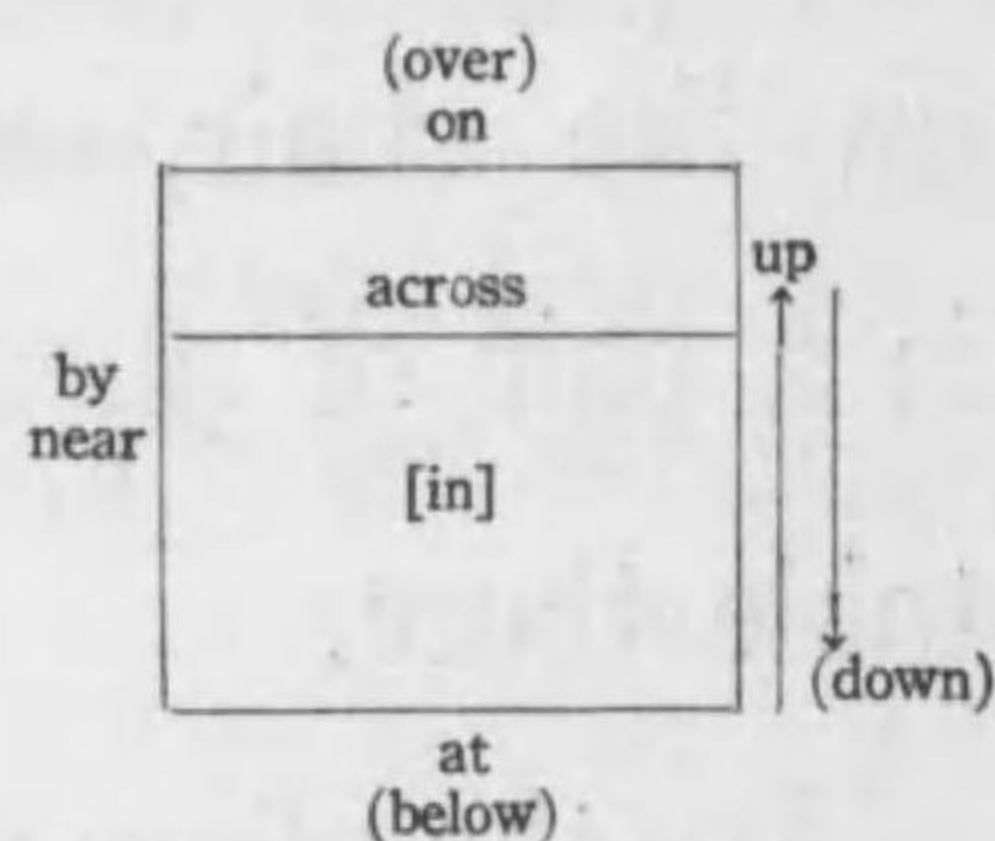
There is a boat
on the lake.

Do you see a bridge across the
river.

There are ships on the sea.

Look at the steamers in the har-
bour.

I climbed up the hill near the
village.



some [sʌm]	preposition [ˌprepəˈzɪʃən]	gate [geɪt]
bicycle [ˈbaɪsɪkl]	boat [bəʊt]	lake [leɪk]
across [əˈkrɒs]	river [ˈrɪvə]	ship(s) [ʃɪp(s)]
steamer(s) [ˈstiːmə(z)]	harbour [ˈhɑːbə]	sea [siː]
hill [hɪl]	near [nɪə]	climb(ed) [klaɪm(d)]
		village [ˈvɪlɪdʒ]

練習第七

A. 次の文中の空所に適語を入れて譯しなさい。

1. What () you see in the ()?
2. I see () automobile.
3. I () play baseball.
4. No, you can ().
5. This radio set is () Japan make.

B. Lesson 30 を譯しておいて再び元の英文に直して見なさい。

C. 次の單語を英譯し、次にそれを含む英文を作りなさい。

自動車, 紳士, 附屬品, ベンチ, ハンダ鋸,
上手である, 函型受信器.

D. 次の國文を英譯しなさい。

1. 机の上に一つの電話機があります。
2. それは誰の雑誌 (magazine) ですか。
3. 其の電池はあなたのですか。
4. あの人が此のラヂオ器を造りました。
5. 君は試合を見にいつでもよろしい。

E. 次の英文を譯しなさい。

1. Here is a meter on the table.
2. I see a screw-driver near a lampstand.

LESSON 31

WRITING A LETTER

Tarô sits at his desk. He takes a sheet of paper. He places it on the desk. The pen is wet with ink. He writes with pen and ink on the paper. Thus he writes a letter.



He folds the letter. He puts the letter into an envelope. He writes his father's name and address. He puts a stamp on the envelope.

He mails the letter.

writing [ˈraɪtɪŋ]	letter [ˈletə]	sit(s) [sɪt(s)]	take(s) [teɪk(s)]
sheet [ʃi:t]	paper [ˈpeɪpə]	place(s) [pleɪs(ɪz)]	
wet [wet]	ink [ɪŋk]	thus [ðʌs]	fold(s) [fəʊld(z)]
put(s) [pʊt(s)]	envelope [ˈenvɪləʊp]	address [əˈdres]	
stamp [stæmp]	mail(s) [meɪl(z)]		

LESSON 32

AN EXAMPLE OF A LETTER

Here is a letter written by Tarô. It reads as follows.

No. 7, Nisikityô-Nityôme,
Kanda, Tôkyô, 10th May.

My Dear Father,

I am glad to learn that you are all very well. I am happy here, for I like the teachers and fellow-students, and I enjoy the lessons, too. But I wish to return home to see you, and I am looking forward to the holidays.

Your loving son,

Tarô Yamato.

example [ɪgˈzɑ:mpl]	written [ˈrɪtɪn]	read(s) [ri:d(z)]	as [æz, əz]
follow(s) [ˈfɒləʊ(z)]	dear [dɪə]	glad [glæd]	learn [lɜ:n]
happy [ˈhæpi]	like [laɪk]	fellow [ˈfeləʊ]	
student(s) [ˈstju:dənt(s)]	enjoy [ɪnˈdʒɔɪ]	return [riˈtɜ:n]	
home [həʊm]	looking [ˈlʊkɪŋ]	forward [ˈfɔ:wəd]	
loving [ˈlʌvɪŋ]	son [sʌn]		

LESSON 33

THE PAST TENSE—I

What was Edison when he was young?
He was a newsboy when he was young.

What were you once? I was a baby once.

What fan were you going to get? I was
going to get a desk fan.

Where were you at that time? We were
in the drafting room.

When was the current off? It was half
past eleven.

10

Make haste slowly.

Do nothing by halves.

Work while you work, and play while you play.

tense [tens]	when [(h)wen]	was [wɒz, wɔs]	Edison ['edɪsn]
news [nju:z]	were [wɜ:, wə]	once [wʌns]	baby ['beɪbi]
going ['gɔɪɪŋ]	get [get]	where [(h)wɛə]	drafting ['dra:ftɪŋ]
current ['kʌrənt]	off [ɔ:f]	half [ha:f]	

LESSON 34

THE PAST TENSE—II

Did you repair this meter? Yes, I repaired
it myself.

Did he pass the examination? Yes, he
passed it at the age of twenty-one.

Did the servant turn off the light? Yes,
he did.

Did you go to see the baseball match?
No, I did not. I only listened to broadcast-
ing for it.

練習 第八

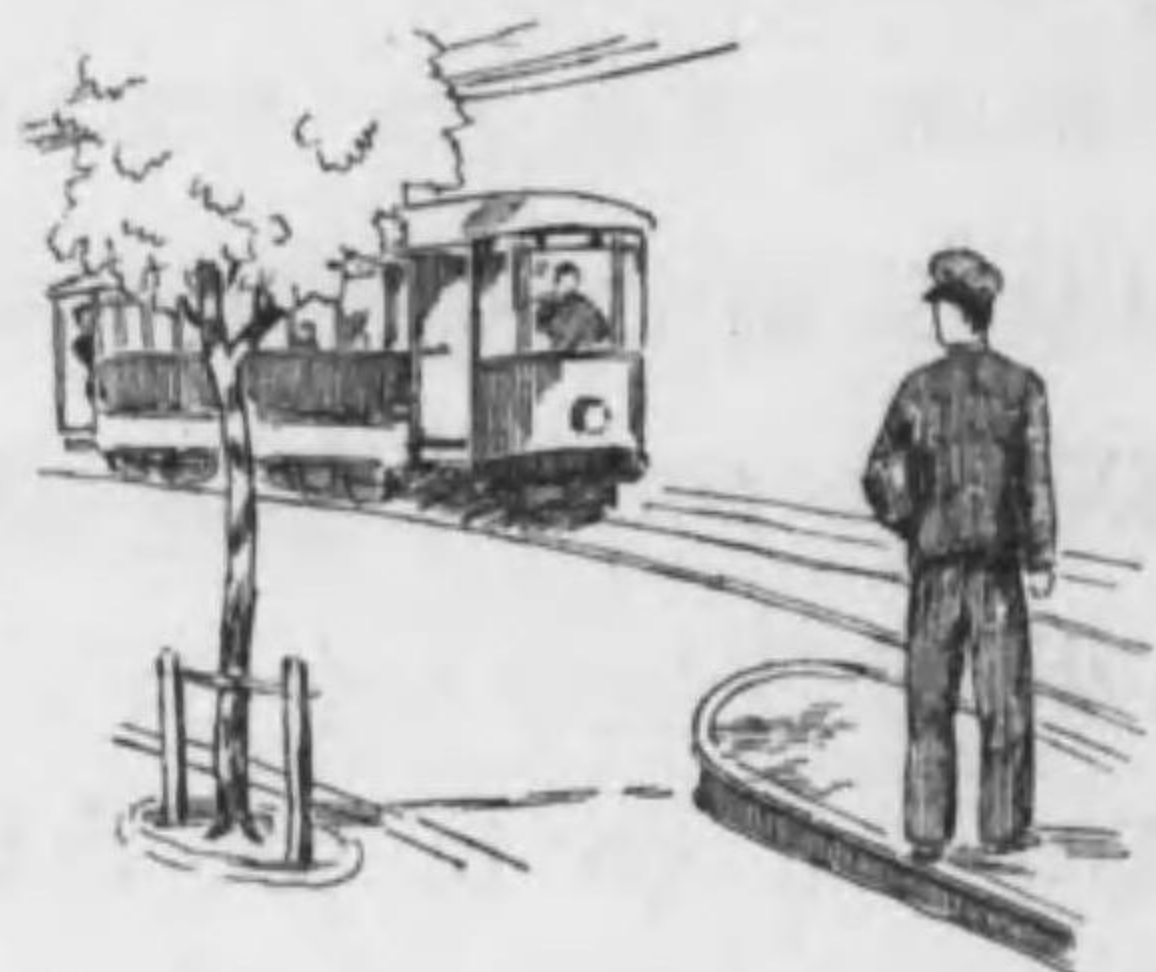
- A. Lesson 31 の全文の主語を I (私は) に改めて反復音
読みなさい。
- B. Lesson 32 の手紙を譯しておいて再び元の英文に直
しなさい。
- C. Lesson 33, 34 の動詞を現在形に直しなさい。

did [dɪd]	repair(ed) [ri'peɪə(d)]	myself [maɪ'self]	pass(ed) [pɑ:s(t)]
examination [ɪg,zæmɪ'neɪʃən]	age [eɪdʒ]	servant ['sɜ:vənt]	
turn [tɜ:n]	broadcasting [brɔ:d'kɑ:stɪŋ]		

LESSON 35

RIDING IN A CAR

I wait for a car. I stand on the street.
 I see the car. I signal to the motorman.
 The motorman
 stops the car. I
 5 enter the car. I
 take a seat. The
 conductor signals
 to the motorman.



The motorman starts the car. Then I give
 10 seven sen to the conductor for a ticket.
 The conductor punches the ticket.

I wish to leave the car and signal. The
 motorman stops the car. I get out of the
 car and walk off.

riding ['raidɪŋ] wait [weɪt] street [stri:t] signal ['sɪgnəl]
 motorman ['moutəmən] stop(s) [stɒp(s)] enter ['entə]
 seat [si:t] conductor [kən'dʌktə] start(s) [stɑ:t(s)]
 give [gɪv] sen [sen] ticket ['tɪkɪt] out [aʊt]

LESSON 36

COLOURS

The blackboard is black. Chalk is white.
 The ceiling is white, too. Ink is red, black
 or blue.

Black and white make grey. Some India-
 rubber is grey. Blue and yellow make green. 5
 Grass in the field is green, while the sky is
 blue.

What colour is your coat? It is black.

The rainbow has seven colours in it. They
 are violet, indigo, blue, green, yellow, orange 10
 and red.

The above is the order of the colours as
 they appear in a spectrum of the sun.

colour(s) ['kʌlə(z)] red [red] blue [blu:] grey [greɪ]
 india-rubber ['ɪndjə'rʌbə] yellow ['jeləʊ] green [gri:n] grass [grɑ:s]
 while [(h)waɪl] sky [skai] coat [kəʊt] rainbow ['reɪnbəʊ]
 violet ['vaɪələɪt] indigo ['ɪndɪɡəʊ] orange ['ɔrɪndʒ] above [ə'baʊv]
 appear [ə'piə] spectrum ['spektrəm] sun [sʌn]

LESSON 37

SHAPES

The blackboard is rectangular. A globe is round or spherical.

This pencil is pointed. The edge of that old knife is blunt.

5 The T-square is straight and long. This piece of chalk is short.

The school building is large. A pen is small.

10 An egg is oval. Boats and ships are oblong.

Look before you leap.

Catch opportunity by the forelock.

shape(s) [ʃeɪp(s)] rectangular [ˌrekˈtæŋɡjələ] globe [ɡləʊb]
spherical [ˈsferɪkəl] pointed [ˈpɔɪntɪd] edge [ˈedʒ] blunt [blʌnt]
T-square [ˈtiː-skwɔː] straight [streɪt] building [ˈbɪldɪŋ] large [lɑːdʒ]
small [smɔːl] egg [eg] oval [ˈoʊvəl] oblong [ˈɒblɒŋ]

LESSON 38

THE DENKI GAKKŌ



This is a picture of our school. It is a large building. It is five stories high, including the basement.

In ten minutes' and noon recesses, we can play on the flat roof as well as in the paved yard. Our teachers are all very kind to us. They love us and we love them.

Our school is at Nisikityō in Kanda, the

stories [ˈstɔːrɪz] high [haɪ] including [ɪnˈkluːdɪŋ] basement [ˈbeɪsmənt]
recess(es) [rɪˈses(ɪz)] noon [nuːn] flat [flæt] roof [ruːf]
pave(d) [peɪv(d)] love [lʌv]

central part of Tôkyô. In English, it is called the Institute of Electrical and Mechanical Technology. It was founded in the 40th year of Meidi.

練習第九

- A. 次の問に對し英語で答へなさい。
1. What does the moter-man do?
 2. What is this large building?
 3. Where is your school?
 4. What shape is the earth (地球)?
 5. What are the seven colours of the rainbow?
- B. Lesson 38 を暗誦して自分で書取を試みなさい。

central ['sentrəl] part [pɑ:t] call(ed) [kɔ:l(d)] institute ['ɪnstɪtju:t]
 electrical [ɪ'lektrɪkəl] mechanical [mi'kænikəl]
 technology [tek'nɒlədʒi] found(ed) [faund(id)]
 [Meidi [meidʒi]

THE ACTIVE & PASSIVE VOICES

I examine the mechanism of this device.

The mechanism of this device is examined by me.

This water-level indicator shows the volume of water in the tank.

The volume of water in the tank is shown by this water-level indicator.

He threw on the switch.

The switch was thrown on by him.

They sell these kinds of apparatus in a hardware merchant's.

These kinds of apparatus are sold in a hardware merchant's.

active ['æktiv] passive ['pæsɪv] voice(s) [vɔɪs(ɪz)]
 examine(d) [ɪg'zæmɪnd] mechanism ['mekənɪzəm] device [dɪ'vaɪs]
 water ['wɔ:tə] level ['levl] indicator ['ɪndɪkeɪtə] show(s) [ʃəʊz]
 volume ['vɔljəm] tank [tæŋk] shown [ʃəʊn] threw [θru:]
 thrown [θroun] sell [sel] these [ði:z]
 apparatus [æpə'reɪtəs] hardware ['hɑ:dweə]

THE FUTURE TENSE

What shall you be in future? I shall be a salesengineer.

What will he be in future? He will be a chief draftsman.

5 What shall I be ten years after this? Perhaps you will be an inventor.

How long will it take to repair this transformer? It will take two or three days.

When is that radio shop to be opened?
10 It will be opened in a few days.

A flow will have an ebb.

Keep your shop, and your shop will keep you.

future ['fju:tʃə] shall [ʃəl] be [bi:] salesengineer ['seilz, endʒɪ'niə]
will [wil] chief [tʃi:f] draftsman ['dra:ftsmən] perhaps [pə'hæps]
inventor [in'ventə] transformer [træns'fɔ:mə]
open(ed) ['oupən(d)] few [fju:]

THE -ING FORMS

1. What are you doing, Mr. Baker? I am testing a lamp.

What is he making? He is making a transformer.

What is your mother doing? She is clean- 5
ing the room with a vacuum-cleaner.

2. Here is a running train. Sometimes it is faster than a flying bird.

It has a number of revolving wheels.

There are some toiling men in the lo- 10
comotive.

3. A Frenchman has succeeded in making this machine. By turning a handle you can set it in motion, and by pushing a button you can stop it. 15

form(s) [fɔ:m(z)] doing ['du(:)ɪŋ] Baker ['beikə] testing ['testɪŋ]
making ['meɪkɪŋ] cleaning ['kli:nɪŋ] vacuum ['vækjuəm]
cleaner ['kli:nə] sometimes ['sʌmtaɪmz] fast(er) [fɑ:st(ə)]
flying ['flaɪɪŋ] bird [bɜ:d] revolving [ri'vɒlviŋ] toiling ['tɔɪlɪŋ]
locomotive ['ləukəməutɪv] Frenchman ['frentʃmən] succeed(ed)
[sək'si:d(id)] machine [mə'ʃi:n] turning ['tɜ:nɪŋ] handle ['hændl]
motion ['məʊʃən] pushing ['puʃɪŋ] button ['bʌtn]

DIRECT CURRENT & ALTERNATING CURRENT

There are two kinds of electric current. They are direct current and alternating current. A current always flowing in one direction is called direct current. When a current changes its direction alternately, it is called alternating current.

There are several means of telling the kind of current. Each of these two kinds has its own field of application.

Direct current is suitable for electric traction and electrolysis. For light and power, however, alternating current is in general use.

direct [di'rekt]	alternating [ˈɔ:lte:neitiŋ]	always [ˈɔ:lweɪz]
flowing [ˈflaʊɪŋ]	direction [di'rekʃən]	change(s) [tʃeɪndʒ(ɪz)]
alternately [ɔ:l'tə:nɪtli]	several [ˈsevrəl]	means [mi:nz]
each [i:tʃ]	application [æpli'keɪʃən]	telling [ˈteliŋ]
suitable [ˈsju:təbl]		
traction [ˈtrækʃən]	electrolysis [ilek'trɒlɪsɪs]	light [laɪt]
power [ˈpaʊə]	however [haʊ'evə]	general [ˈdʒenərəl]
		use [ju:s]

ELECTRIC SOURCE

We get electricity from various sources. It may be had from a dynamo or an electric generator. Another source of electricity is an electric cell.

Direct current alone can be obtained from an electric cell. A dynamo generating direct current is called a D.C. dynamo or D.C. generator. An A.C. generator is often called an alternator.

Cells are classified into two kinds—primary and secondary. A group of cells is a battery. Secondary batteries are often called accumulators.

source [sɔ:s]	electricity [ilek'trisiti]	various [ˈvɜəriəs]
dynamo [ˈdaɪnəməʊ]	generator [ˈdʒenəreɪtə]	alone [ə'ləʊn]
obtain(ed) [əb'teɪn(d)]	generating [ˈdʒenəreɪtɪŋ]	often [ˈɔ:fn]
alternator [ˈɔ:lte:neɪtə]	classified [ˈklæsɪfaɪd]	primary [ˈpraɪməri]
secondary [ˈsekəndəri]	group [gru:p]	had [hæd]
	accumulator(s) [ək'ju:mjuleɪtə(z)]	

LESSON 44

USEFUL METALS

Steel, iron and copper are useful metals. Steam boilers are made of steel plates. Most generator yokes are made of cast steel or cast iron.

5 Of course you will very often see copper wires and cables used as electric conductors.

Brass is not a pure metal. It is an alloy of copper and zinc.

10 Iron wire coated with zinc is called the galvanized iron wire.

“Nichrome” is an alloy of iron, nickel and chromium, and is made into resistance wires for electric heaters.

useful [ˈjuːsfʊl]	metal(s) [ˈmetl(z)]	steam [stiːm]	boiler(s) [ˈbɔɪlə(z)]
steel [stiːl]	plate(s) [pleɪt(s)]	most [məʊst]	yoke(s) [jəʊk(s)]
cast [kɑːst]	course [kɔːs]	copper [ˈkɒpə]	used [juːzd]
brass [brɑːs]	pure [pjʊə]	alloy [əˈlɔɪ]	zinc [zɪŋk]
coat(ed) [kəʊt(id)]	galvanize(d) [ˈgælvənaɪz(d)]	nichrome [ˈnɪkrəʊm]	
nickel [ˈnɪkl]	chromium [ˈkrəʊmiəm]	resistance [rɪˈzɪstəns]	

練習第十

A. 次を能動と受動の両方に英訳しなさい。

1. 電燈は室や街路 (street) を照らします。
2. 先生が此の装置の機構を説明されます (explain).
3. 製圖家は明日迄に (by to-morrow) 其を仕上げる (finish) でせう。
4. 私は變壓器を作つて居ます。
5. 數個の回轉して居る車輪が見えます。
6. 私は電鈴を鳴らします (ring).

B. 次の英文の空所を充たして譯しなさい。

1. The shop () () opened soon.
2. By pushing a button you can set it () ().
3. Copper is made () wires.
4. Alternating current is () general use.
5. I () be an inventor in future.

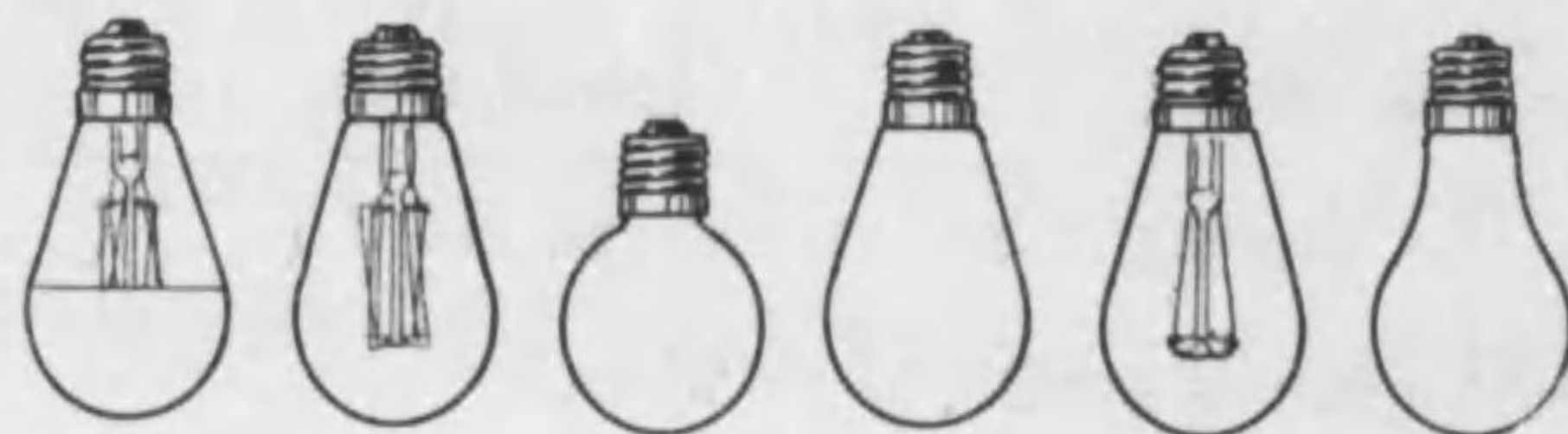
C. 次の英文を譯しなさい。

1. I can see some toiling farmers (農夫) in the fields (田・畑).
2. There are several means of testing electric current.

LESSON 45

KINDS OF BULBS

There are many kinds of lamp bulbs. Some of them are gas-filled, and others are vacuum. Some of them are round and others are pear-shaped. Some are transparent and others are frosted.



Gas-filled lamps are more efficient than vacuum ones. Frosted bulbs are good for the eye and look nicer, too.

gas-fill(ed) ['gæs-fil(d)] pear-shaped ['pɛɜː-ʃeɪpt] transparent
[træns'pɛərənt] frost(ed) [frɔːst(id)] efficient [i'fɪʃənt]
nice(r) [naɪs(ə)]

LESSON 46

THE LIGHTNING CONDUCTOR

What is that on the roof of the house? It looks like a metal rod. It is the lightning conductor. It has gold points at its top, and is connected with a wire to the ground.



What is the use of the lightning conductor? It protects houses from the damage done by lightning.

Early to bed and early to rise, makes a man healthy, wealthy and wise.

—Franklin.

lightning ['laɪtnɪŋ] rod [rɒd] gold [gould] point(s) [pɔɪnt(s)]
top [tɒp] connect(ed) [kə'nekt(id)] ground [graund]
protect(s) [prə'tekt(s)] damage ['dæmɪdʒ] done [dʌn]

LESSON 47

THE ELECTRIC TRAIN

Is this a steam train, father? No, Tommy, for it has no steam engine, but a pantagraph. What is it run by? It is run by electricity, and is called an electric train. The train is hauled by an electric locomotive, not by motor cars.

You know a part of the Tōkaidō Line has been electrified. That is to say, steam trains have been replaced by electric trains. The electric train is cleaner and more comfortable than the steam train.

The frontispiece is a picture of an electric train of the New York, New Haven and Hartford Railroad Company.

Tommy ['tɒmi] pantagraph ['pæntəgræf] haul(ed) [hɔ:l(d)] line [lain]
 been [bi:n] electrified [i'lektɹifaɪd] say [sei] replace(d) [ri:'pleɪs(t)]
 comfortable ['kʌmfətəbl] frontispiece ['frʌntɪspi:s]
 New York ['nju:'jɔ:k] Haven ['heɪvən] Hartford ['hɑ:tfəd]
 railroad ['reɪlrouəd] company ['kʌmpəni]

LESSON 48

THE TROLLEY-BUS



The trolley-bus uses only a part of the highway. A breakdown does not affect the whole of the system, but only the disabled car.

In case of a breakdown its trolley pole can be removed from the conductor, and the bus may be towed away to be repaired. It is cheaper to install, as rails are not needed.

trolley-bus ['trɒli-bʌs] highway ['haɪwei] breakdown ['breɪk'daʊn]
 affect [ə'fekt] whole [həʊl] system ['sɪstɪm] disable(d) [dɪs'eɪbl(d)]
 pole [pəʊl] remove(d) [rɪ'mu:v(d)] tow(ed) [tu:(d)]
 away [ə'wei] install [ɪn'stɔ:l] need(ed) [ni:d(id)]

THE ELECTRIC CLOCK

There is a novel kind of clock. It requires no winding up at all. It is called an electric clock.

An electric clock consists of a master clock and a number of secondary clocks, electric mechanism being properly connected to them.



By means of this arrangement all the secondary clocks indicate the same time as the master clock.

novel ['nɒvəl]	require(s) [ri'kwaɪə(z)]	winding ['waɪndɪŋ]
consist(s) [kən'sɪst(s)]	master ['mɑ:stə]	being ['bi:ɪŋ]
properly ['prɒpəli]	arrangement [ə'reɪnz̩mənt]	
indicate ['ɪndɪkeɪt]	same [seɪm]	

CONDUCTORS AND INSULATORS

All metals are good conductors of electricity more or less. We generally use copper as an electric conductor. For it is very highly conductive, cheap and convenient for workmanship.

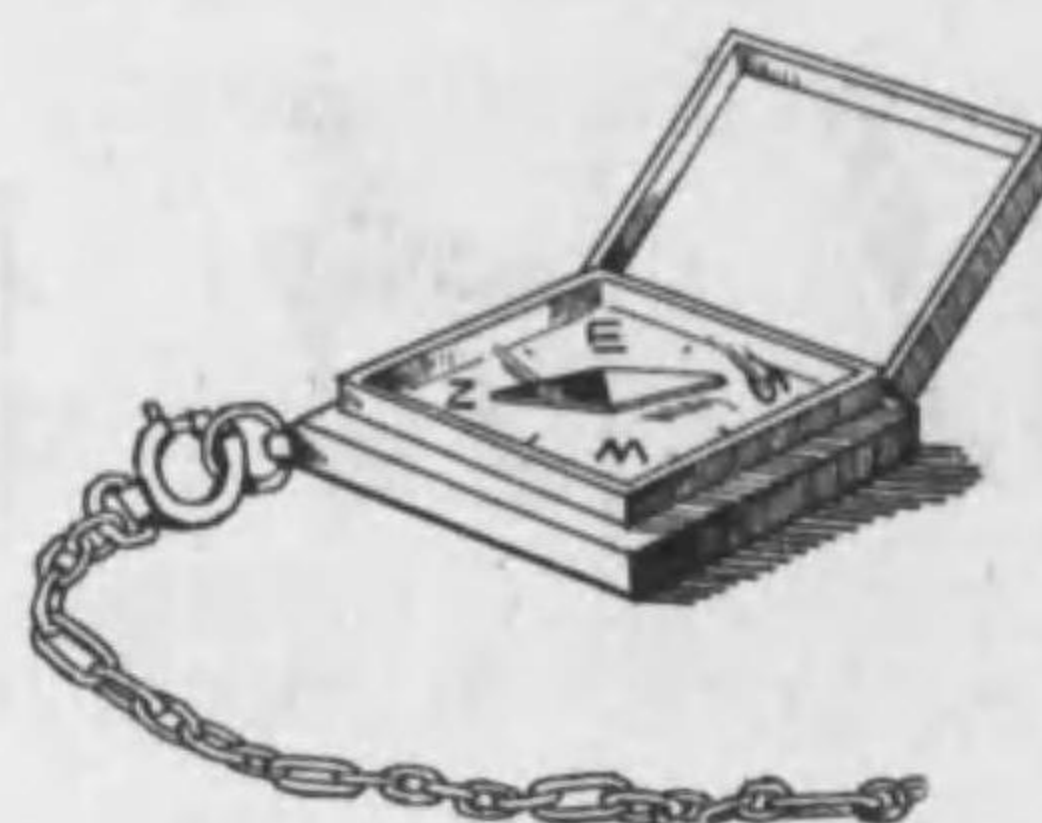
Glass, wax, paraffin, ebonite, vulcanized fiber and bakelite do not conduct electricity and are called insulators. India-rubber, mica, porcelain, dry paper, cotton and silk are also insulators.

Pure water is a poor conductor. But it becomes a good conductor on the addition of a little salt.

more [mɔ:]	less [les]	generally ['dʒenərəli]	highly ['haɪli]
conductive [kən'dʌktɪv]	cheap [tʃi:p]	convenient [kən'vi:njənt]	
workmanship ['wɜ:kmənfɪp]		glass [glɑ:s]	wax [wæks]
paraffin ['pærəfɪn]	ebonite ['ebənait]	vulcanize(d) ['vʌlkənaɪz(d)]	
fiber ['faɪbə]	bakelite ['beɪklait]	conduct [kən'dʌkt]	mica ['maɪkə]
porcelain ['pɔ:sli:n]	dry [draɪ]	cotton ['kɒtn]	
also ['ɔ:lsoʊ]	poor [puə]	become(s) [bi'kʌm(z)]	
	little ['lɪtl]	salt [sɔ:lt]	

LESSON 51

THE COMPASS



What is that you have on your watch guard? It is a compass. The compass has a needle. The needle is a permanent magnet.

The black end points to the North, and the white one to the South. We can tell by the compass which is North, South, East or West.

There are many applications of the compass, such as the mariner's compass, the surveyor's transit and so on.

compass ['kɑmpəs]	needle ['ni:dl]	permanent ['pə:mənənt]	
magnet ['mægnɪt]	end [end]	north [nɔ:θ]	south [sauθ]
east [i:st]	west [west]	mariner's ['mærinəz]	
surveyor's [sə(:)'veɪəz]	transit ['trænzɪt]	so [sou]	

LESSON 52

THE KNIFE SWITCH



I have a new knife. It has a handle and two blades. The handle is made of horn, and the blades are made of steel.

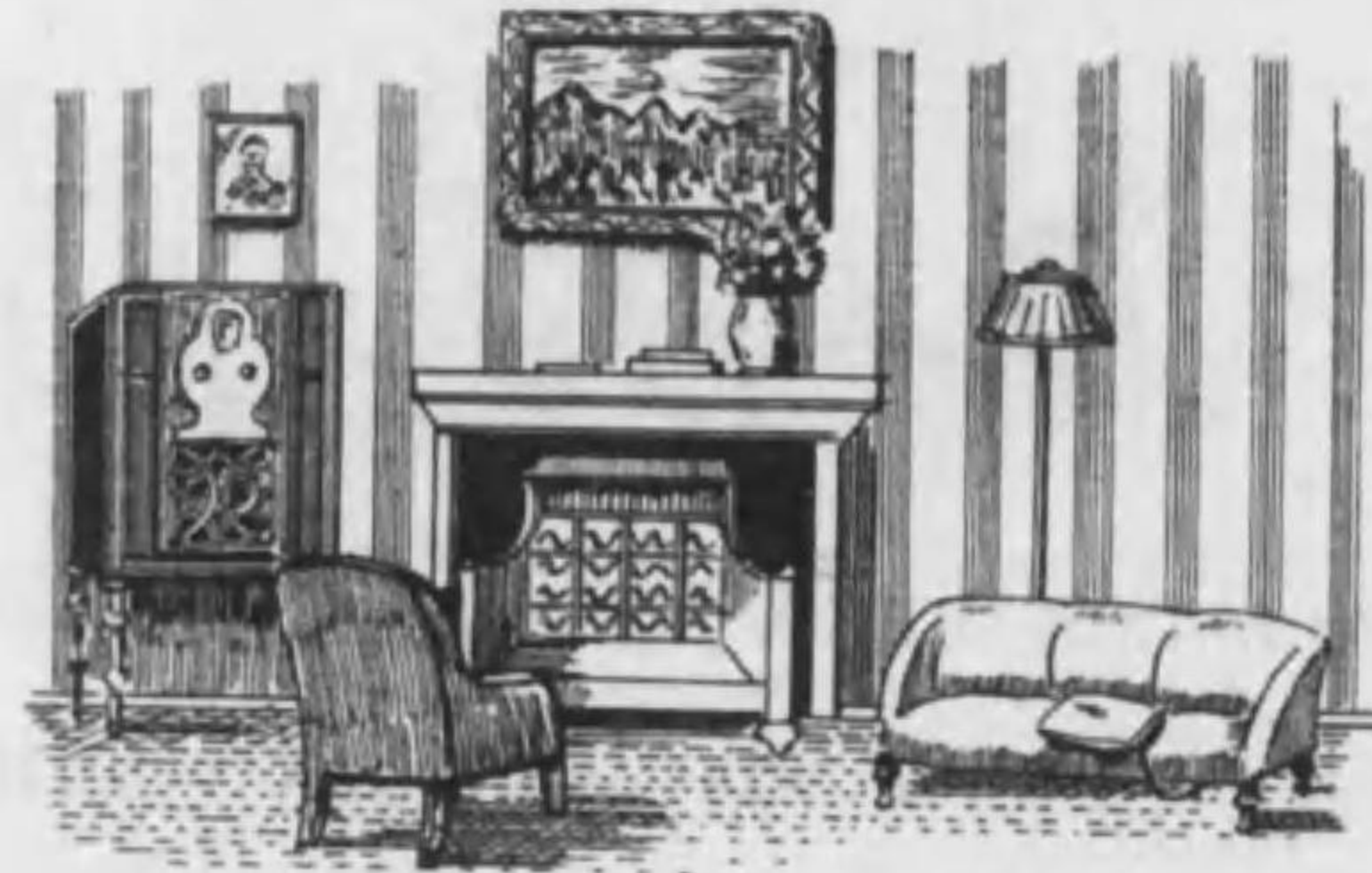
Here is a knife switch. It has a wooden handle and two copper blades. A switch with two blades is called a two-pole switch. A single-pole switch has only one blade. A three-pole switch has three blades.

There are a large variety of switches, such as push-button switches, snap switches, tumbler switches, oil switches and many others.

new [nju:]	horn [hɔ:n]	wooden [wudn]	single ['sɪŋɡl]
variety [və'raɪəti]	snap [snæp]	tumbler ['tʌmblə]	

LESSON 53

HOME ELECTRIFICATION—I



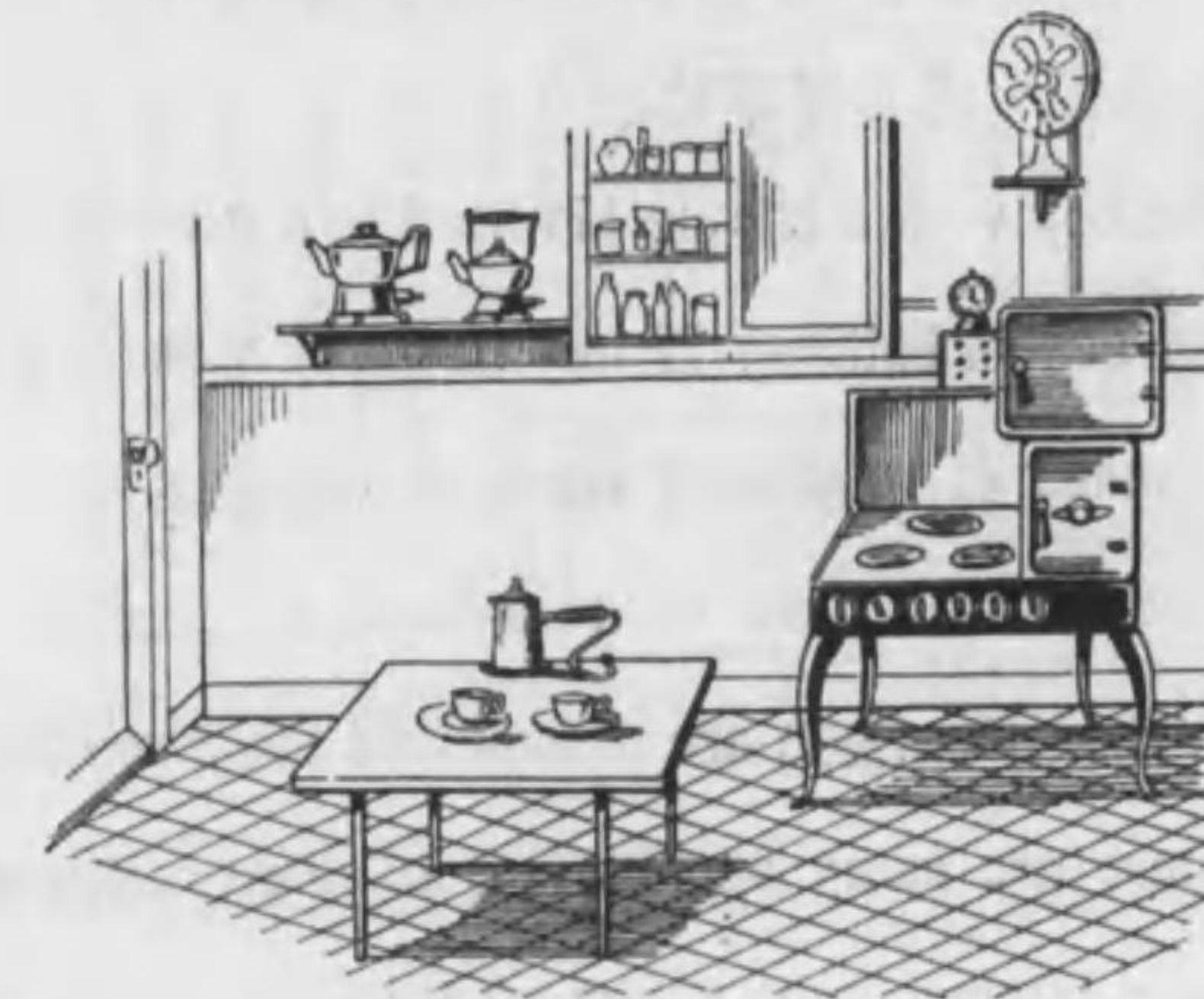
This is my house. It is of European style, and the interior is electrified. In my room there are a stove, a warming pad and so on.

An electric stove is healthy and convenient. This stove is fairly large, but you can carry it to anywhere you like. The warming pad is more comfortable than an ordinary cushion. It never gets too hot, for it is provided with a thermostat.

electrification [i,lektrifi'keifən] European [juərə'pi(:)ən] style [stail]
 interior [in'tiəriə] stove [stouv] warming ['wɔ:mɪŋ] pad [pæd]
 healthy ['helθi] fairly ['feəli] carry ['kæri] anywhere
 ['eni(h)wɛə] ordinary ['ɔ:dinəri] cushion ['kʊʃən] hot [hɒt]
 provide(d) [prə'vaɪd(id)] thermostat ['θə:məstæt]

LESSON 54

HOME ELECTRIFICATION—II



This is our kitchen. Here we see many electrical utensils, such as a range, a milk-warmer and kettles. This electric range is safe as well as clean. It is very efficient. This milk warmer is economical, and heats a bottle of milk in four minutes.

We see two kettles on the shelf. This new kettle is widely used, as it consumes less current than that old one.

kitchen ['kitʃɪn] utensil(s) [ju(:)'tensl(z)] such [sʌʃ] range [reɪndʒ]
 milk [mɪlk] warmer ['wɔ:mə] economical [i:kə'nɒmɪkəl]
 heat(s) [hi:t(s)] bottle ['bɒtl] kettle(s) ['ketl(z)]
 widely ['waɪdli] consume(s) [kən'sju:m(z)]

練習 第十 一

A. 次の英文を譯しなさい。

1. The boy with a cap on his head is a friend of mine.
2. Our school building is not made of wood (木材), but is made of reinforced concrete (鐵筋混凝土).
3. Steam trains have been replaced by electric trains, as the latter (後者) are cleaner and more comfortable.
4. There are many applications of electricity, and we have learned only a few of them.

B. 次の英文に就て (甲) 各語の品詞を示し, (乙) 主部と述部を區別し, (丙) 自動詞と他動詞をぬき出しなさい。

1. Pure water becomes a good conductor on the addition of a little salt.
2. You know that a part of the Tōkaidō Line has been electrified.
3. Here is a letter which was written by Tarō.
4. It protects houses from the damage that is done by lightning.

英文法略表

第一表 品詞 Parts of Speech

名詞	Noun (book, Japan, family 等)
代名詞	Pronoun (I, he, one, which 等)
形容詞	Adjective (new, tall, white 等)
動詞	Verb (have, get, learn 等)
副詞	Adverb (only, very, always 等)
接續詞	Conjunction (and, or, for 等)
前置詞	Preposition (in, on, up, at 等)
感嘆詞	Interjection (ah, oh, hurrah 等)

第二表 名詞の種類 Classes of Nouns

固有名詞	Proper noun (Edison, Tokyo 等)
普通名詞	Common noun (book, motor 等)
集合名詞	Collective noun (people, class 等)
物質名詞	Material noun (water, gold 等)
抽象名詞	Abstract noun (goodness, beauty 等)

第三表 代名詞の種類 Classes of Pronouns

人稱代名詞	Personal pronoun (I, you, he 等)
關係代名詞	Relative pronoun (that, who, what 等)
疑問代名詞	Interrogative pronoun (what, who, which 等)

備考: 一尚ほ此の他に所有代名詞, 指示代名詞等あり。

第四表 代名詞の變化 Inflection of Pronouns						
数	格	一人稱		二人稱		
		通性	通性	男性	女性	中性
單數	主格	I	you	he	she	it
	所有格	my	your	his	her	its
	目的格	me	you	him	her	it
複數	主格	we	you	they		
	所有格	our	your	their		
	目的格	us	you	them		
備考	mine, ours, yours, his, hers, theirs..... は所有格の次の名詞を省く時に用ひらる。 This is my book. を This book is mine. とする如し。					

第五表 形容詞 Adjectives			
種類	代名形容詞 (this, that, some, every 等)		
	數量形容詞 (many, little, ten 等)		
	性質形容詞 (good, great 等)		
比較	常級	比較級	最上級
	1. 原形 (great)	原形+er (greater)	the 原形+est (the greatest)
	2. 原形 (comfortable)	more 原形 (more comfortable)	the most 原形 (the most comfortable)
3. 原形 (good)	不規則 (better)	不規則 (the best)	
冠詞	不定冠詞 { a 子音に始まる語 (a boy, a switch 等) an 母音に始まる語 (an antenna, an eraser 等) 定冠詞 the (a, an の如き制限なし)。		
備考	形容詞は名詞又は代名詞を修飾す。		

第六表 動詞 Verbs			
語形	現在形	過去形	過去分詞形
	1. 原形 (call)	原形+ed (called)	原形+ed (called)
	2. 原形 (see)	不規則 (saw)	不規則 (seen)
時制	基本	現在	過去
	1. 原形 (call)	原形+ed (called)	shall } 原形 (shall call) will } (will call)
	2. 原形 (see)	不規則 (saw)	同上 (shall see) (will see)
制	完了	現在完了	過去完了
	have 過去分詞 (have called) have seen	had 過去分詞 (had called) had seen	shall } have 過去分詞 will } (have called) (have seen)
准	不定法 to 原形 (to call, to see)		
動詞	分詞	現在分詞 原形+ing (calling, seeing) [進行形も同形]	
		過去分詞 原形+ed 又は不規則 (called, seen)	
種類	動名詞 原形+ing (calling, seeing)		
種類	自動詞 目的を取らず, 補語を取るこゝあり。 他動詞 目的を取る, 補語を取るこゝあり。		
態	能動態 働を及ぼす。(We love our mother.) 受動態 働を受く。(Our mother is loved by us.)		

第七表 主語と動詞 Subject and Verb			
時制	数		
	一人稱	二人稱	
現 在	一人稱	I am (use, have)	we are (use, have)
	二人稱	you are (use, have)	you are (use, have)
	三人稱	he } she } it } is (uses, has)	they are (use, have)
過 去	一人稱	I was (used, had)	we were (used, had)
	二人稱	you were (used, had)	you were (used, had)
	三人稱	he } she } it } was (used, had)	they were (used, had)
未 來	一人稱	I shall be (use, have)	we shall be (use, have)
	二人稱	you will be (use, have)	you will be (use, have)
	三人稱	he } she } it } will be (use, have)	they will be (use, have)
備 考	1. 名詞を主語とする場合には、本表中第三人稱に準じて、動詞を用ふべし。 2. 本表中の未來時制には單純未來のみを掲げたり。I will, you shall 等も使用せらる。		

第八表 副詞 Adverbs			
種 類	1. 單純副詞 (greatly, well 等)		
	2. 關係副詞 (when, where, why 等)		
	3. 疑問副詞 (when, where, why 等)		
比 較	常 級	比 較 級	最 上 級
	1. 原 形 (early)	原形+er (earlier)	原形+est (earliest)
	2. 原 形 (highly)	more 原形 (more highly)	most 原形 (most highly)
備 考	3. 原 形 (well)	不 規 則 (better)	不 規 則 (best)
	副詞は動詞、形容詞又は他の副詞等を修飾す。 形容詞の語尾に ly を附加すれば副詞となるもの多し。 同一語にて形容詞としても、副詞としても用ひらるゝものあり。		

第九表 接續詞 Conjunctions	
種 類	1. 對等接續詞 (and, but, or 等)
	2. 從屬接續詞 (for, as, while 等)
備 考	1 は獨立語同志又は獨立節同志を結び、2 は主節と從節とを結ぶ。(第十一表参照)

第十表 前置詞 Prepositions	
種類	1. 單純前置詞 (at, in, from 等) 2. 成句前置詞 (in front of, with regard to 等)
語例	最も屢用ひらるゝ單純前置詞は略次の如し。 about, above, after, along, among, as, at, before, behind, below, between, by, during, except, for, from, in, into, of, on, over, through, till, to, under, until, upon, with, within, without.
備考	前置詞は名詞又は代名詞の前に置かるゝ詞なり。直接前に置かるゝことゝ、形容詞等を隔てゝ前に置かるゝことゝあり。前置詞の後に來る名詞又は代名詞はその目的格とす。

第十一表 文の組成 Composition of a Sentence	
成立	音, sound→語, word→句, phrase→節, clause→文, sentence
構成	主部, subject+述部, predicate
文の分類	1. 單純文.....主部+述部 (I read.) 2. 複合文.....獨立節+獨立節 (I read and he writes.) 3. 複雜文.....主節+從節 (I read the book, for I like it.)
文の形式	1. 主語+動詞 (I see.) 2. 主語+動詞+補語 (I am a boy.) 3. 主語+動詞+目的 (I have a book.) 4. 主語+動詞+間接目的+直接目的 (I wrote him a letter.) 5. 主語+動詞+目的+補語 (He made me happy.)
備考	命令文には普通主語を省く。(Read it. Be honest.)

各章單語譯解

本譯解中 (名)は名詞, (代)は代名詞, (形)は形容詞, (動)は動詞, (副)は副詞, (接)は接續詞, (前)は前置詞, (感)は感嘆詞, (冠)は冠詞, (助)は助動詞, (接)は接詞, (選分)は過去分詞なり。

LESSON 1	LESSON 3	oil-switch (名) 油入閉器
this (代) これは	plug (名) 栓	
is (動) である	base (名) 扇坐	LESSON 6
a (冠) 一つの	blade (名) 扇翼	pump (名) ポンプ
pin (名) ピン	cord (名) 紐線	tram-car (名) 電車
bell (名) 電鈴	guard (名) 保護器	train (名) 列車
cell (名) 電池	motor (名) 電動機	bulb (名) 電球
fan (名) 電氣扇	LESSON 4	boy (名) 少年
lamp (名) ランプ(電燈)	coil (名) 線輪	man (名) 大人
punch (名) 孔貫き	hammer (名) 鎚	shade (名) 笠
box (名) 箱	terminal (名) 端子	LESSON 7
book (名) 本	LESSON 5	yes (副) ハイ(然り)
	an (冠) 一つの	no (副) 一エ(否)
LESSON 2	note-book (名) 雜記帳	not (副) ...でない
pen (名) ペン	hat (名) 帽子(縁のある)	cable (名) 電纜
nail (名) 釘	cap (名) 帽子(學帽等)	heater (名) 電熱器
ball (名) 球	bag (名) 鞆	it (代) それ
sail (名) 帆	wire (名) 電線 「れ	LESSON 8
bolt (名) ボールト	inkstand (名) インキ入	what (代) 何
nut (名) ナット	insulator (名) 碍子	knob (名) 把手(こって)
pencil (名) 鉛筆	iron (名) 鑊「ンテナ)	cleat (名) 線押へ
knife (名) 小刀	antenna (名) 空中線(ア	watch (名) 懐中時計
bench (名) 腰掛	eraser (名) 字消し	clock (名) 柱時計
fork (名) フーク		

meter (名) 計器

LESSON 9

here(副) 此處に
on (前) の上に「味」
the(冠)この、あの、意
desk (名) 机
English (形) 英語の
reader (名) 読本
primer (名) 初歩
there is ...がある
another(形)もう一つの
shelf (名) 棚
dictionary (名) 辞典
Japanese (形) 日本の

LESSON 10

stand (名) スタンド
table (名) テーブル
kind (名) 種類
electric (形) 電気の
for (前) に對する
round (形) 圓い
very (副) 甚だ
nice (形) 綺麗な

LESSON 11

have (動) 持つ
has (動) 持つ 「筆」
fountain-pen (名) 万年
silk (名) 絹
none (代) 一つも...ない

LESSON 12

am (動) である
are (動) である
pupil (名) 生徒
teacher (名) 先生
you (代) あなた
he (代) 彼は
workman (名) 職人
she (代) 彼女は
telephone operator (名)
電話交換手
we (代) 吾々は
Japanese (名) 日本人
they (代) 彼等は
foreigner (名) 外國人

LESSON 13

who (代) 誰
do (動) なす
see (動) 見る
gentlemen (名)
(gentlemanの複)紳士
in (前) 於て
yard (名) 中庭
tall (形) 丈の高い
Mr. (Misterの略)(名)君
Brown (名) 人名
our (代) 吾々の
engineer (名) 技師
short (形) 丈の低い
Smith (名) 人名

foreman (名) 職工長
erecting shop (名) 組
立工場

LESSON 14

number (名) 數
cardinal (形) 基本の
ordinal (形) 順序の

LESSON 15

calculation (名) 計算
addition (名) 加へ算
and (接) ミ
plus (形) 加へる
equal(s) (動) 等しい
subtraction (名) 引き算
minus (形) 引く
from (前) から
leave(s) (動) 残す

LESSON 16

hand(s) (名) 指針
long (形) 長い
minute (名) 分
hour (名) 時間
second (名) 秒
sixty (形) 六十
twenty-four (形) 二十四
day (名) 日
time (名) 時
now (副) 今
past (前) 過ぎ

quarter (名) 四分の一
to (前) に至るまで
thirty (名) 三十
fifty-four (名) 五十四

LESSON 17

of (前) の
week (名) 週
how many 如何程
can (助) 出来る
name (動) 名を云ふ
them (代) それ等を
in order 順に
Sunday (名) 日曜
Monday (名) 月曜
Tuesday (名) 火曜
Wednesday (名) 水曜
Thursday (名) 木曜
Friday (名) 金曜
Saturday (名) 土曜
holiday (名) 休日
working day 仕事日
or (接) 即ち
school (名) 學校(授業)
other (形) 他の

LESSON 19

human (形) 人の
body (名) 身體
face (名) 顔
eye(s) (名) 眼

ear(s) (名) 耳
nose (名) 鼻
mouth (名) 口
hand(s) (名) 手
thumb (名) 拇指
finger(s) (名) 指
feet (名) 足(複數)
toe(s) (名) 足指
foot (名) 足(單數)
hair (名) 毛
black (形) 黒い
teeth (名) (toothの複)
齒
white (形) 白い

LESSON 20

with (前) を以て
hear (動) 聞く
smell (動) かく
my (代) 僕の
speak (動) 話す
sing (動) 歌ふ
taste (動) 味はふ
grasp (動) 握る
walk (動) 歩む
and (接) 又
run (動) 走る
leg(s) (名) 脚
fly (動) 飛ぶ
for (接) 何故こいふに
wing(s) (名) 翼

LESSON 21

house (名) 家
live (動) 住む
father (名) 父
mother (名) 母
brother (名) 兄弟
sister (名) 姉妹
elder (形) 年上の
is married (marryの
過分) 結婚してゐる
younger (形) 年下の
pet (名) 秘藏子
family (名) 家族
year(s) (名) 歳
parents (名) 兩親
old (形) 年取つてゐる
but (接) しかし
young (形) 若い

LESSON 22

comparison (名) 比較
centimeter(s) (名) セン
チメートル
just (副) 丁度
oh (感) オー 「高い」
tall(er) (形) (モット) 丈
than (接) より
only (副) わづかに
know (動) 知る
tall(est) (形) (一ばん)
丈高い

us (代) 吾々に
all (代) 皆

LESSON 23

singular (名) 単数
plural (名) 複数
neon (名) ネオン
tube (名) 管
your (代) 君の
slide rule(s) (名) 計算尺
vest (名) チョッキ
pocket (名) ポケット
merchant (名) 商人
many (形) 澤山の
his (代) 彼の
shop (名) 店
across (前) 横切つて
field (名) 野原
station (名) 停車場
are playing (play) 遊び
つゝある
playground (名) 運動場
is running (run) after
追かけつゝある

LESSON 24

class (名) 級
room (名) 室
window(s) (名) 窓
sliding door (名) 引戸
hang (動) かゝる
ceiling (名) 天井

pupil(s) (名) 生徒
on (前) の上に
floor (名) 床
teacher's (名) 教師の
stand(s) (動) 立つ
by (前) 傍に
platform (名) 教壇
write (動) 書く
blackboard (名) 黒板
piece (名) 片
chalk (名) 白墨

LESSON 25

month (名) 月
January (名) 一月
February (名) 二月
March (名) 三月
April (名) 四月
May (名) 五月
June (名) 六月
July (名) 七月
August (名) 八月
September (名) 九月
October (名) 十月
November (名) 十一月
December (名) 十二月
divide (動) 分ける
into (前) に
season(s) (名) 季節
too (副) も亦
spring (名) 春

summer (名) 夏
autumn (名) 秋
winter (名) 冬

LESSON 26

radio (名) 無線(ラジオ)
set (名) 装置
listen to を聴く
every day (名, 副) 毎日
made (make の過去)
(動) 造つた
cabinet (名) 函「逸製
German make (名) 獨
ever (副) 今迄に
have seen (see の過分)
見た(こゝがある)
microphone (名) マイ
クロフォン 「い
never (副) 今迄に...な
one (代) もの
wish (動) したいと望む
able (形) 堪能な

LESSON 27

automobile (名) 自動車
look at を視る
picture (名) 繪
car (名) 車
in front of の前の方に
driver (名) 運転手
is made (make の過分)
up of で造られてある

engine (名) 機関
car-body (名) 車體
shaft(s) (名) 車軸
wheel(s) (名) 車輪
accessories (名) acces-
sory の複 附屬品

LESSON 28

may (助) してもよい
must (助) ねばならぬ
play (動) 遊ぶ
base-ball (名) 野球
is good at ...が上手だ
rowing (名) 漕艇
then (副) それなら
tennis (名) 庭球
well (副) 上手に
champion (名) 選手
go (動) 行く
game (名) 試合
come back (名) 歸る
before (前) 前に
dark (名) 日暮

LESSON 29

mine (代) 僕のもの
yours (代) 君のもの
his (代) 彼のもの
screw-driver (名) ねぢ
まはし
pliers (名) ペンチ
pair (名) 對

whose (代) 誰の
soldering iron (名) ハ
ンダ鐵
don't = do not...しない

LESSON 30

some (形) 數個の
preposition (名) 前置詞
gate (名) 門
bicycle (名) 自轉車
boat (名) 小舟
lake (名) 湖
bridge (名) 橋
river (名) 河
ship(s) (名) 船
sea (名) 海
steamer (名) 汽船
harbour (名) 港
climb(ed) (動) 登つた
hill (名) 丘
near (前) ...の近くに
village (名) 村

LESSON 31

writing (write) (名) 書
くこと
letter (名) 手紙
sit(s) (動) 坐る
take(s) (動) 取る
sheet (名) 枚
paper (名) 紙
place(s) (動) 置く

wet (形) ぬれた
ink (名) インキ
thus (副) かうして
fold(s) (動) 折りたゝむ
put(s) into に入れる
envelope (名) 封筒
name (名) 姓名
address (名) 住所
stamp (名) 切手
mail(s) (動) 郵送する

LESSON 32

example (名) 例
written (write の過分)
(形) 書かれた
read(s) (動) 書いてある
as follows 次の如し
dear (形) 親愛なる
glad (形) 嬉しい
happy (形) 幸福なる
learn (動) 知る
like (動) 好む「學友
fellow student(s) (名)
enjoy (動) 楽しむ
return (動) 歸る
home (名) 家庭「つゝ
looking (look) (動) 見
forward (副) 前方に
loving (love) (形) 愛情
son (名) 息子 いる

LESSON 33

past (名) 過去
 tense (名) 時制
 when (副) ...時に
 was (is, am の過去)
 (動) であつた
 Edison (名) 人名
 newsboy (名) 新聞賣子
 were (are の過去) (動)
 であつた
 once (副) 一度
 baby (名) 赤坊
 was going to しようと
 してゐた
 get (動) 得る
 where (副) 何處に
 drafting (draft) (形) 製
 圖の
 current (名) 電流「て
 off (副) 切れて(停電し

LESSON 34

did (do の過去) なした
 repair (動) 修繕する
 myself (代) 僕自身
 examination (名) 試験
 age (名) 歳
 servant (名) 召使
 turn off 消す
 light (名) 電燈
 broadcasting (broad-

cast) (名) 放送

LESSON 35

riding (ride) (名) 乗る
 wait (動) 待つしこと
 street (名) 街路
 signal (動) 信號する
 motorman (名) 運轉手
 stop(s) (動) 止める
 enter (動) 入る
 seat (名) 座席
 conductor (名) 車掌
 start (動) 出發させる
 sen (名) 錢
 give (動) 與へる
 ticket (名) 切符
 punch(es) (動) (切符な
 ぎに) 穴をあける
 leave (動) 去る
 get out of から出る
 walk off 歩き去る

LESSON 36

colour (名) 色
 red (名) (形) 赤, 赤い
 blue (名) (形) 青, 青い
 grey (名) 灰色
 India-rubber (名) ゴム
 yellow (名) 黄
 green (名) 綠
 grass (名) 草

while (接) 然るに
 sky (名) 空
 coat (名) 上衣
 rainbow (名) 虹
 violet (名) 紫
 indigo (名) 藍色
 orange (名) 橙色
 above (名) 上記
 appear (動) 現れる「ル
 spectrum (名) スペクト
 sun (名) 太陽

LESSON 37

shape(s) (名) 形狀
 rectangular (形) 矩形の
 globe (名) 球
 spherical (形) 球形の
 pointed (形) とがつた
 edge (名) 及
 blunt (形) 鈍い
 T-square (名) T型定規
 straight (形) 眞直な
 building (名) 建物
 large (形) 大きい
 egg (名) 卵
 oval (形) 卵形の
 oblong (形) 長橢圓形の

LESSON 38

stories (story の複)
 (名) 階

high (形) 高い「めて
 including (include) 含
 basement (名) 地階
 recess(es) (名) 休み
 noon (名) 正午
 flat (形) 平らな
 roof (名) 屋根
 paved (pave の過分)
 (形) 舗装した
 kind (形) 親切な
 love (動) 愛す
 central (形) 中央の
 part (名) 部分
 is called (call の過分)
 稱せらる

institute (名) 學校
 electrical (形) 電氣の
 mechanical (形) 機械の
 technology (名) 工藝學
 was founded (found の
 過分) 創立せられた

LESSON 39

active (形) 能動の
 passive (形) 受動の
 voice(s) (名) 態「る
 examine(s) (動) 試験す
 mechanism (名) 機構
 device (名) 装置
 water-level indicator
 (名) 水位指示計

show(s) (動) 示す
 threw (throw の過去)
 on 入れた
 switch (名) スウィッチ,
 開閉器
 was thrown (throw の
 過分) on 入れられた
 sell (動) 賣る
 these (形) これ等の
 apparatus (名) 器具
 hardware (名) 金物
 merchant's (名) 商人の
 (店)

LESSON 40

future (名) (形) 未來,
 未來の
 shall (助) であらう
 be (動) である
 salesengineer (名) 販
 賣技師
 will (助) であらう
 chief (形) 主なる, 長
 draftsman (名) 製圖家
 perhaps (副) 多分
 inventor (名) 發明家
 transformer (名) 變壓器
 be opened (open の過
 分) 開かれる
 a few 數個の

LESSON 41

form(s) (名) 形式
 are doing (do) 爲しつ
 、ある
 Baker (名) 人名
 am testing (test) 試験
 しつ、ある
 is making (make) 造
 りつ、ある
 is cleaning (clean) 清
 潔にしつ、ある
 vacuum cleaner (名)
 真空掃除器
 sometimes (副) 時折
 fast(er) (形) (より) 速
 い「るる
 flying (fly) (形) 飛んで
 bird (名) 鳥
 revolving (revolve)
 (形) 回轉してゐる
 toiling (toil) (形) 骨折
 つてゐる
 locomotive (名) 機關車
 Frenchman (名) フラ
 ンス人
 succeeded (succeed の
 過去) (動) 成功した
 machine (名) 機械
 turning (turn) (名) 回
 轉すること
 handle (名) ハンドル

set (動) 置く
motion (名) 運動
pushing (push) (名) 押
すこと
button (名) ボタン

LESSON 42

direct current (名) 直流
alternating current
(名) 交流
always (副) 常に
flowing (flow) (形) 流
れるところの
direction (名) 方向
change(s) (動) 變へる
alternately (副) 交互に
several (形) 種々の
means (名) 方法
telling (tell) (名) 告げ
ること
each (代) 各
field (名) 方面
application (名) 應用
suitable (形) 適當な
traction (名) 牽引
electrolysis (名) 電解
light (名) 點燈
power (名) 動力 「ら
however (接) 然しながら
general (形) 一般の
use (名) 使用

its (代) それの

LESSON 43

source (名) 源
electricity (名) 電氣
be had (have の過分)
得らる
be obtained (obtain の
過分) 得らる
various (形) 種々の
dynamo (名) 發電機
generator (名) 發電機
alone (形) だけ
generating (generate)
(形) 起すところの
often (副) 屢々
alternator (名) 交流機
is classified (classify
の過分) 分類される
primary (形) 一次の
secondary (形) 二次の
group (名) 群 「電池
accumulator(s) (名) 蓄

LESSON 44

useful (形) 有用なる
metal(s) (名) 金屬
steam (名) 蒸汽
boiler(s) (名) 汽罐
steel (名) 鋼鐵
iron (名) (形) 鐵, 鐵の

plate(s) (名) 板金
most (形) 大抵の
yoke(s) (名) 轡鐵
cast (cast の過分) (形)
鑄造の
of course 勿論
copper (名) 銅
conductor(s) (名) 導體
brass (名) 眞鍮
pure (形) 純粹の
alloy (名) 合金
zinc (名) 亜鉛
coated (coat の過分)
(形) 被覆せる
galvanized (galvanize
の過分) (形) 亜鉛鍍
せる 「ーム
nichrome (名) ニクロ
nickel (名) ニッケル
chromium (名) クロム
is made into... に造ら
れる
resistance (名) 抵抗

LESSON 45

gas-filled (形) ガス入の
「(通稱茄子形)の
pear-shaped (形) 梨形
transparent (形) 透明
の
frosted (形) 艶消の

efficient (形) 能率よき
look (動) 見える
nicer (nice) (形) より
優美な

LESSON 46

lightning (名) 電光
like (前) やうに
rod (名) 竿
gold (形) 金の
point(s) (名) 尖頭
top (名) 上部
is connected (connect
の過分) 接続される
ground (名) 大地「る
protect(s) (動) 保護す
damage (名) 損害
done (do の過分) (形)
なされた

LESSON 47

Tommy (名) 人名
pantagraph (名) バン
タグラフ
is run (run の過分) 運
轉せられる
is hauled (haul の過
分) 引かれる
motor-car (名) 電動車
line (名) 線
has been electrified

(electrify の過分) 電
化された
say (動) 言ふ
has been replaced
(replace の過分) 取
りかへられた
comfortable (形) 氣持
のよい
frontispiece (名) 口繪
New York (名) 地名
New Haven (名) 地名
Hartford (名) 地名
railroad (名) 鐵道
company (名) 會社

LESSON 48

trolley-bus (名) 無軌道
電車
highway (名) 大道
breakdown (名) 故障
affect (動) 影響する
whole (形) 全體の
system (名) 系統
disabled (disable の過
分) (形) (運轉) 不能の
pole (名) 柱
be removed (remove
の過分) 取除かれる
be towed (tow の過分)
引いて行かれる
away (副) 向ふへ

as (接) 故に
install (動) 設備する
rail (名) レール
are not needed (need
の過分) 要せられない

LESSON 49

novel (形) 珍奇の
require(s) (動) 要する
winding up 巻くこと
at all 少しでも
consist(s) (動) 成り立つ
master clock (名) 親時
計 「子時計
secondary clock (名)
being connected (con-
nect の過分) = and
is connected そして
連接せられてゐる
properly (副) 適當に
arrangement (名) 裝置
the same...as 同じ

LESSON 50

good (形) 良い
more or less 多少
generally (副) 一般に
use (動) 使用する
highly (副) 非常に
conductive (形) 傳導し
やすい

cheap (形) 安價な
convenient (形) 便利な
workmanship (名) 工作
glass (名) ガラス
wax (名) 蠟 「ン, 石蠟
paraffin (名) パラフィン
ebonite (名) エボナイト
vulcanized fiber (名)
硫化ファイバー
bakelite (名) ベークラ
イト

conduct (動) 導く
mica (名) 雲母
porcelain (名) 磁器
dry (形) 乾いた
cotton (名) 木綿
poor (形) 貧弱な
become(s) (動) なる
little (形) 少しの
salt (名) 鹽

LESSON 51

compass (名) 羅針盤
guard (名) 鎖
needle (名) 針
permanent magnet
(名) 耐久磁石

end (名) 端
north (名) 北
south (名) 南
east (名) 東
west (名) 西 「(の)
mariner(s) (名) 航海者
surveyor(s) (名) 測量
家(の) 「ト
transit (名) トランジツ
and so on ...等

LESSON 52

new (形) 新しい
horn (名) 角
wooden (形) 木製の
single (形) 単一の
variety (名) 種類
snap switch (名) 撥動
開閉器
tumbler switch (名) 投
げ倒し開閉器

LESSON 53

electrification (名) 電化
European style (名)
洋風
interior (名) 内部
stove (名) ストーブ

warming (warm) (形)
暖める
pad (名) 布團 「い
healthy (形) 健康によ
carry (動) 運ぶ 「でも
anywhere (副) 何處へ
ordinary (形) 通常の
cushion (名) 布團
get(s) hot 熱くなる
is provided (provide
の過分) 備へ付けらる
thermostat (名) 恒温器

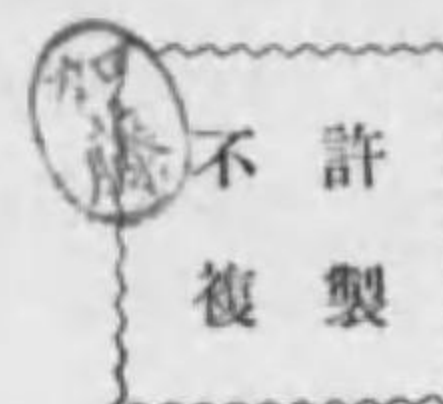
LESSON 54

kitchen (名) 臺所
utensil(s) (名) 器具
such (形) そんな
milk (名) 牛乳
warmer (名) 暖器
economical (形) 經濟的
heat(s) (動) 熱する
bottle (名) 壺
kettle(s) (名) 湯沸し
widely (副) 廣く
consume(s) (動) 消費
old (形) 古い する
range (名) 竈(かまど)

— を は り —

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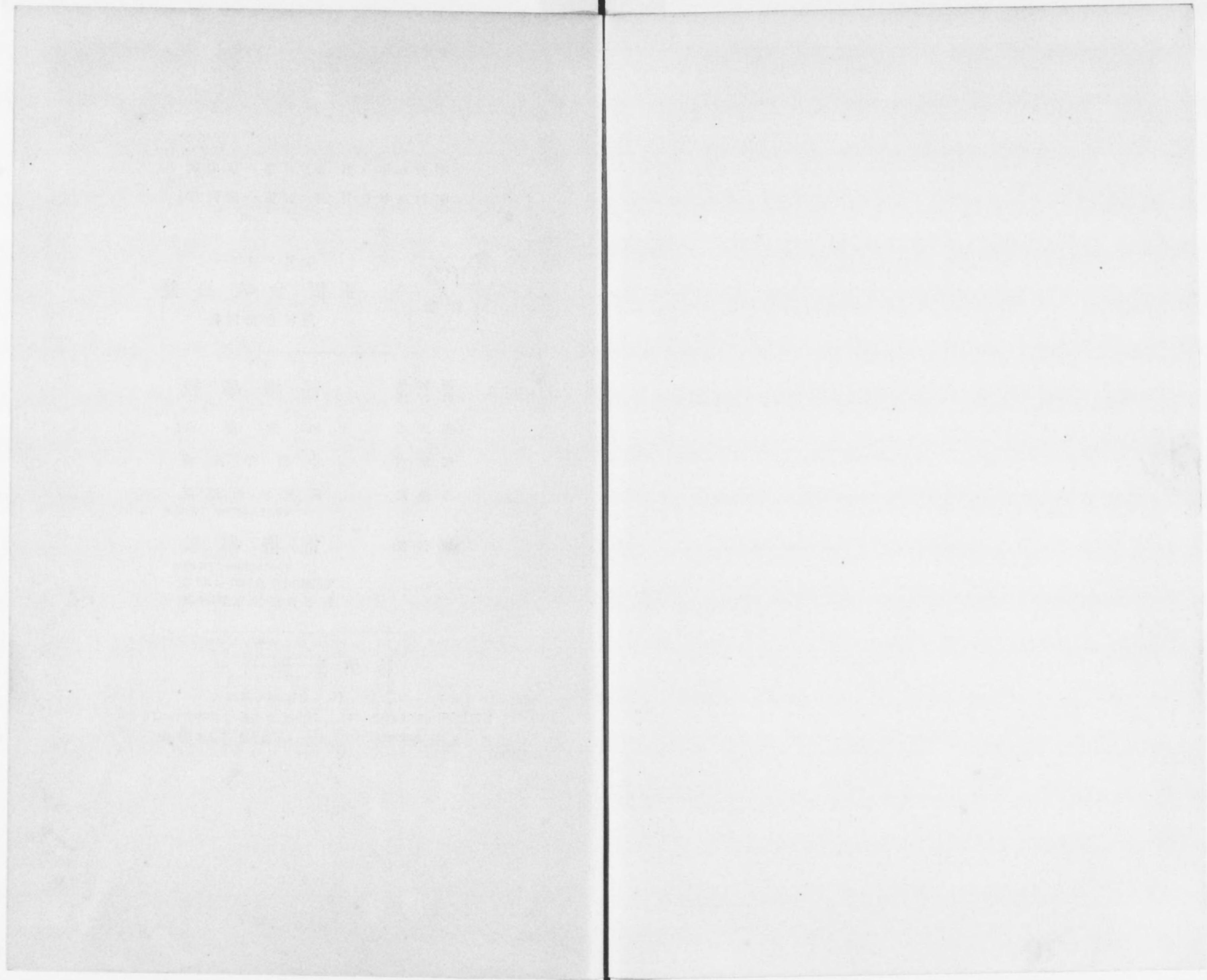
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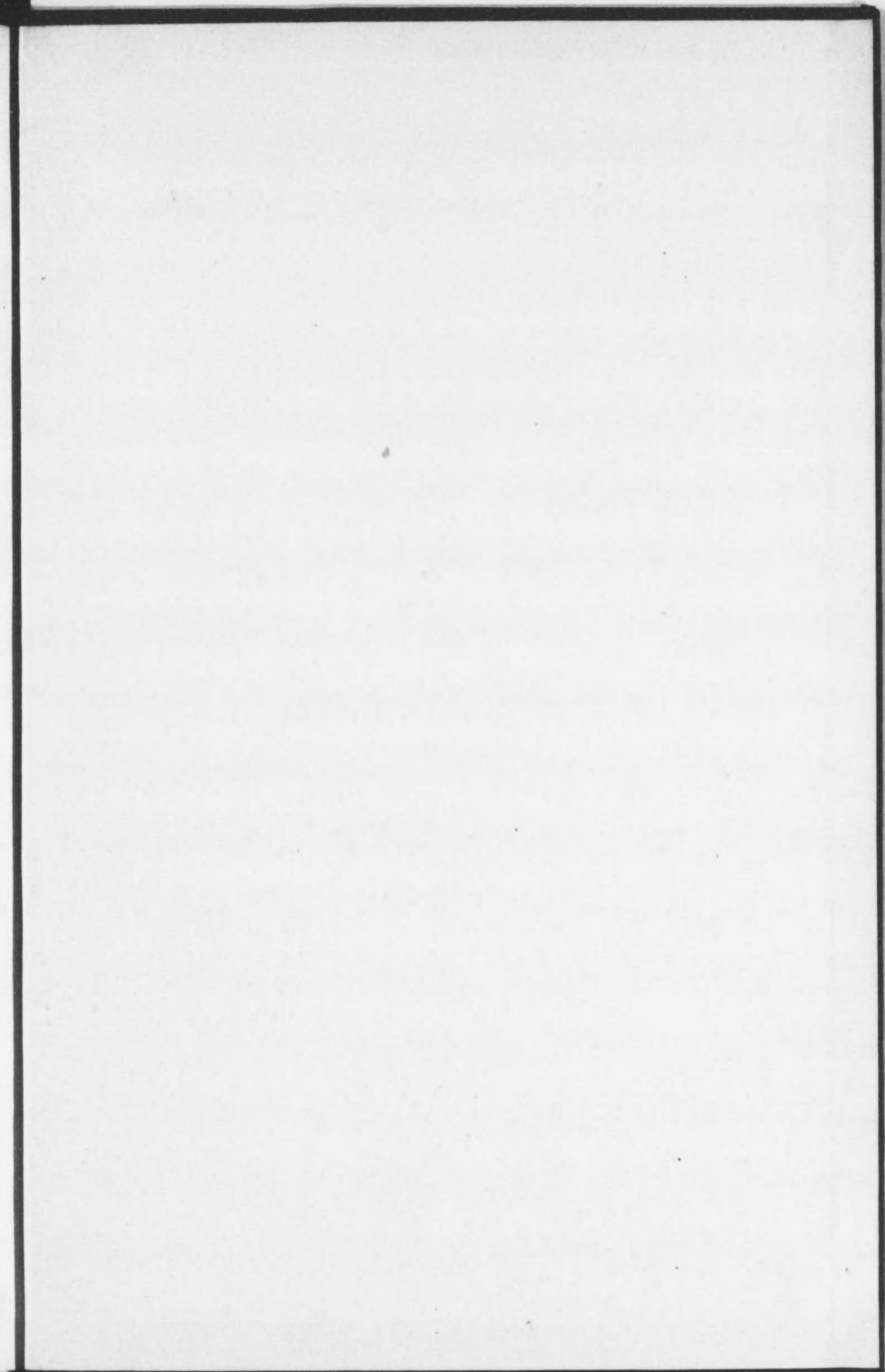
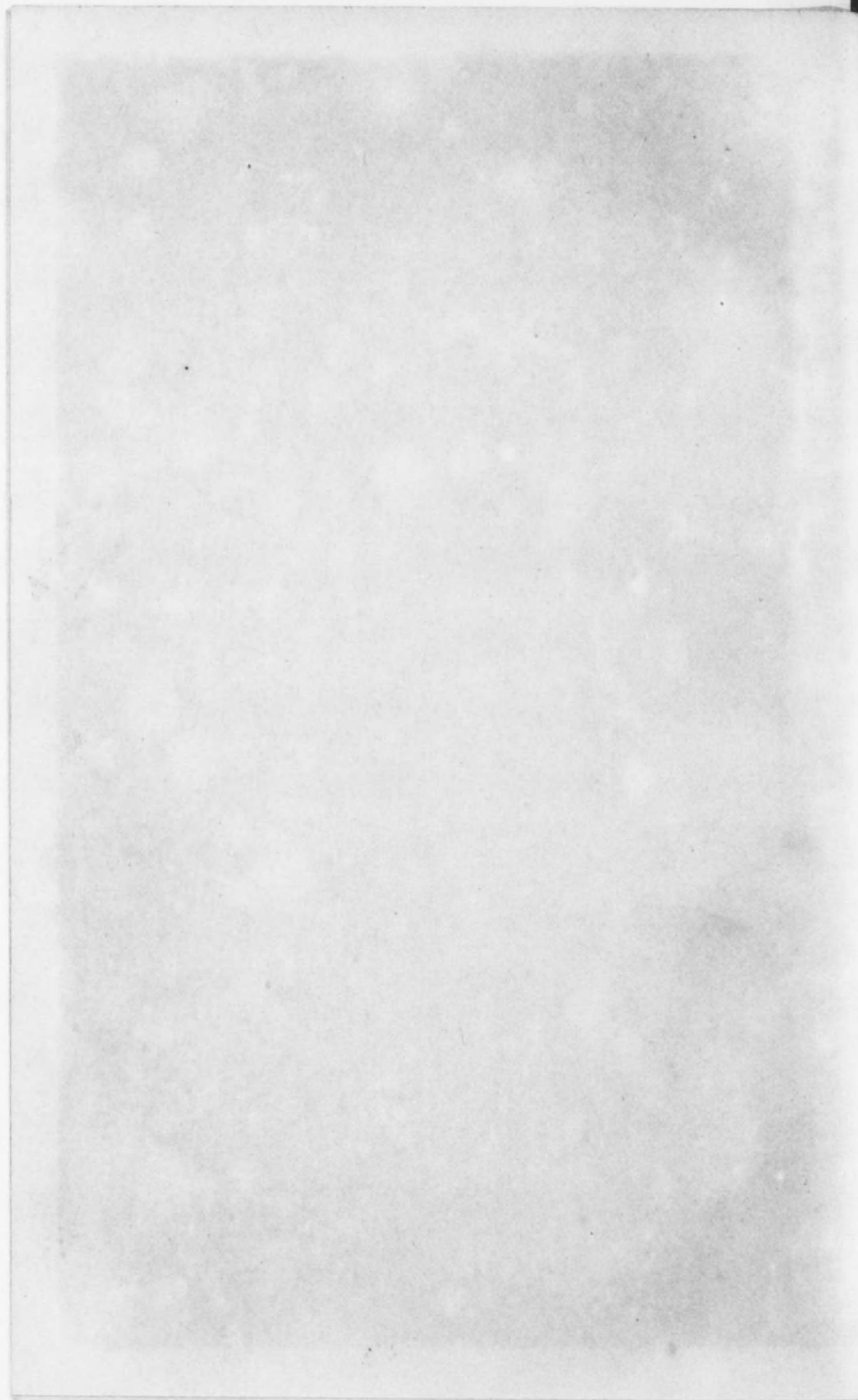
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