

MIECZYŚLAW PIWOWARCZYK

ZAJĘCIA RĘKODZIELNICZE
W SZKOLE

ROBOTY Z RÓŻNYCH MATERIAŁÓW

A T L A S

Z 238 RYCINAMI



KSIĄŻNICA-ATLAS * LWÓW-WARSZAWA
1939

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ROBOTY Z RÓŻNYCH MATERIAŁÓW

A T L A S

Z 238 RYCINAMI



KSIĄŻNICA-ATLAS * LWÓW-WARSZAWA
1939



3030

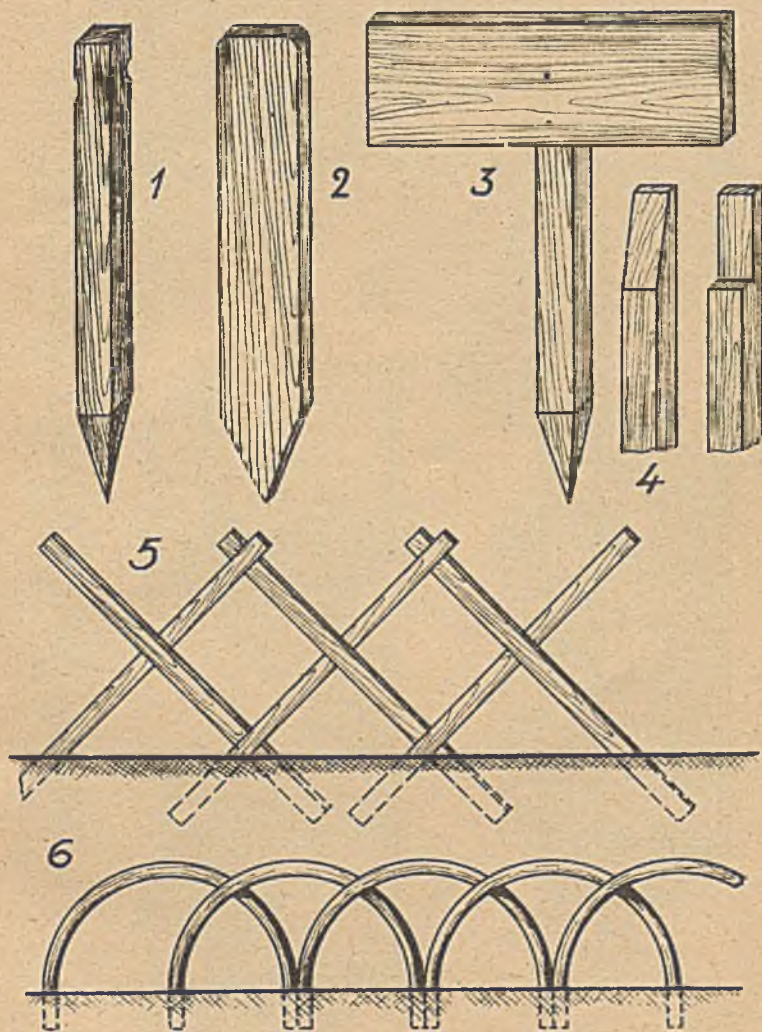
WYDAWCA: KSIĄŻNICA-ATLAS S. A., ZJEDNOCZONE ZAKŁADY KARTO-
GRAFICZNE I WYDAWNICZE T. N. S. W., LWÓW, CZARNIECKIEGO 12
ODDZIAŁ: WARSZAWA, NOWY ŚWIAT 59

ODBITO W ZAKŁADACH GRAFICZNYCH SP. AKC., KSIĄŻNICA-ATLAS
LWÓW, GEN. ROZWADOWSKIEGO 20

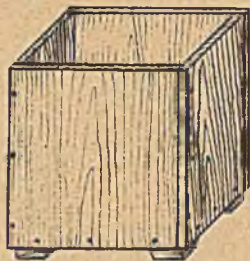
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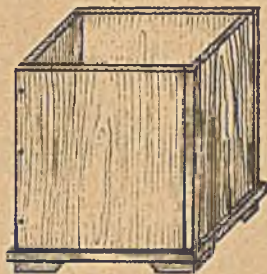
Palik, tabliczki i ogrodzenie



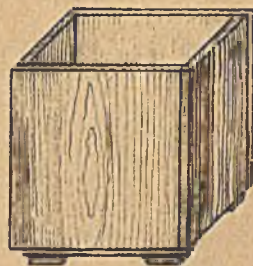
Skrzynki do hodowli roślin



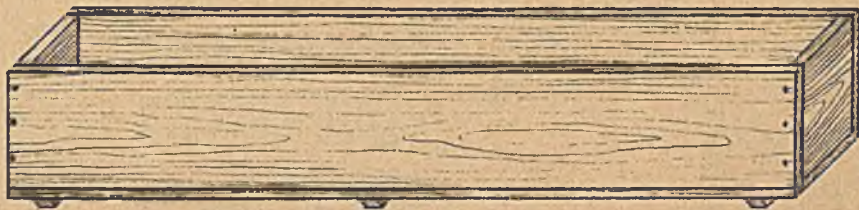
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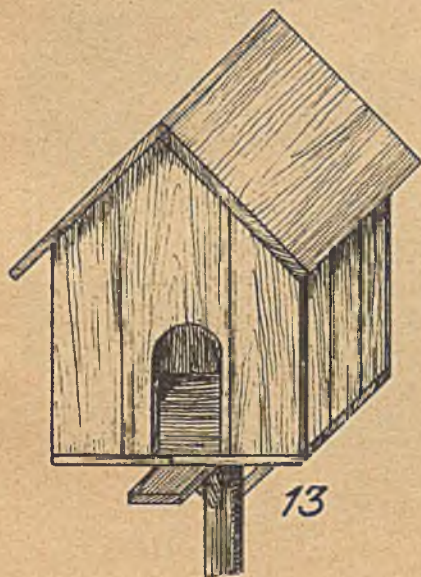
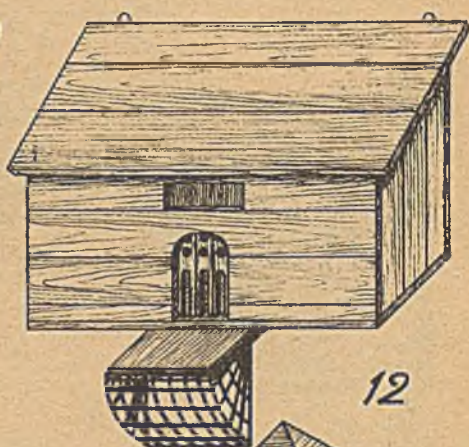
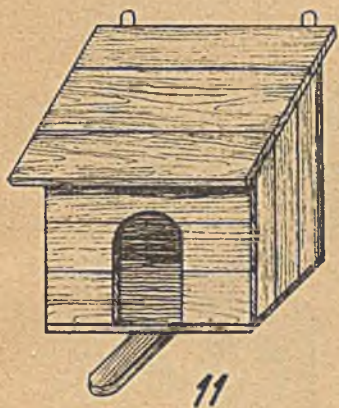


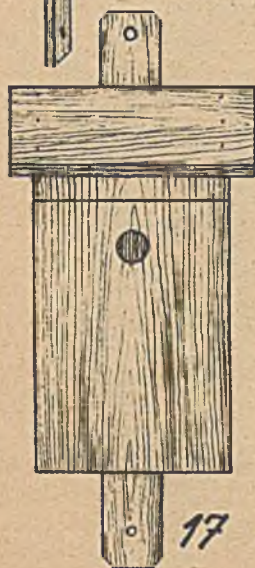
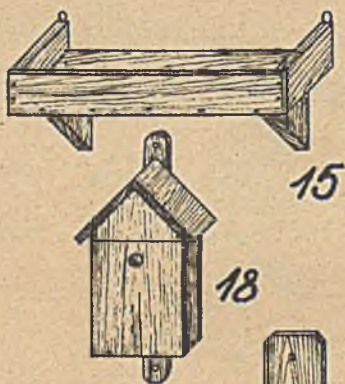
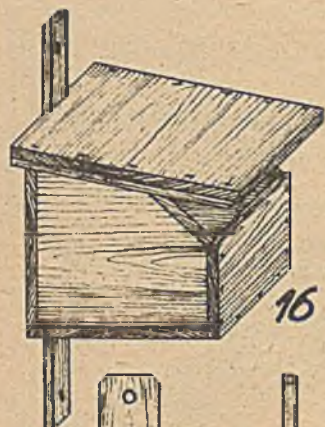
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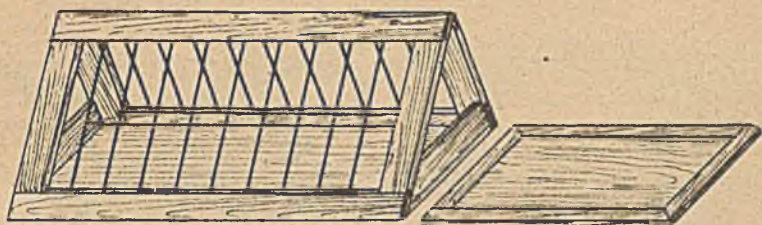
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Gotebniki



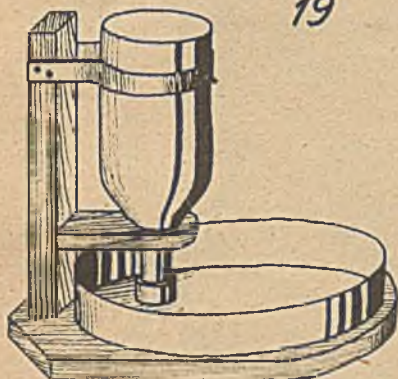
Póteczki i domki dla ptaków

Karmidetka i poidetka

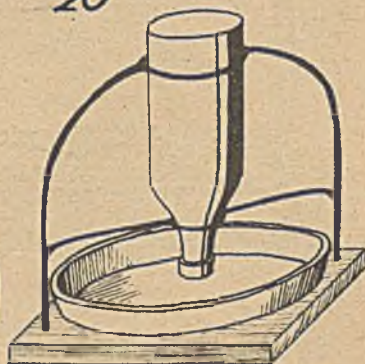


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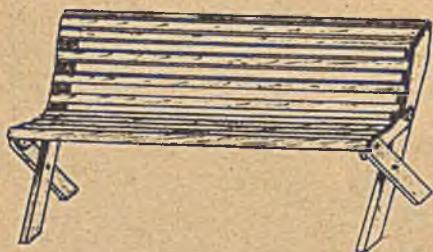
Ławki i stoliki ogrodowe



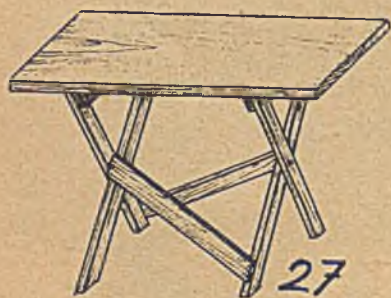
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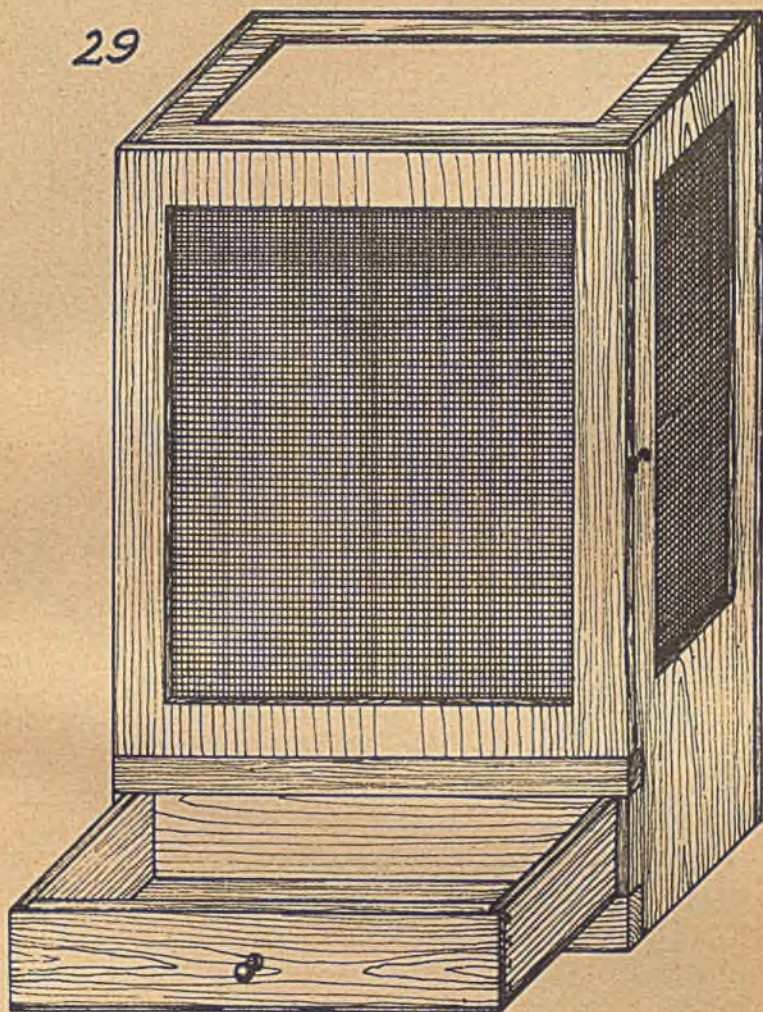


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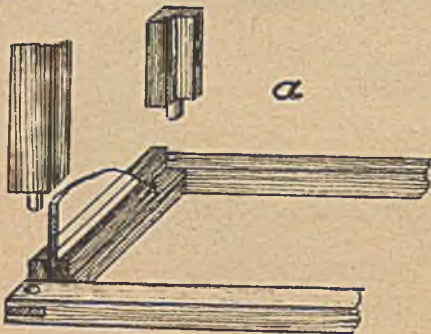
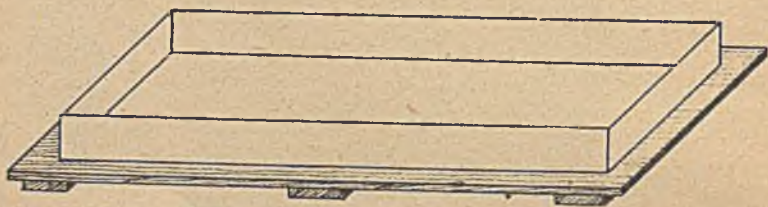
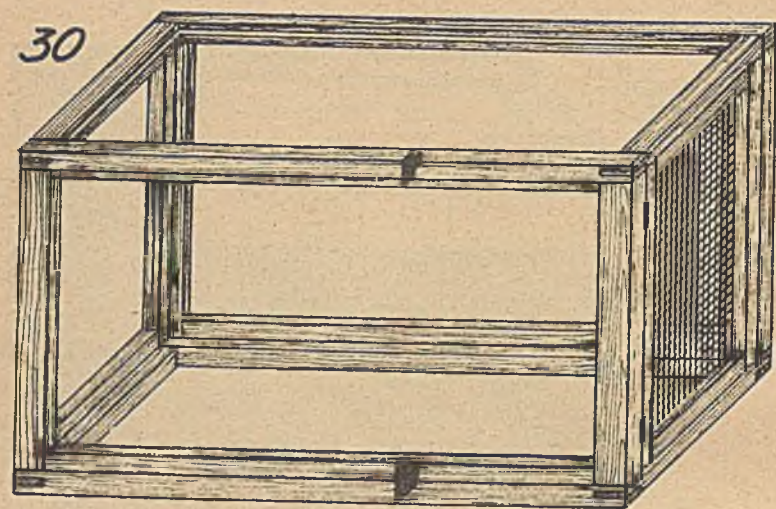
Wiwarium

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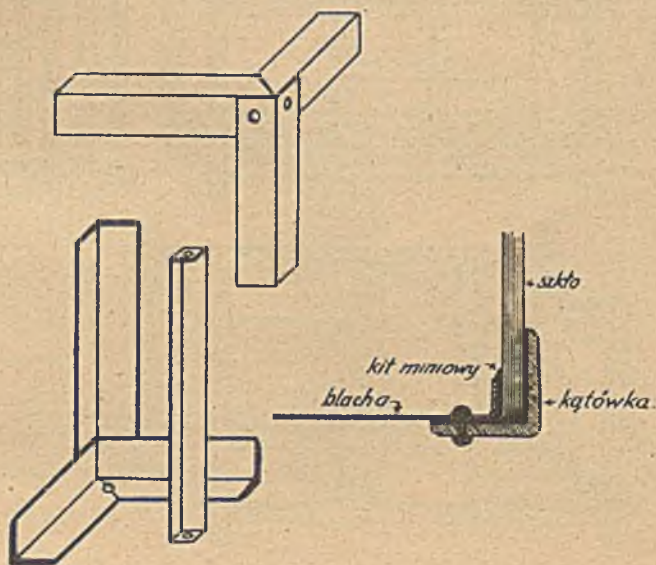
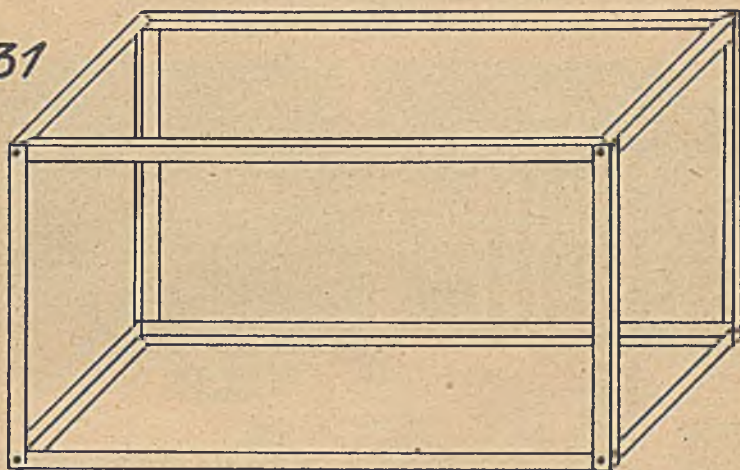
Terrarium

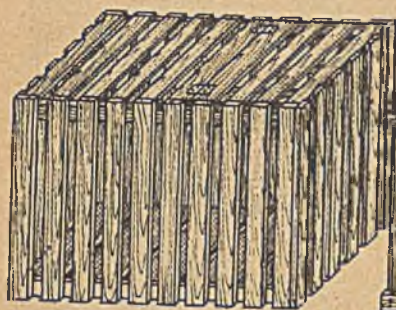
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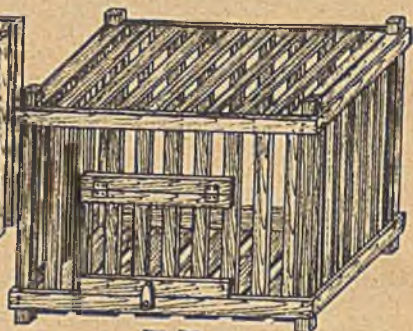
Akwarium metalowe

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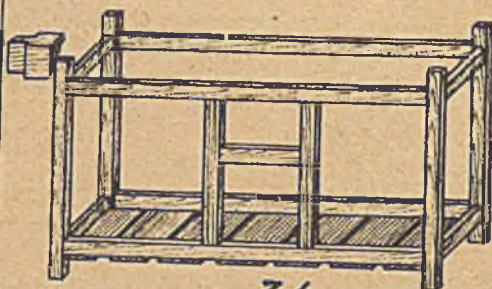


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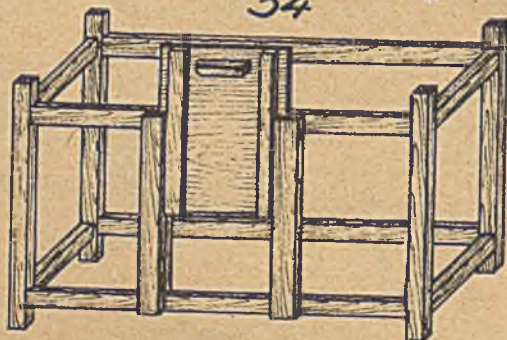
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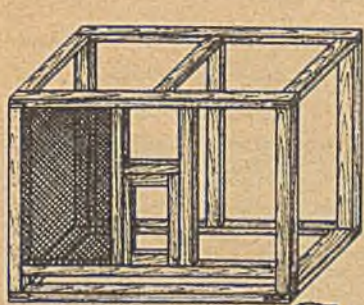


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Klatki



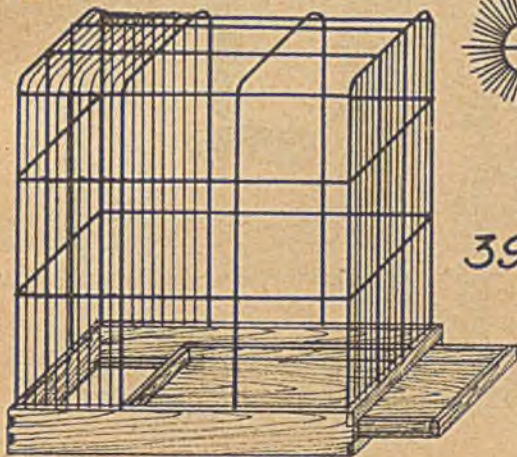
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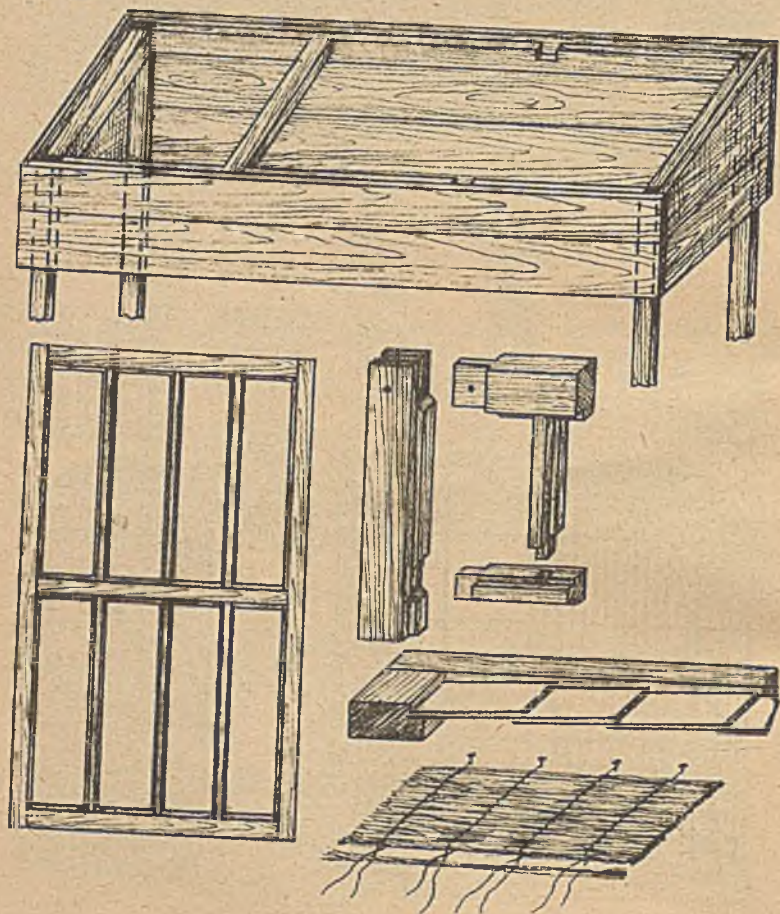


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Inspekty

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Sprzet ogrodniczy

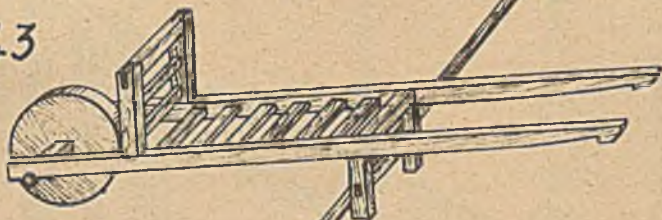
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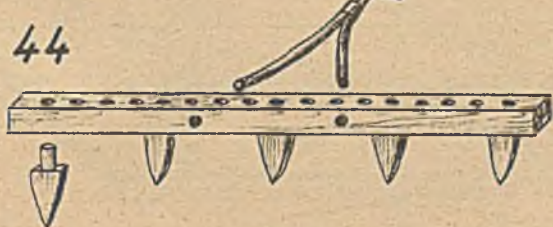
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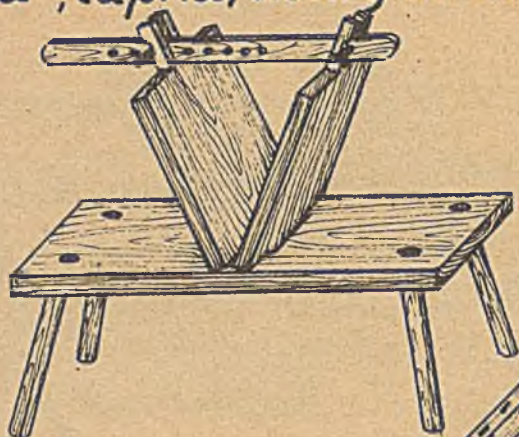


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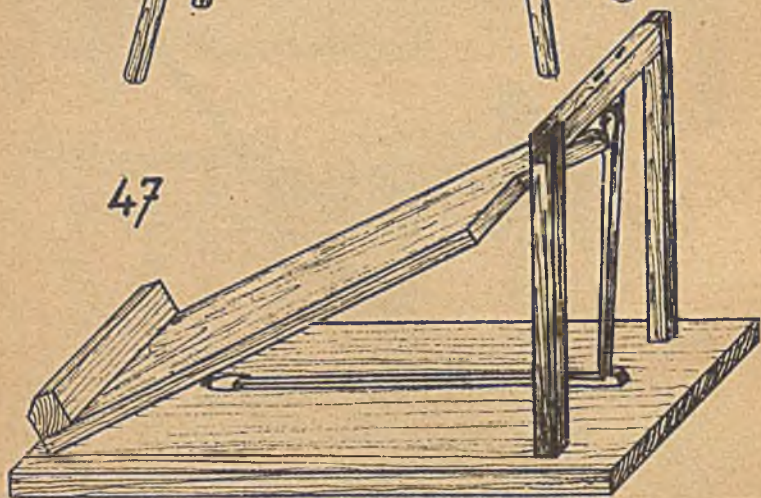


Prasa , łapka, listwy do obrazu

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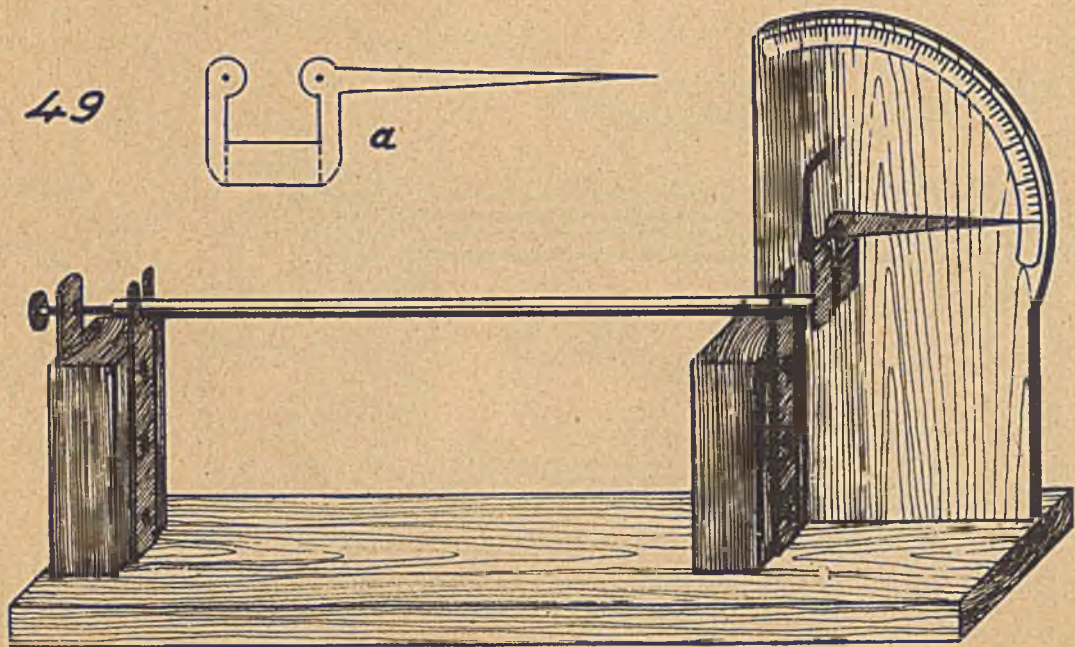
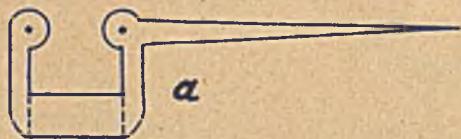


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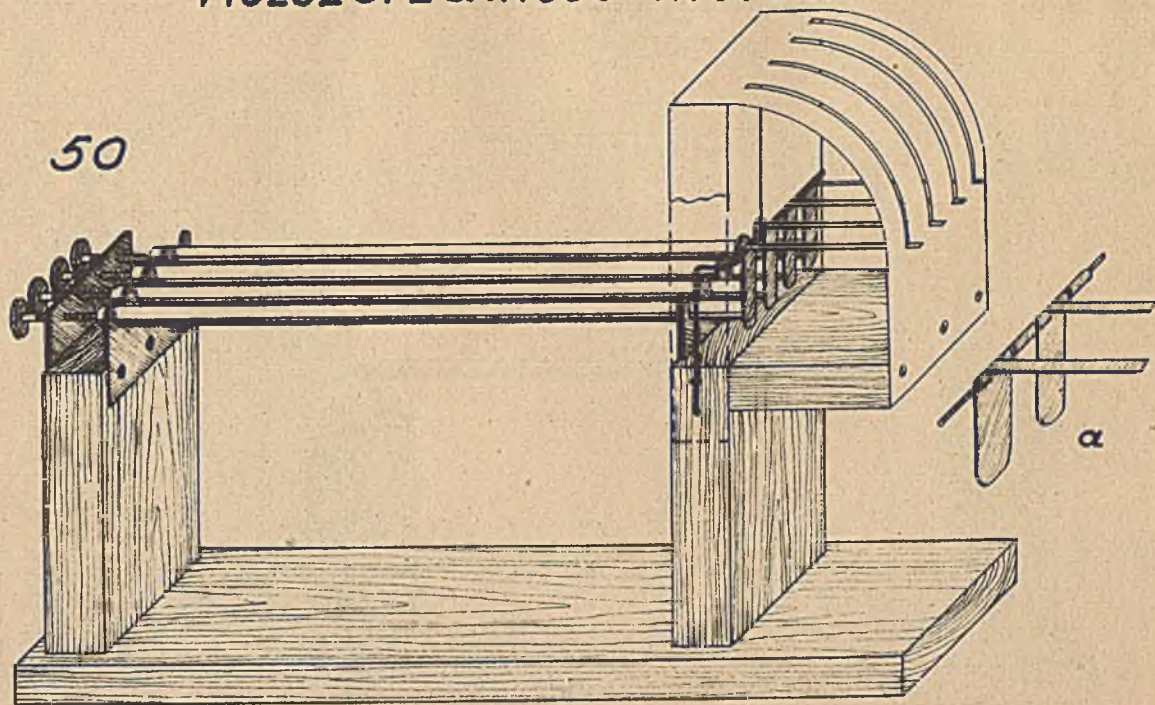


Rozszerzalność metali

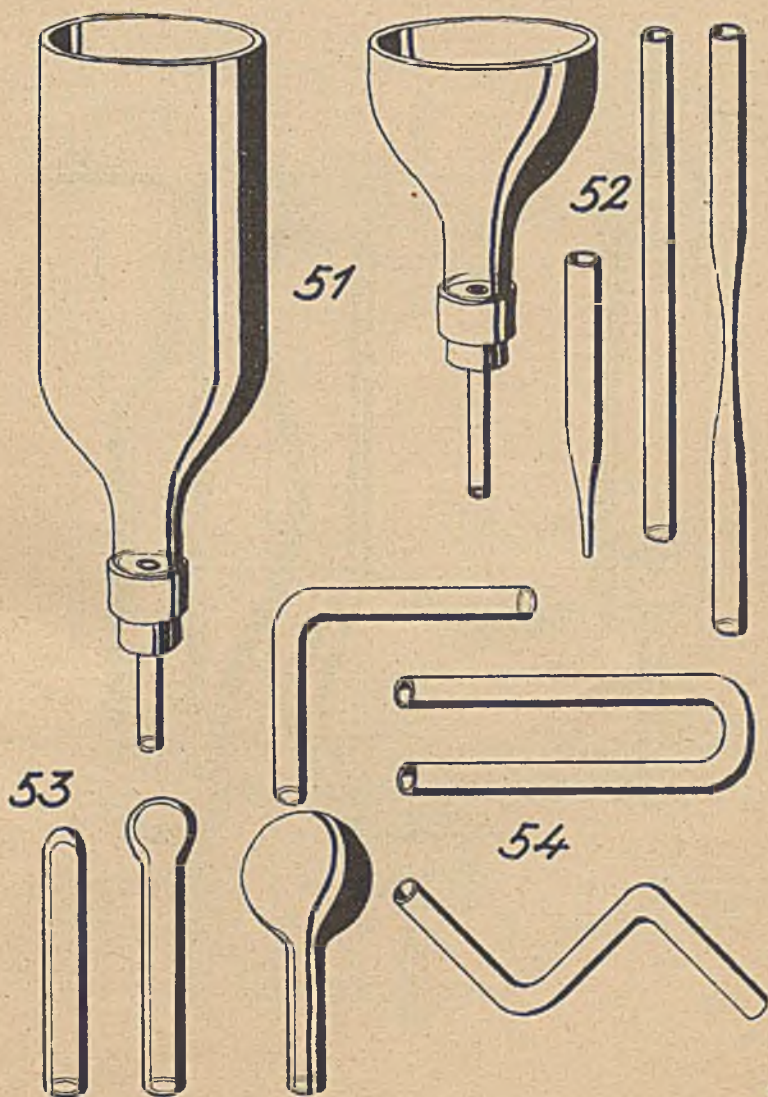
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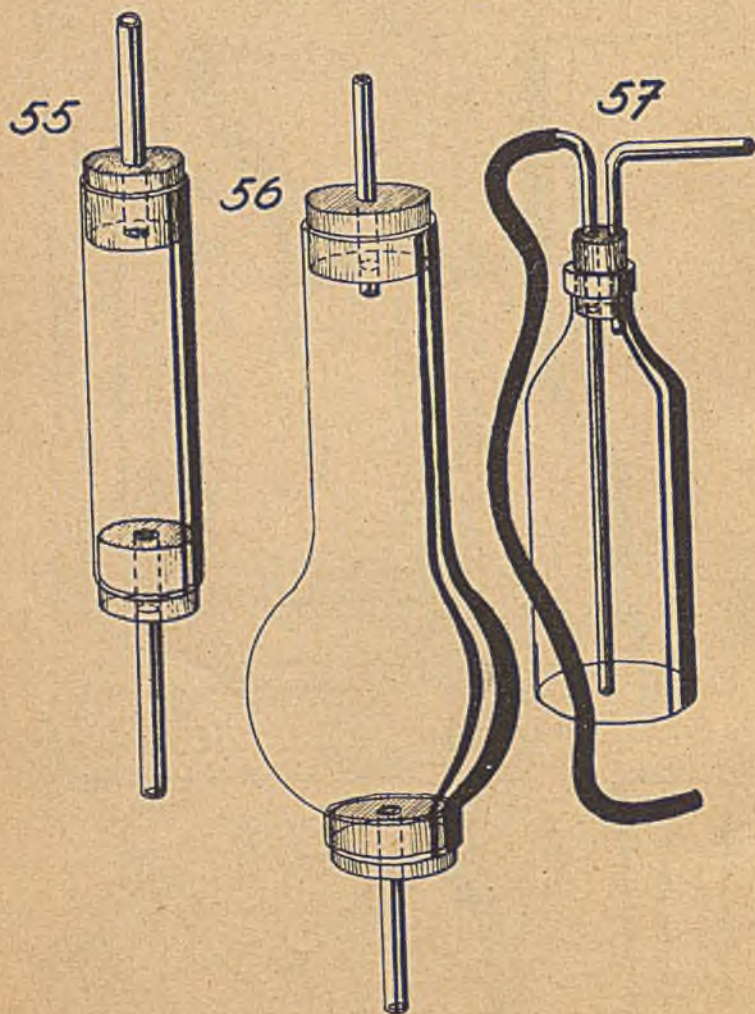


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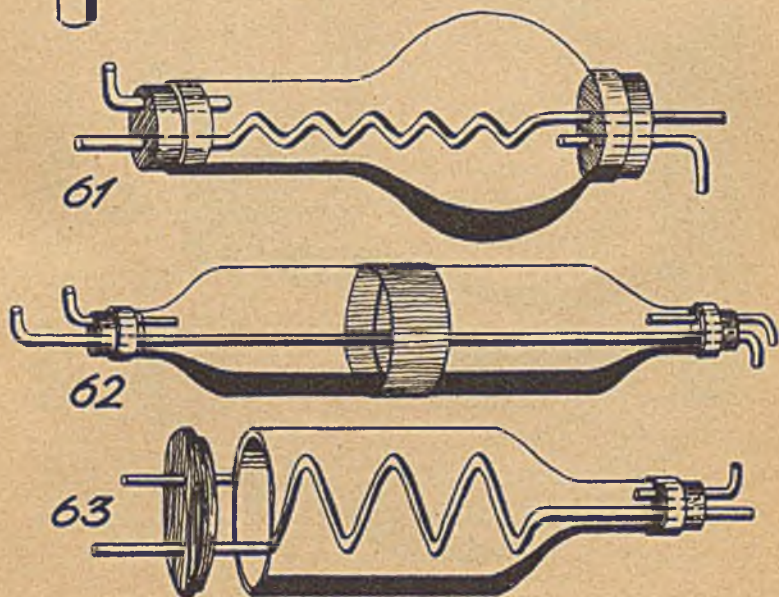
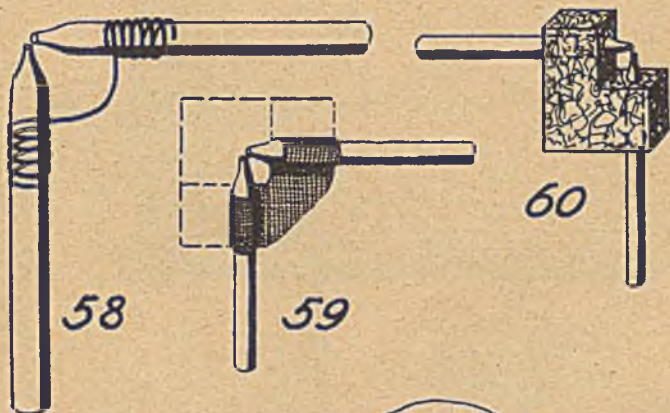


Formy użytkowe ze szkła

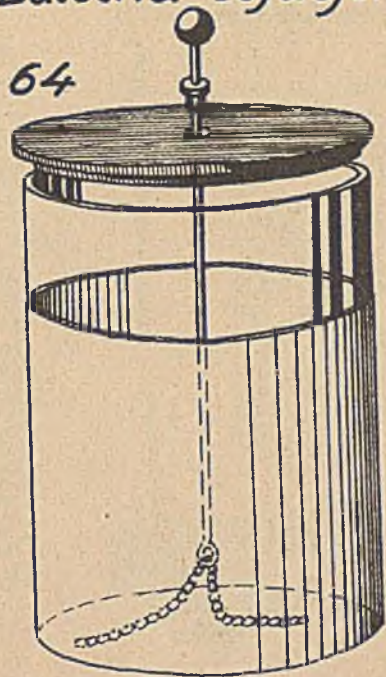


Lewary

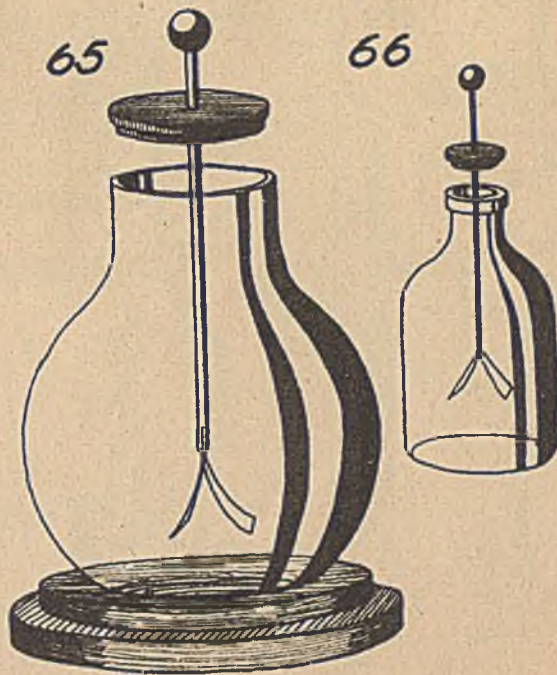
Rozpylacze, oziębiacze

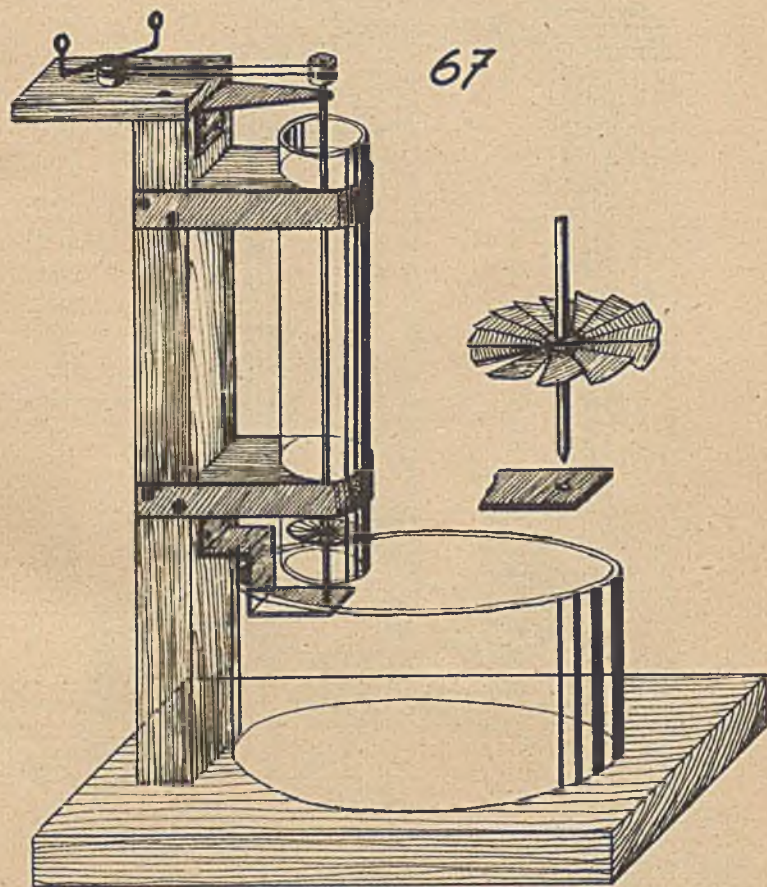


Butelka Lejdejska

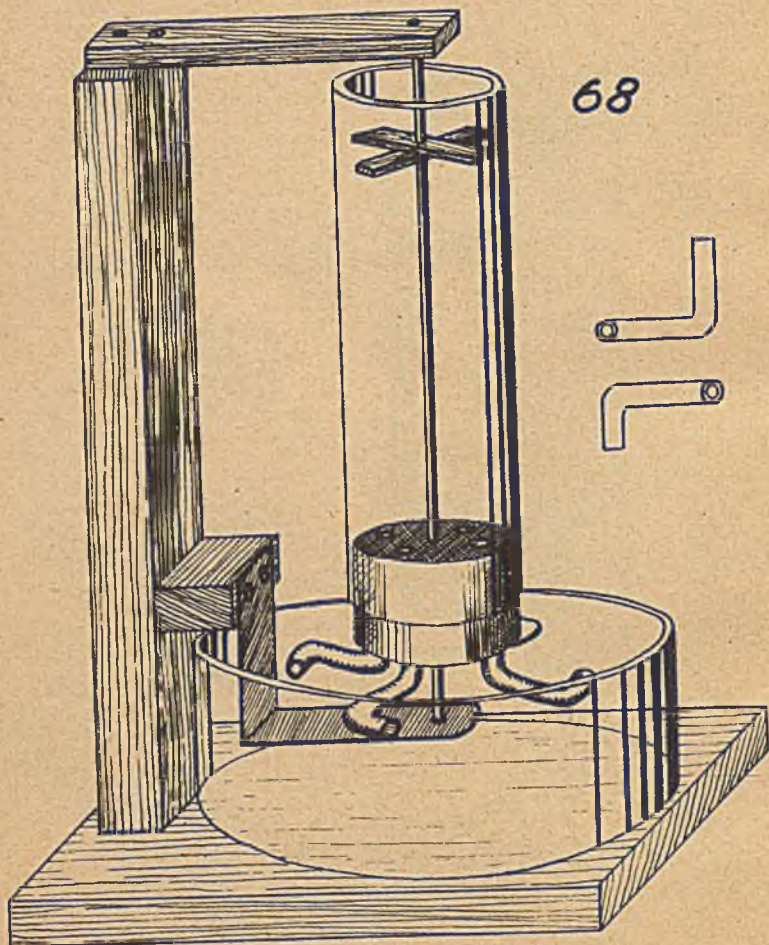


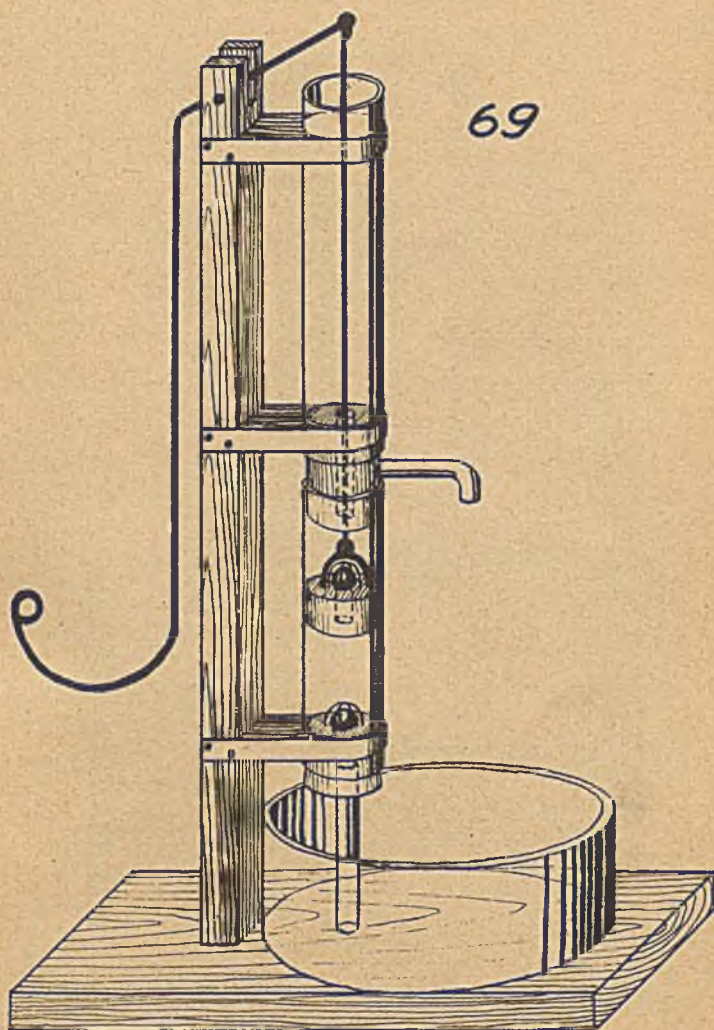
Elektroskop

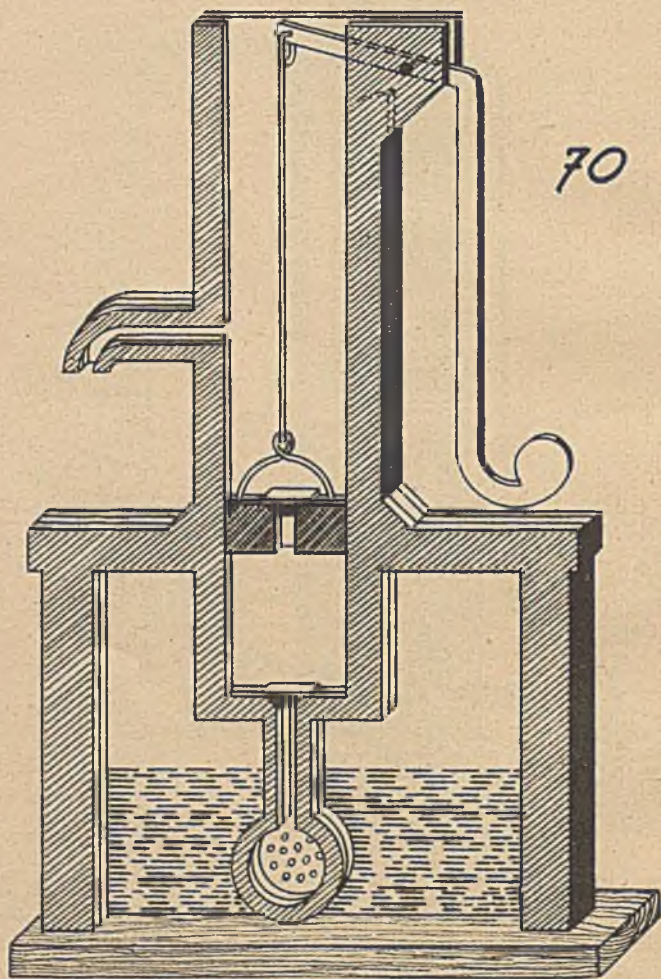


Turbina

Młyneczek Segnera

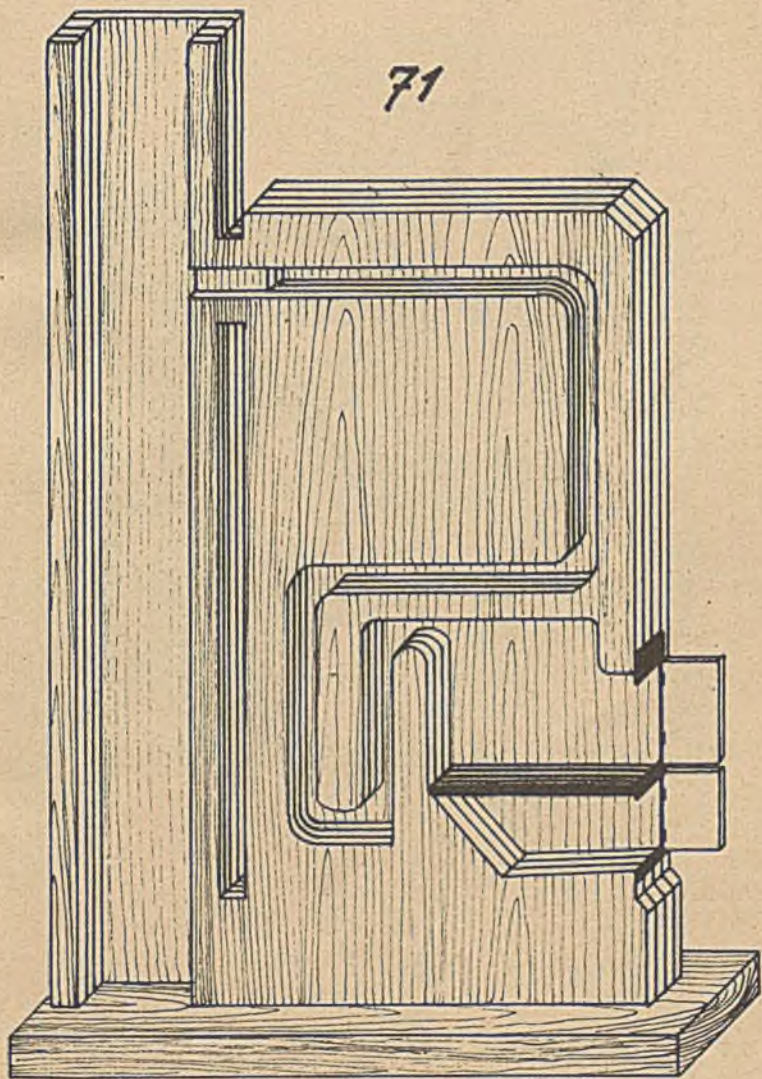


Studnia

Studnia

Piec pokojowy

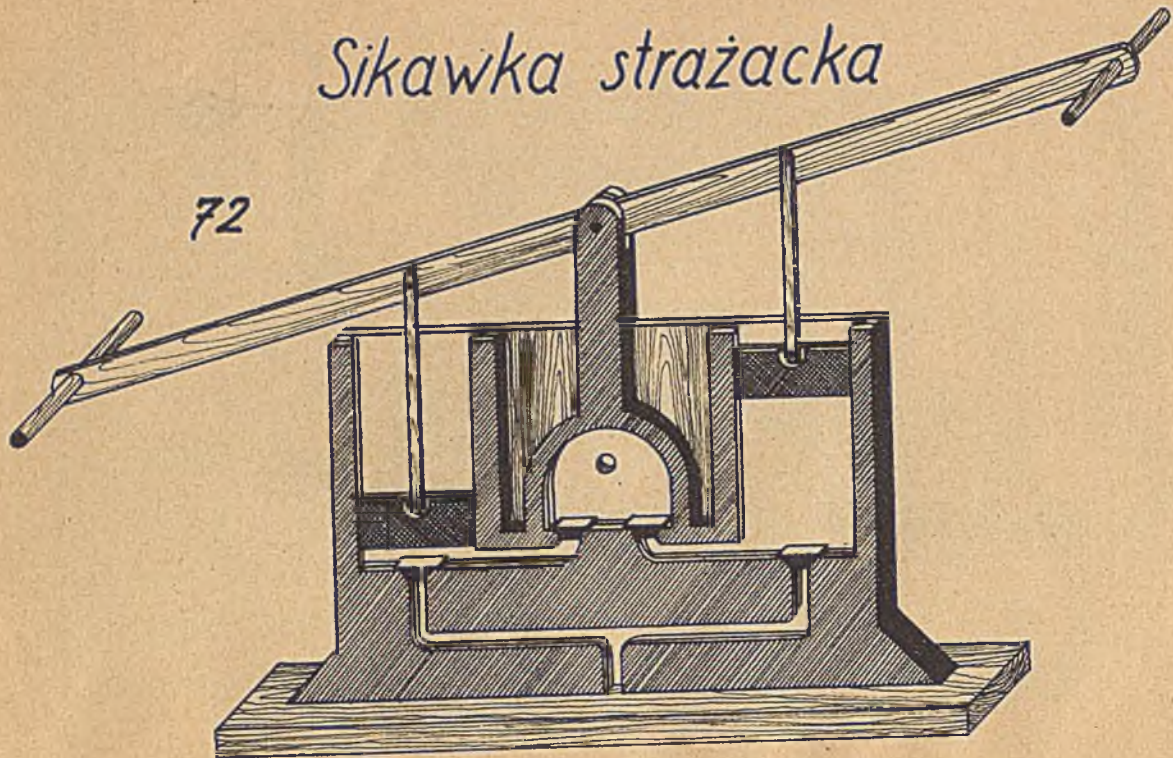
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Sikawka strażacka

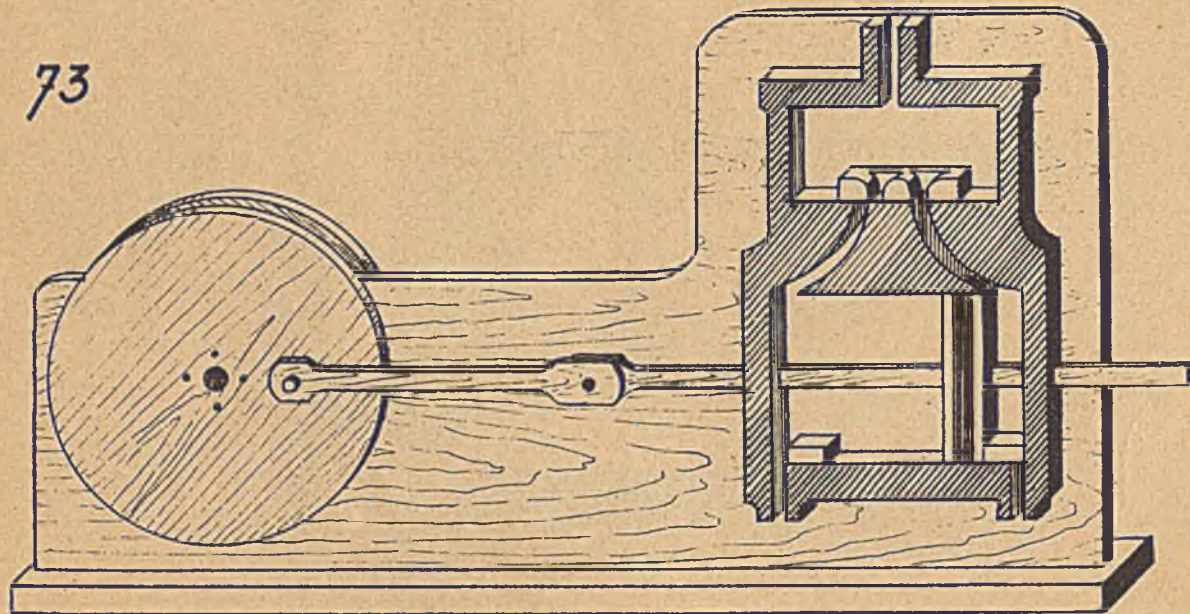
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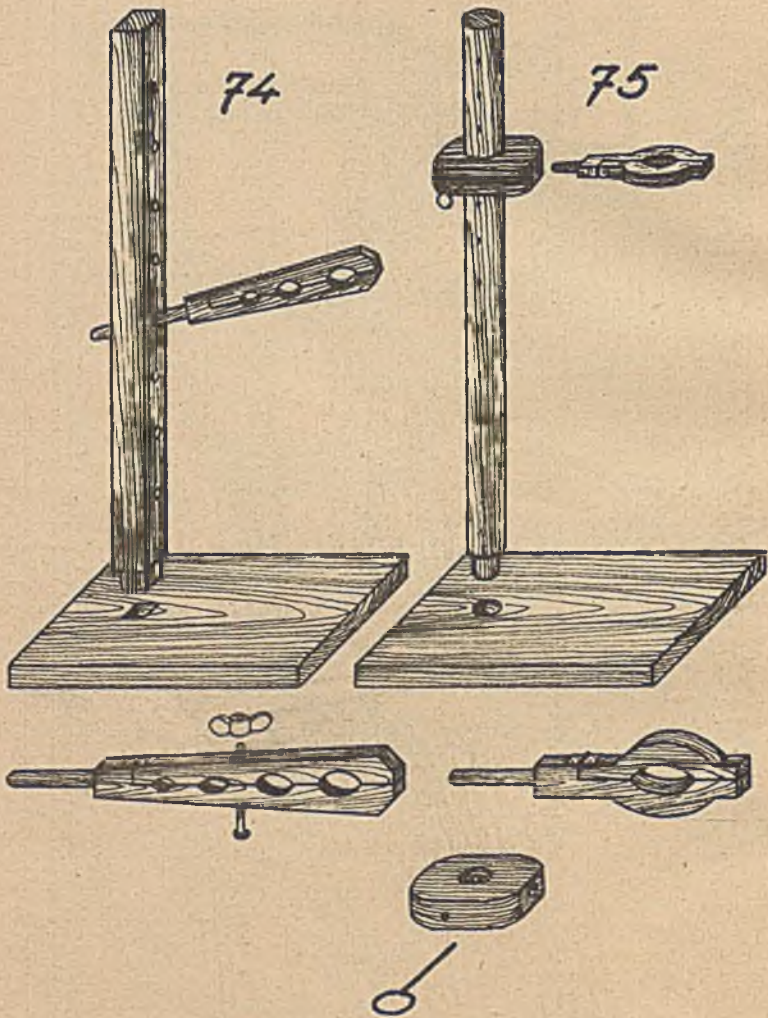


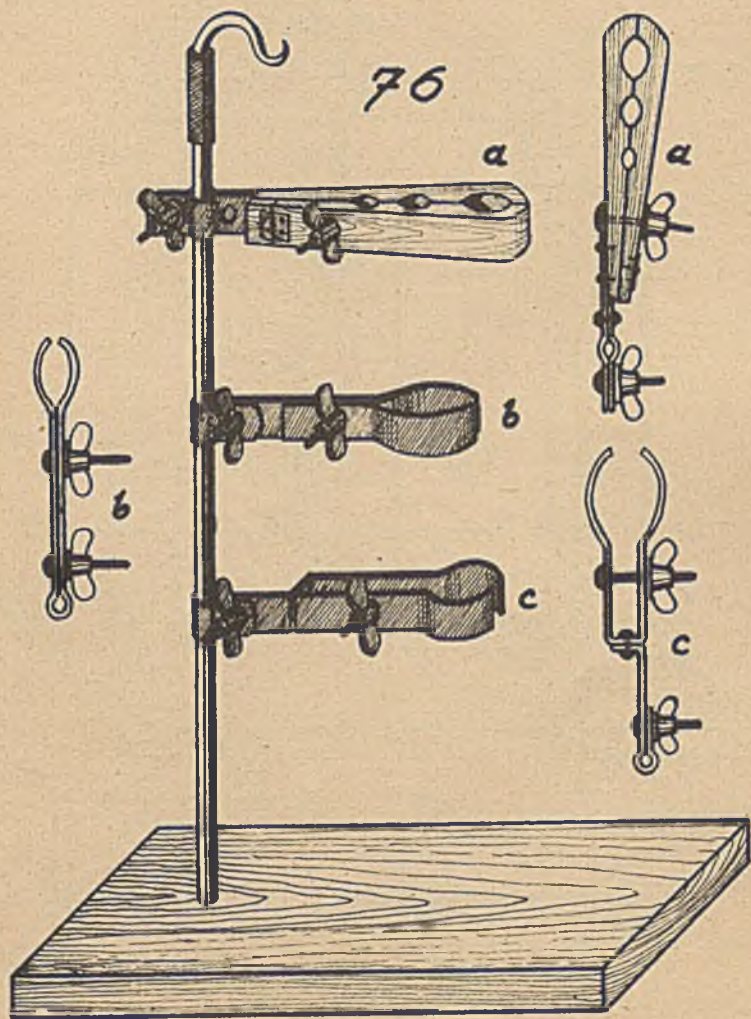
Przekrój cylindra parowego

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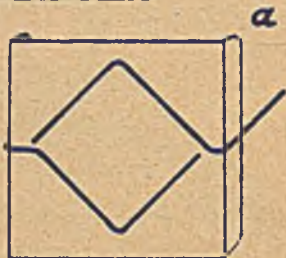
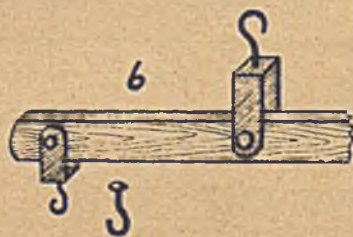
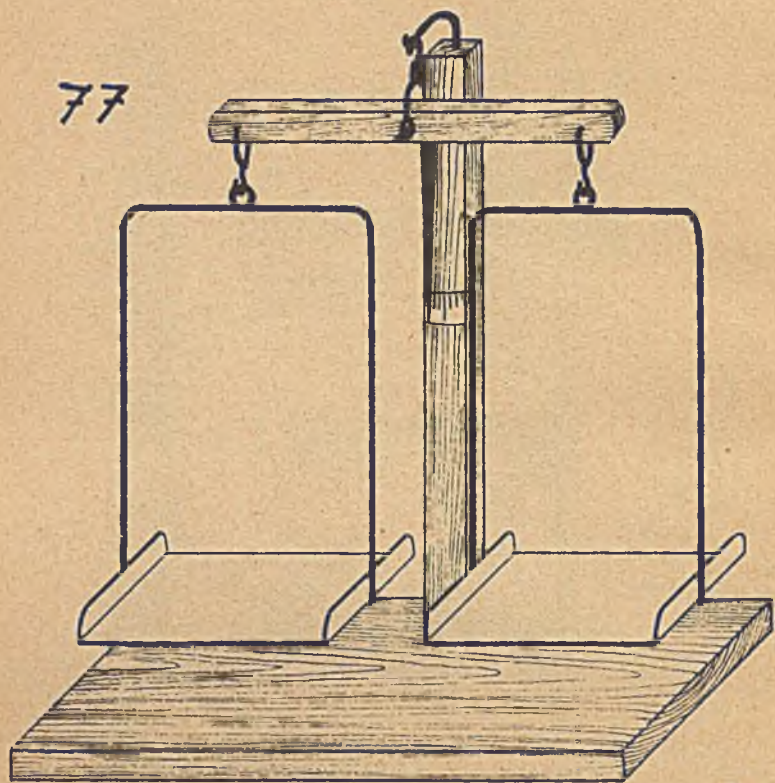
Statywy



Statyw

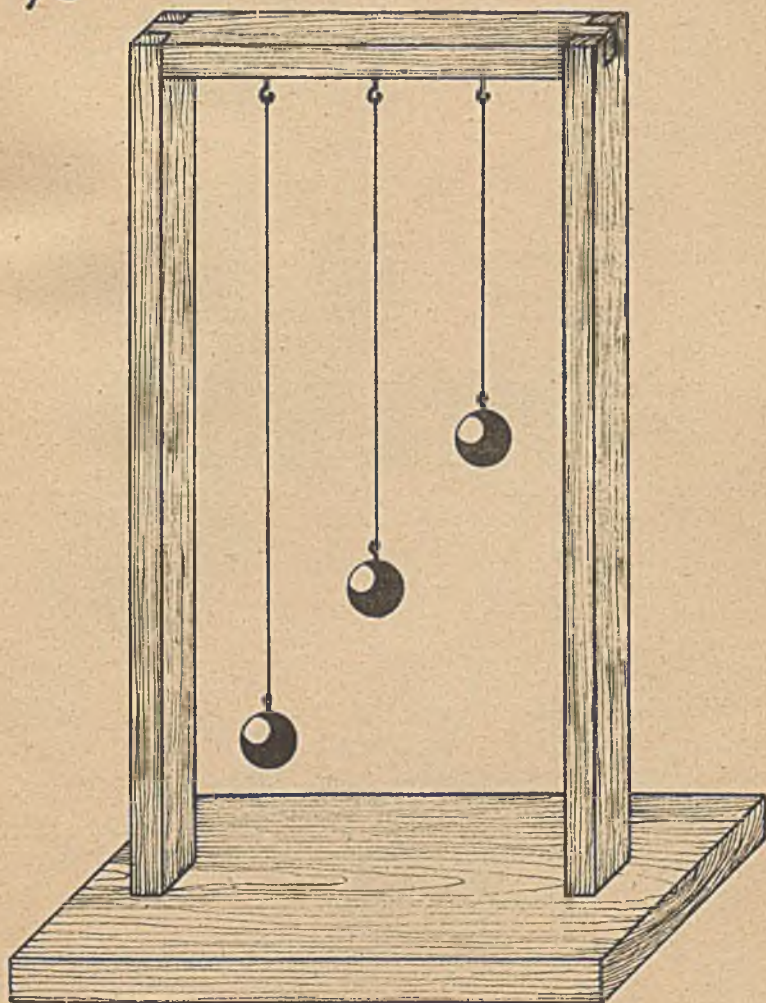
Waga

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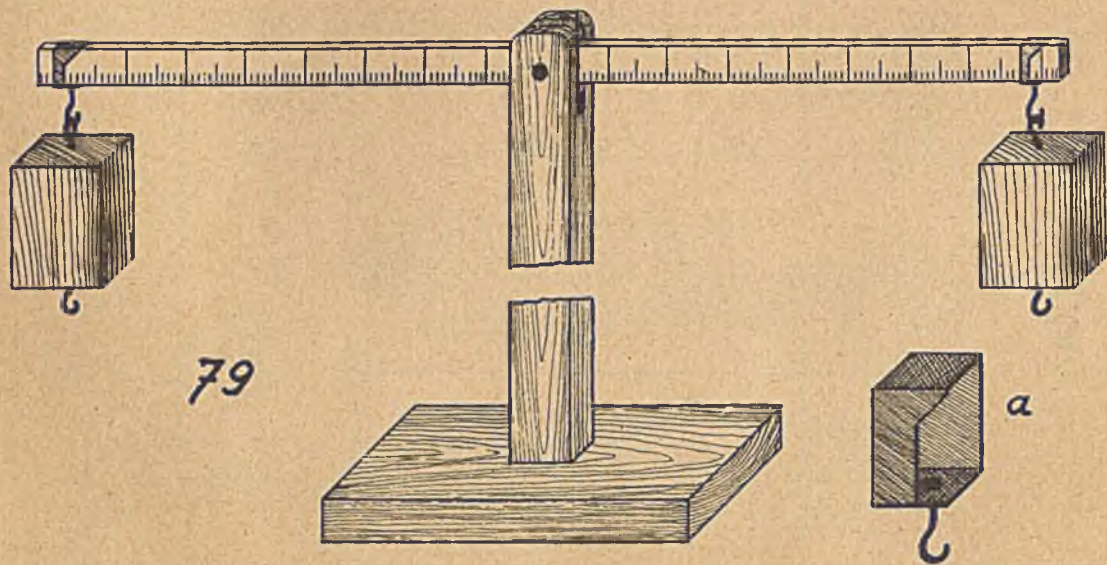


Wahadło

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Dźwignia

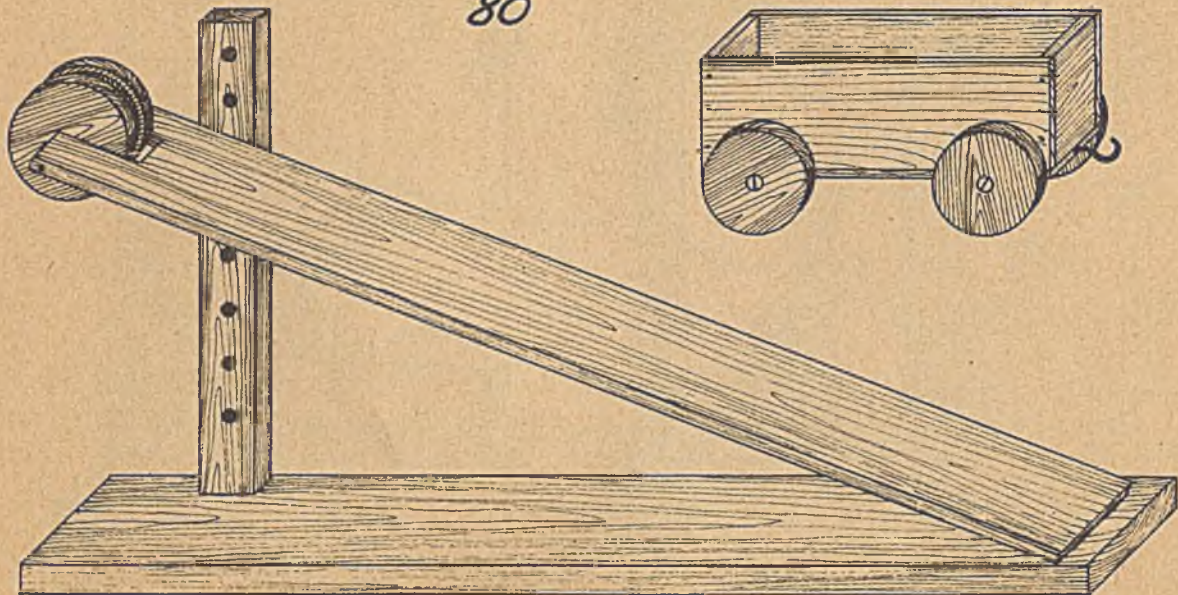
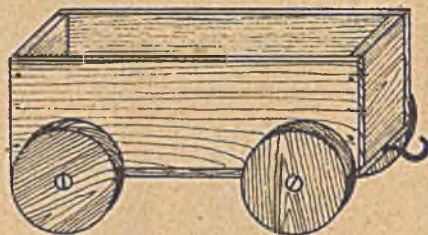


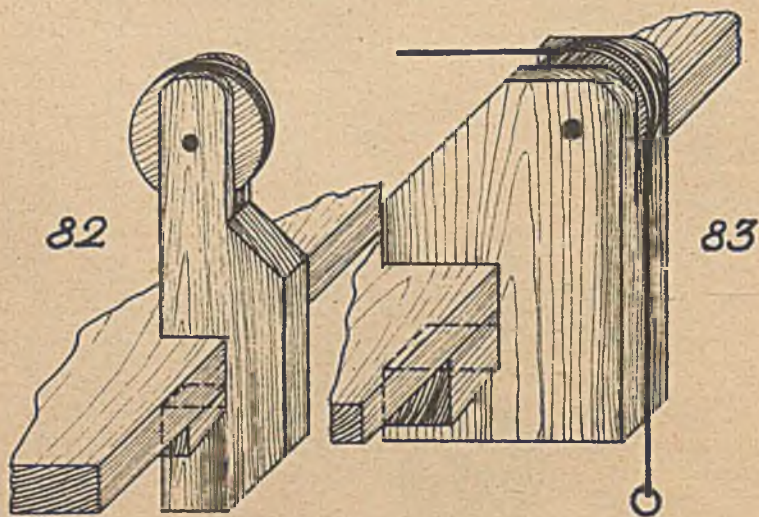
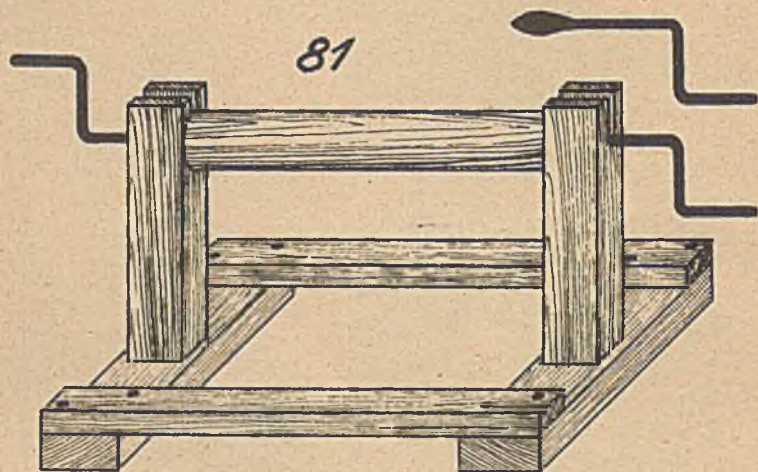
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Równia pochyła

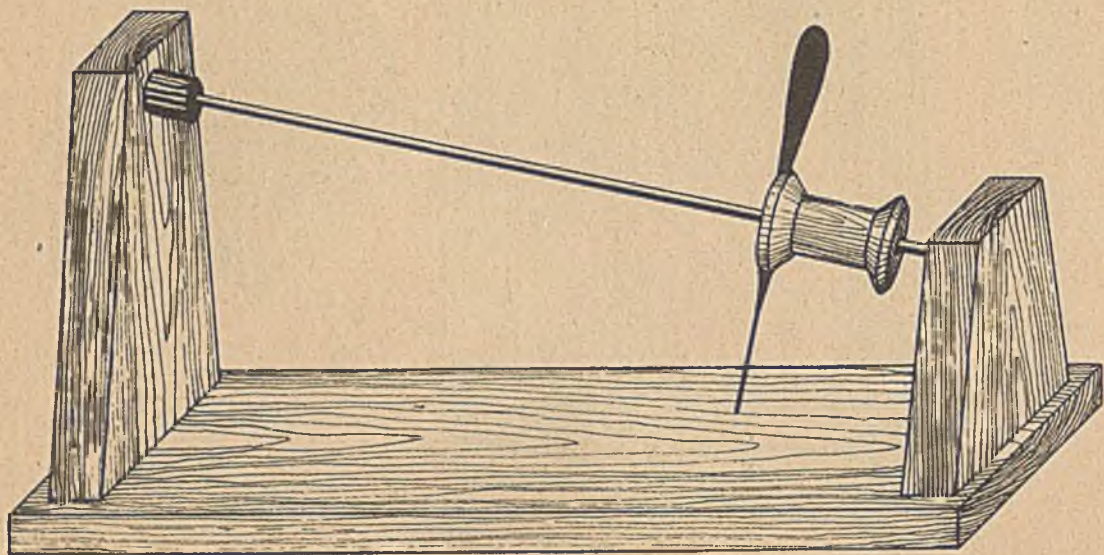
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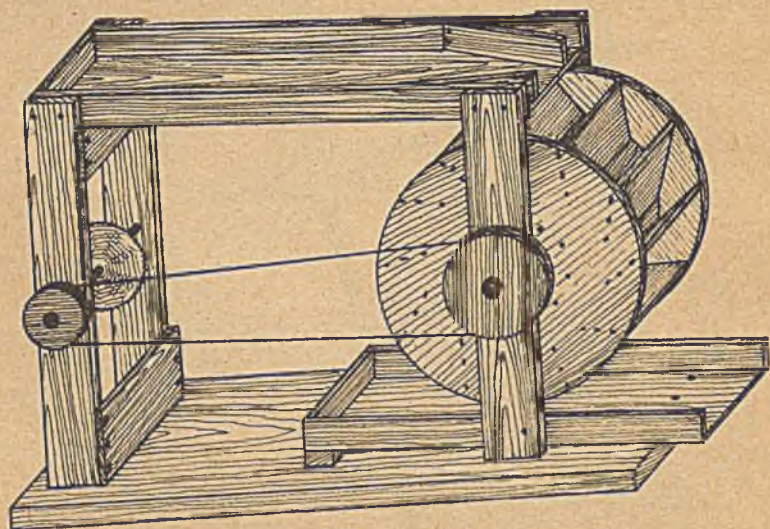
Kotowrót i bloki

Smigto

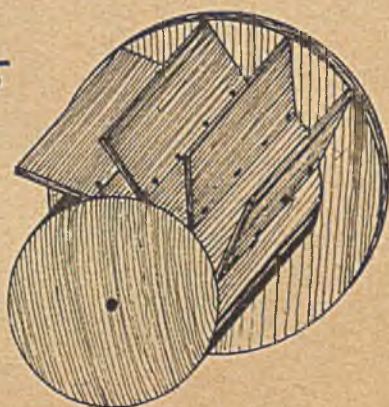
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Koto wodne nasiębierne

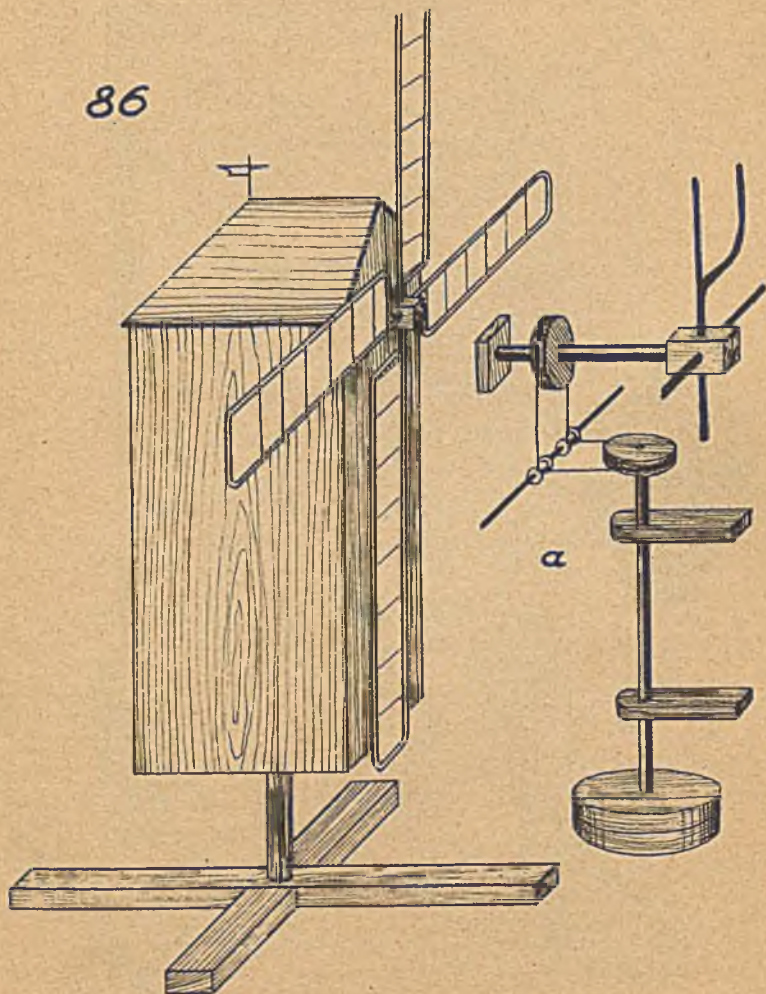


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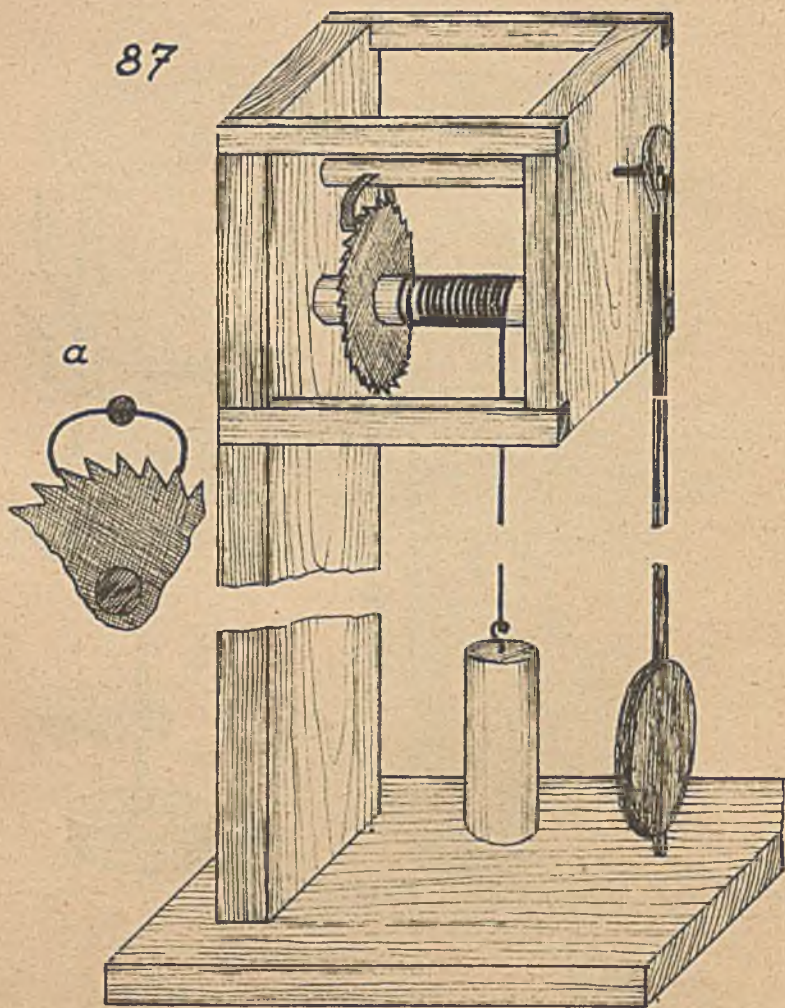
Wiatrak

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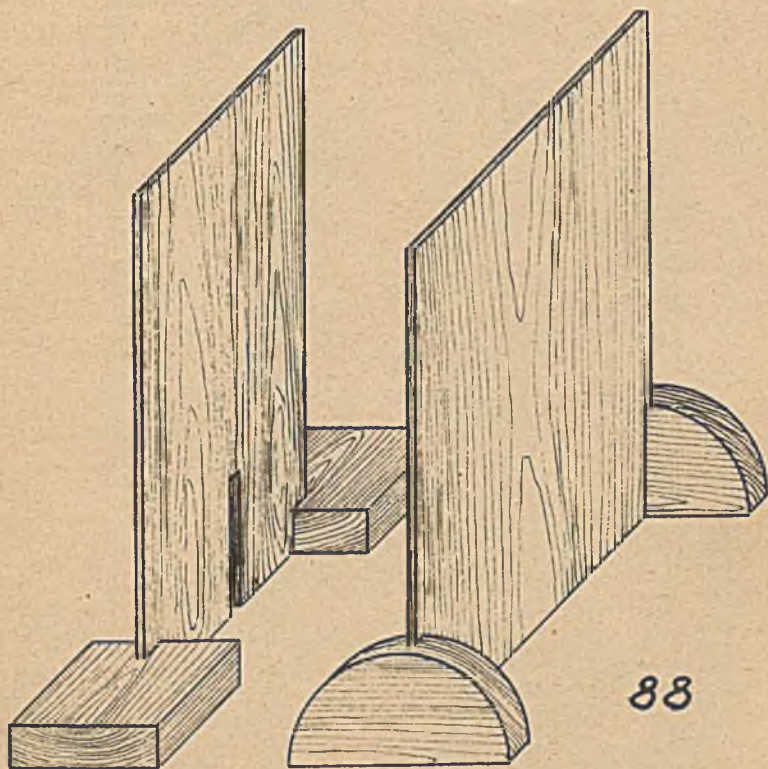


Zegar wahadłowy

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Ekrany

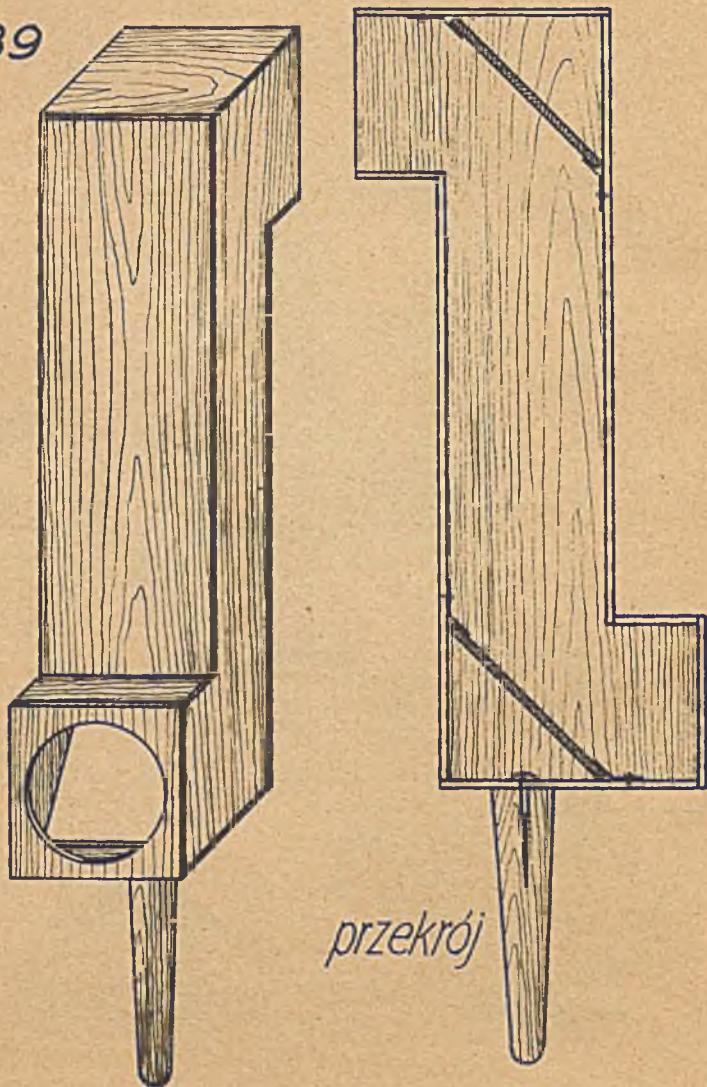


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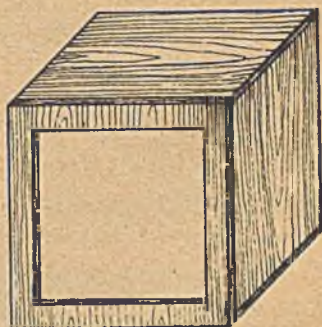
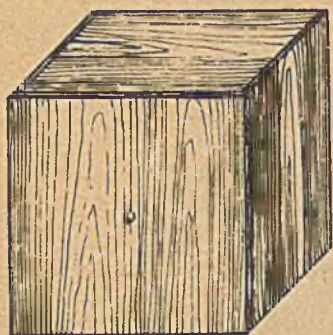
Peryskop

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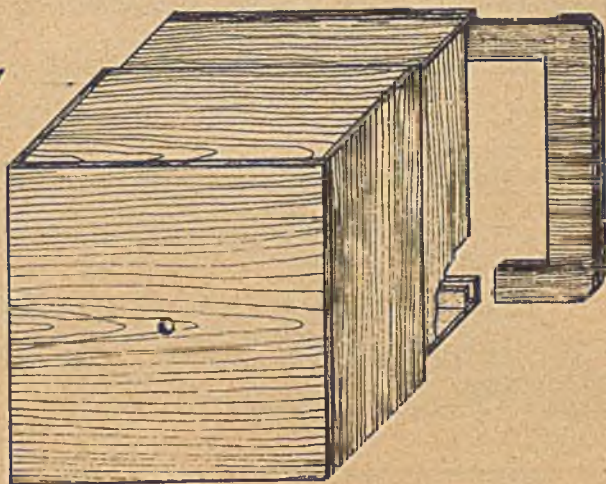


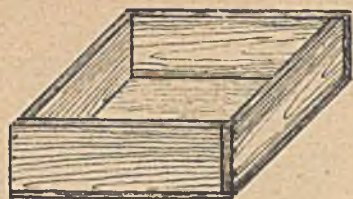
Ciemnie optyczne

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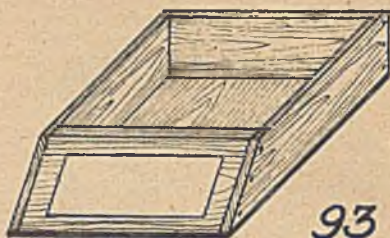


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Pudełka i skrzynki na zbiory

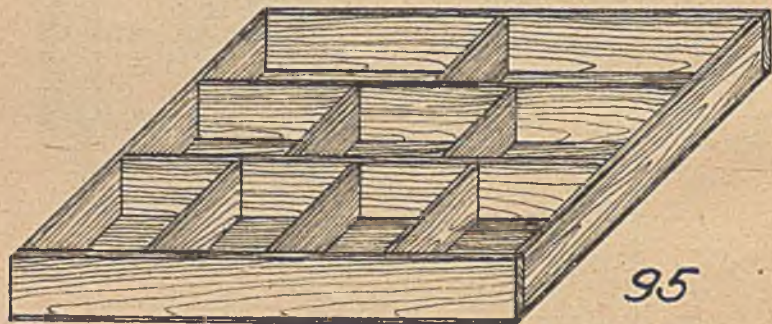
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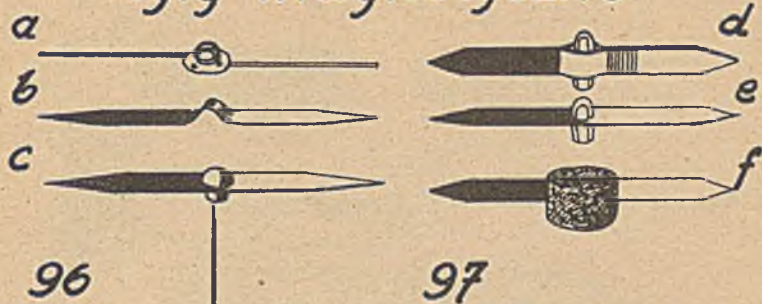


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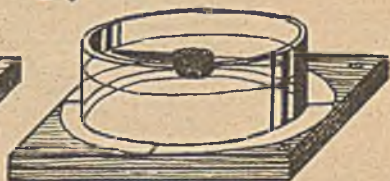
Igły magnetyczne



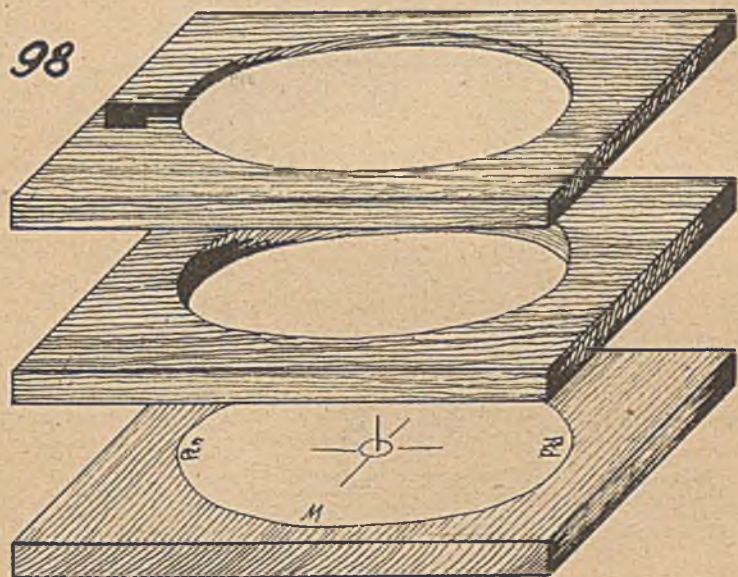
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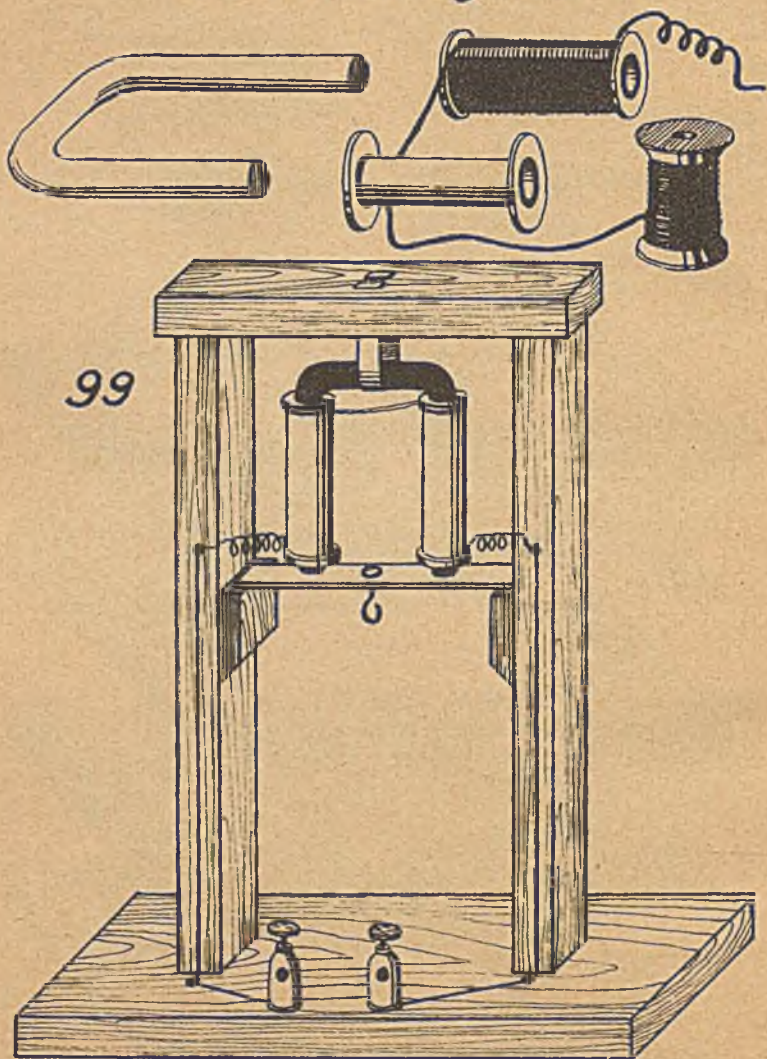
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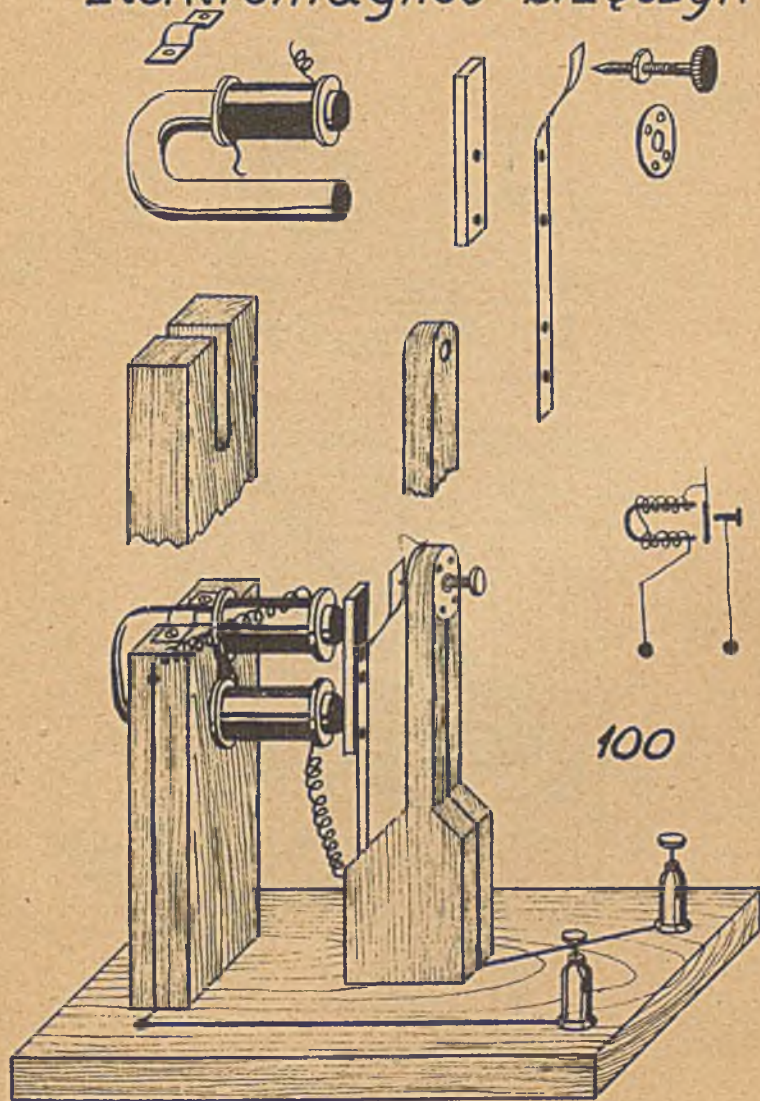
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Elektromagnes

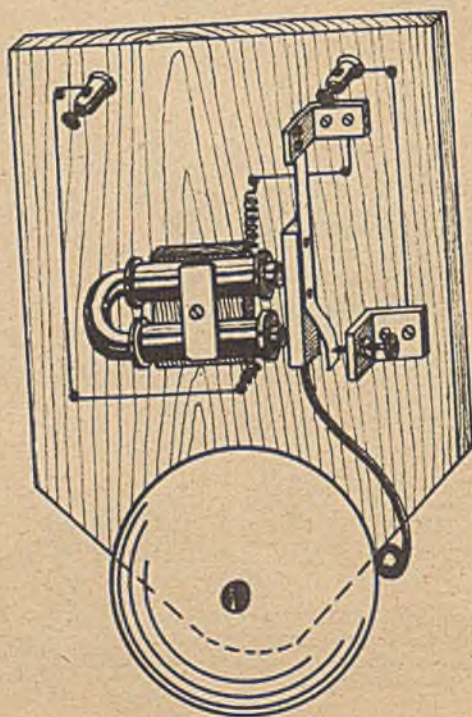
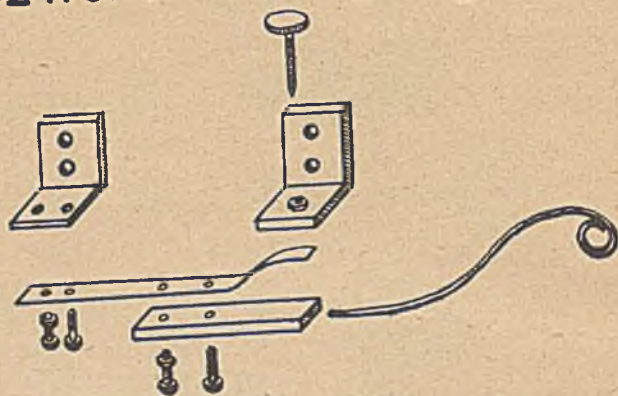


Elektromagnes - brzęczyk



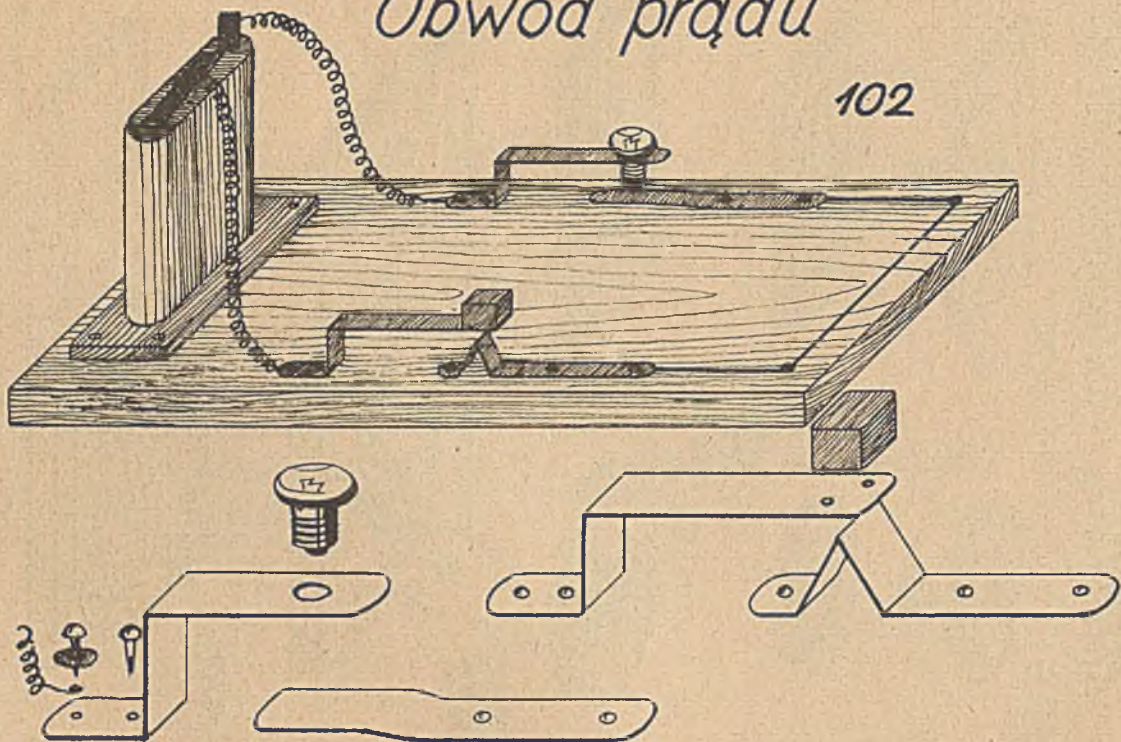
Dzwonek elektryczny

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Obwód prądu

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Przyciski, rozdzielnik, klucz.

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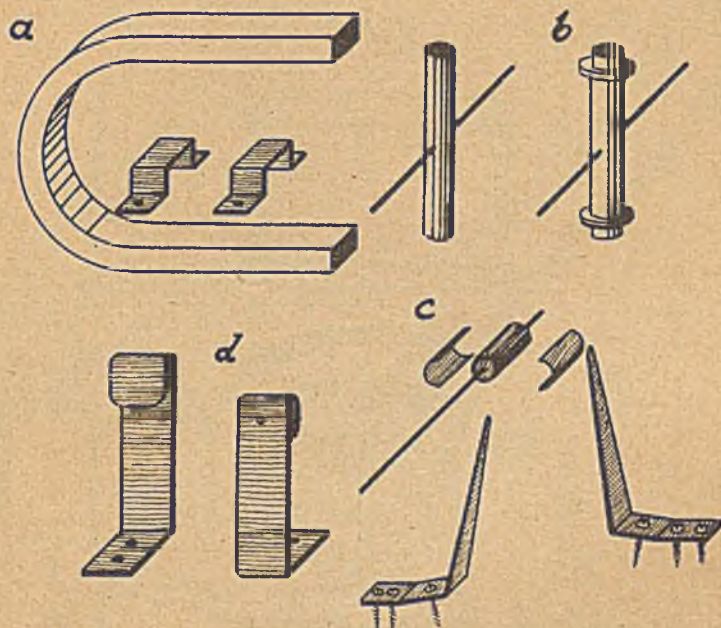
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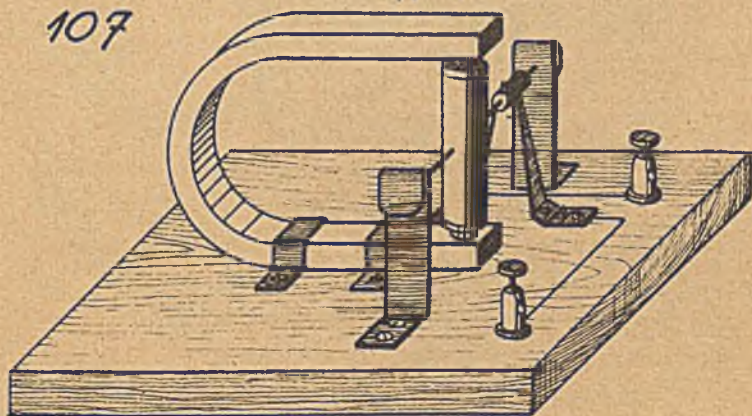
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Motorek elektryczny

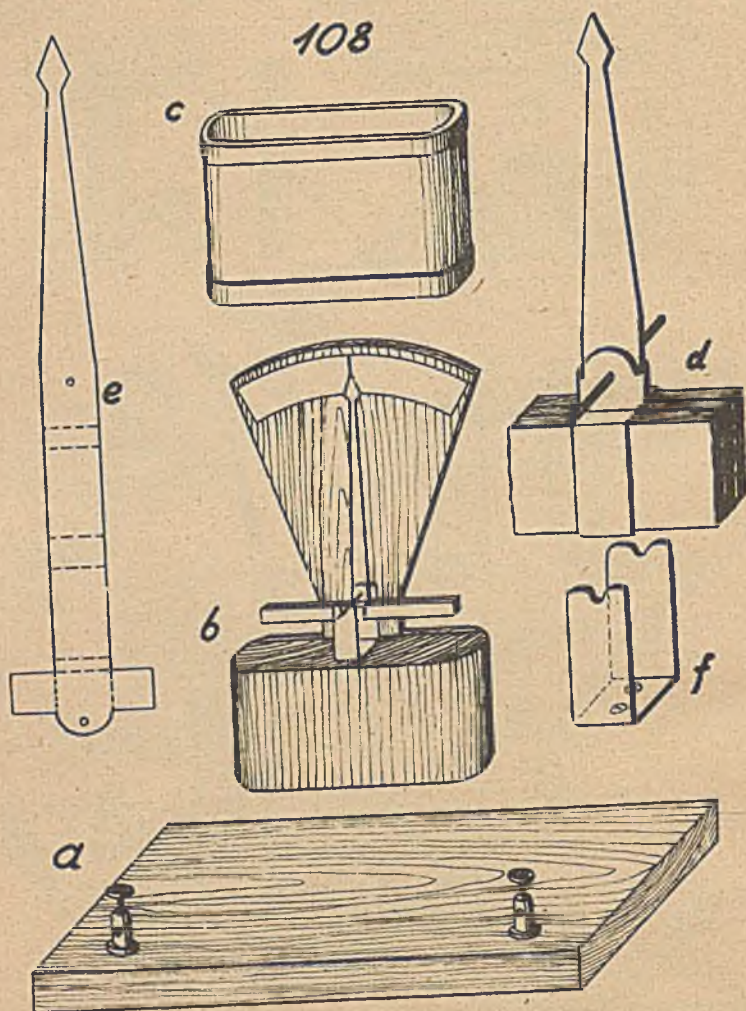


107



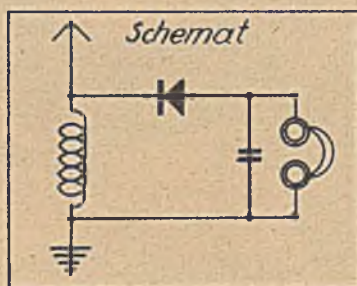
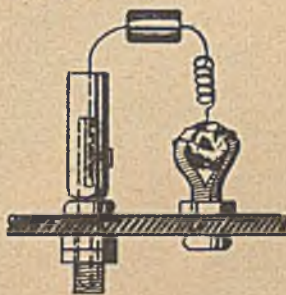
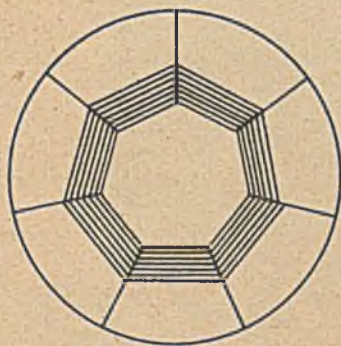
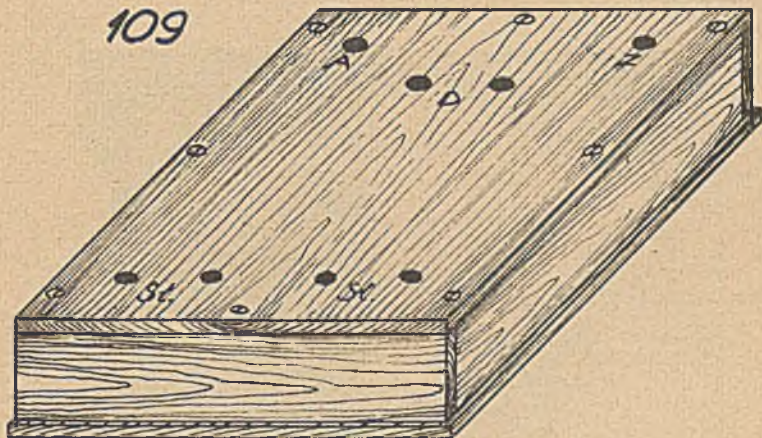
Galwanoskop

108



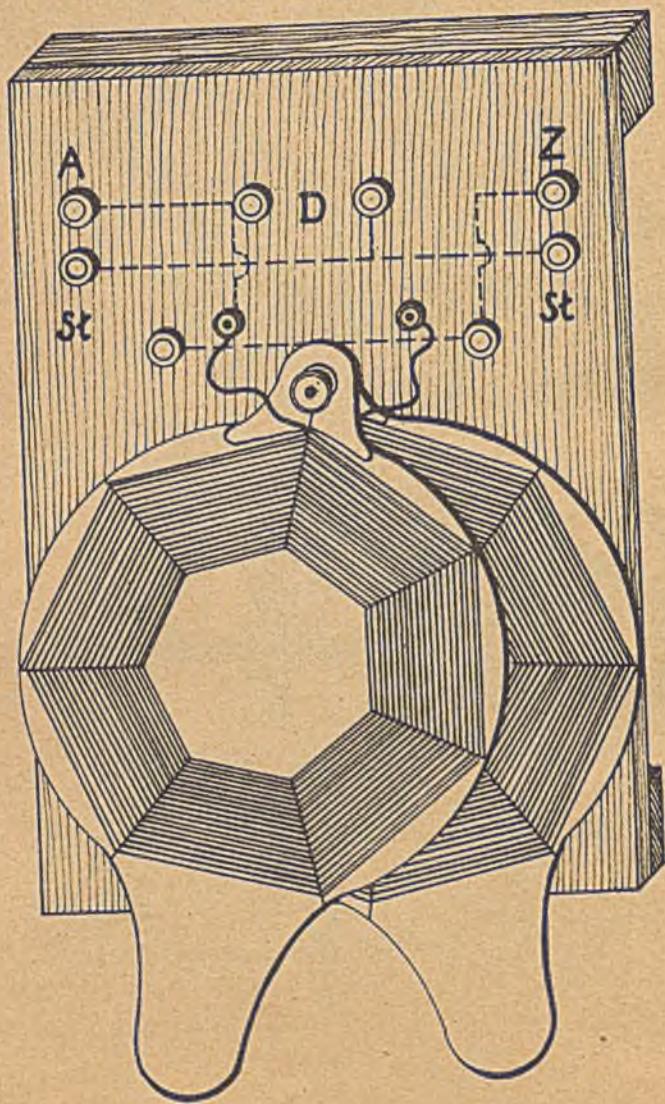
Detektor

109



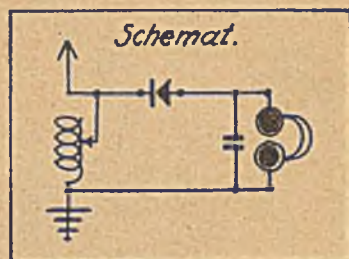
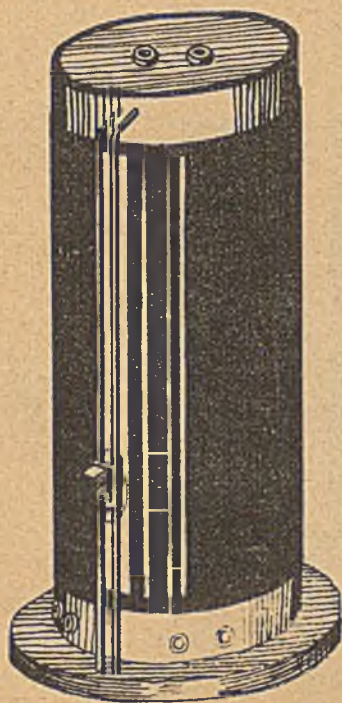
Detektor

110



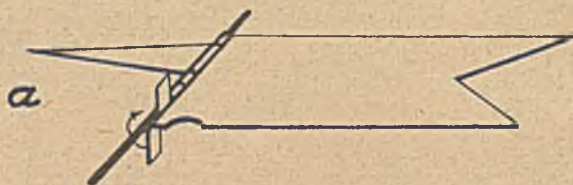
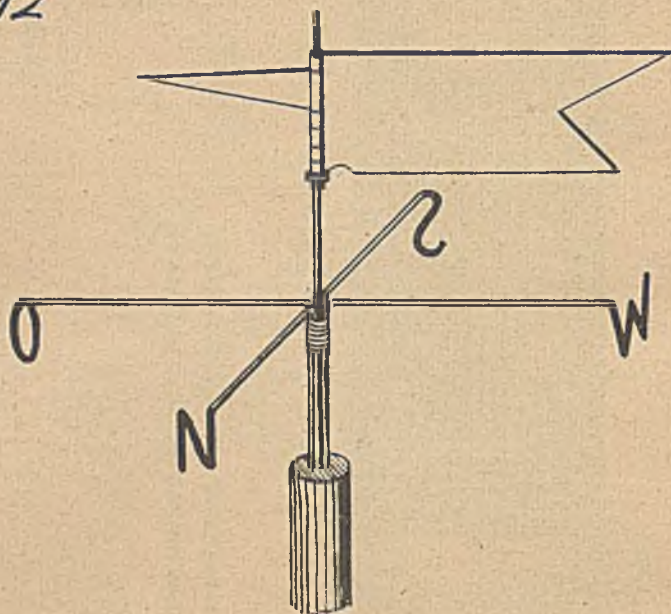
Detektor suwakowy

111



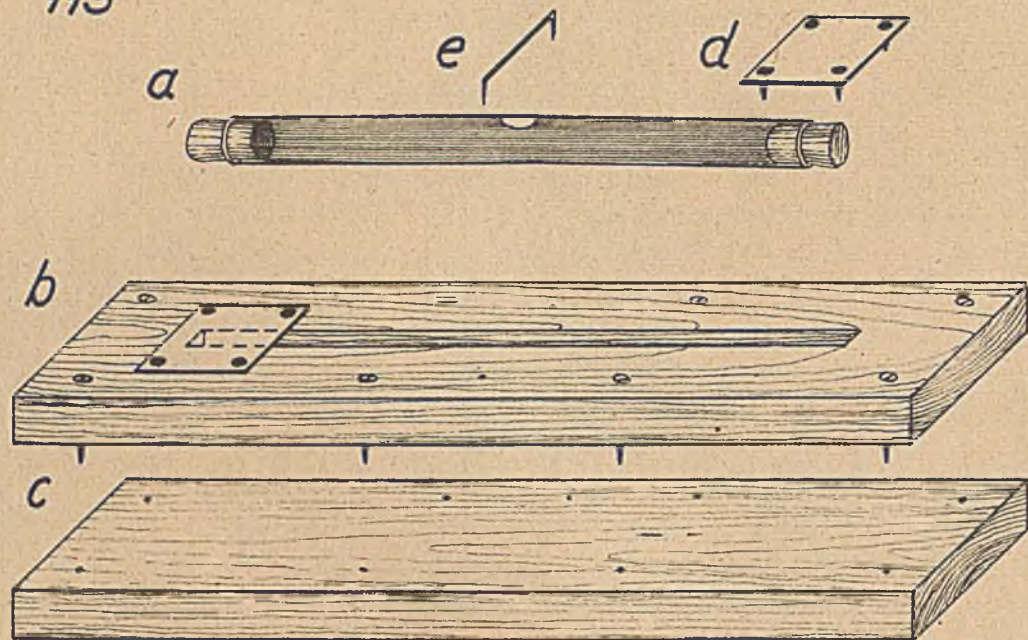
Wiatrowskaz

112



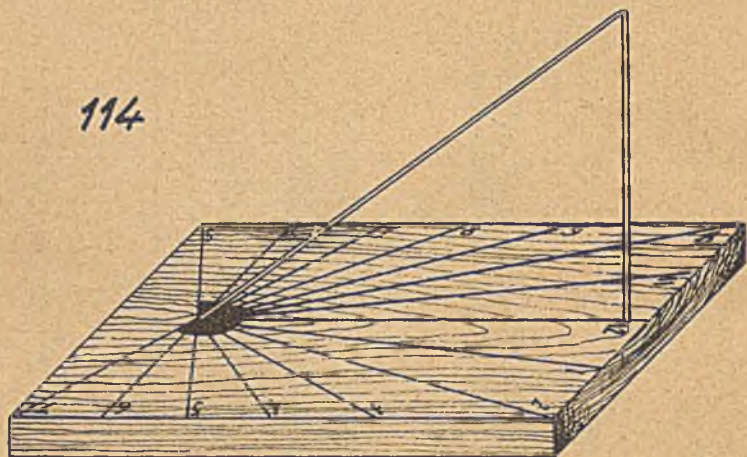
Poziomica

113

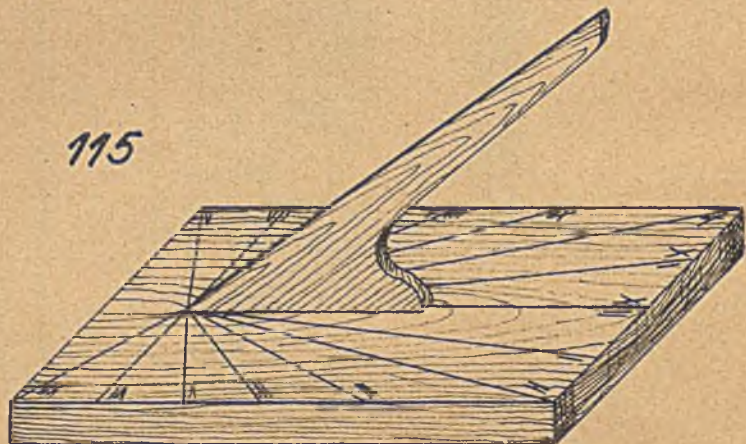


Zegary słoneczne

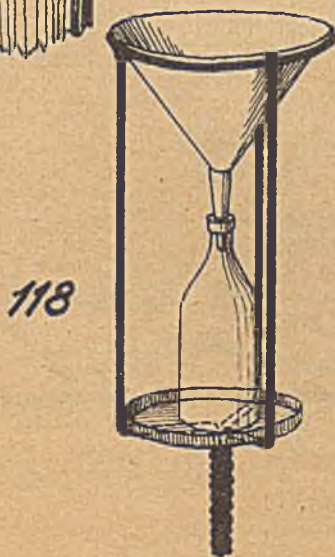
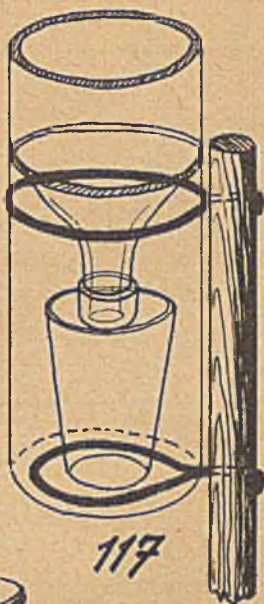
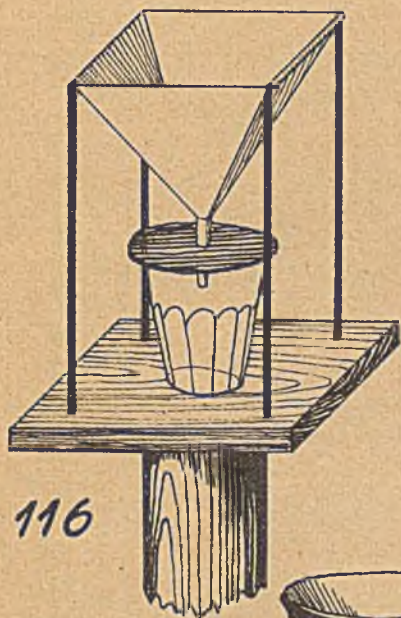
114

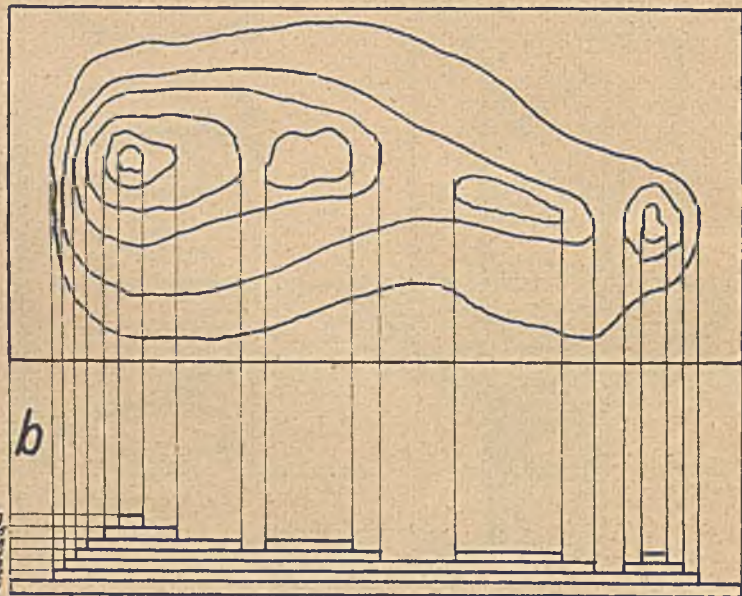


115



Deszczomierze



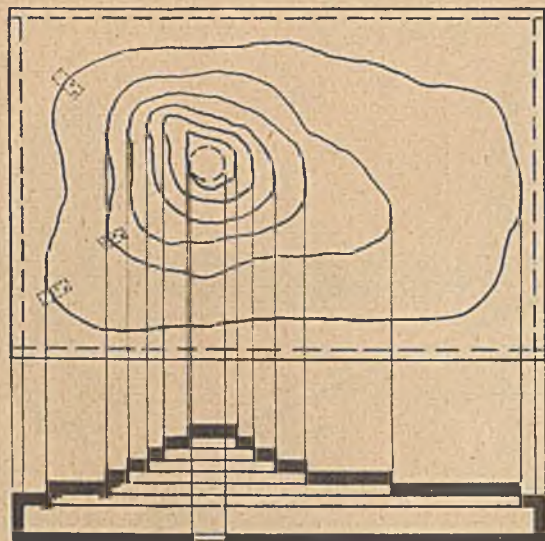
*Warstwie**a*

119

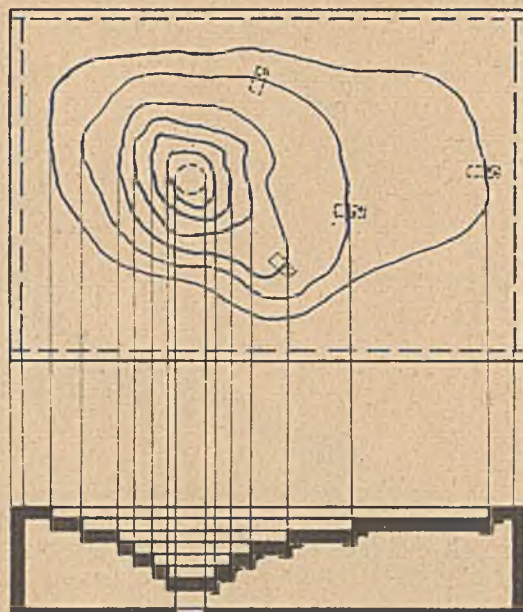
c

Warstwie

120

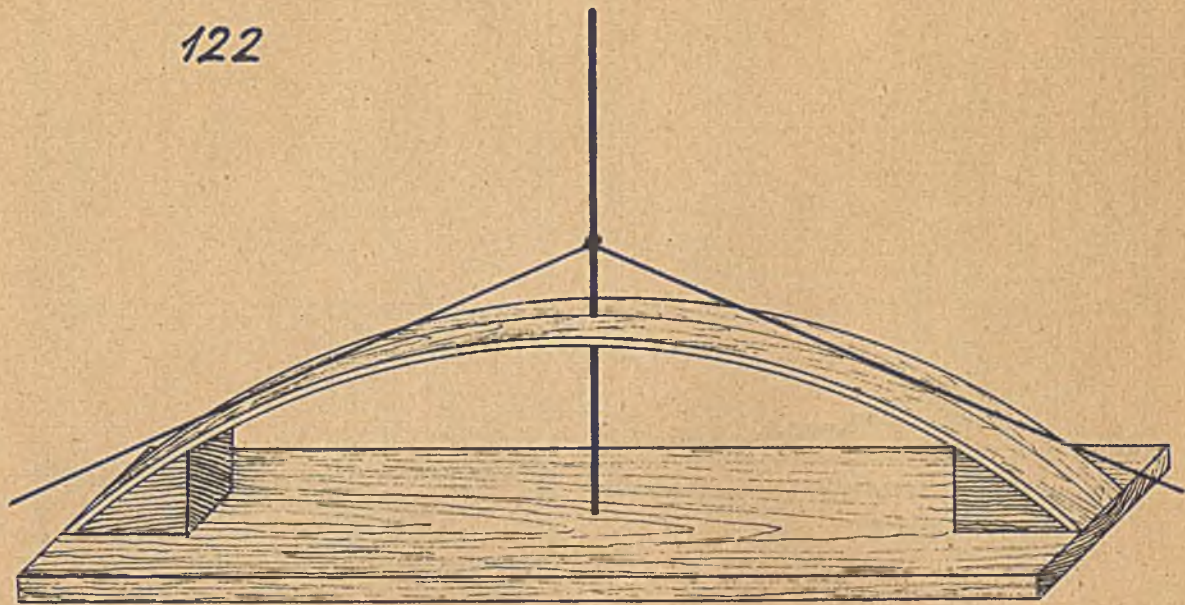


121

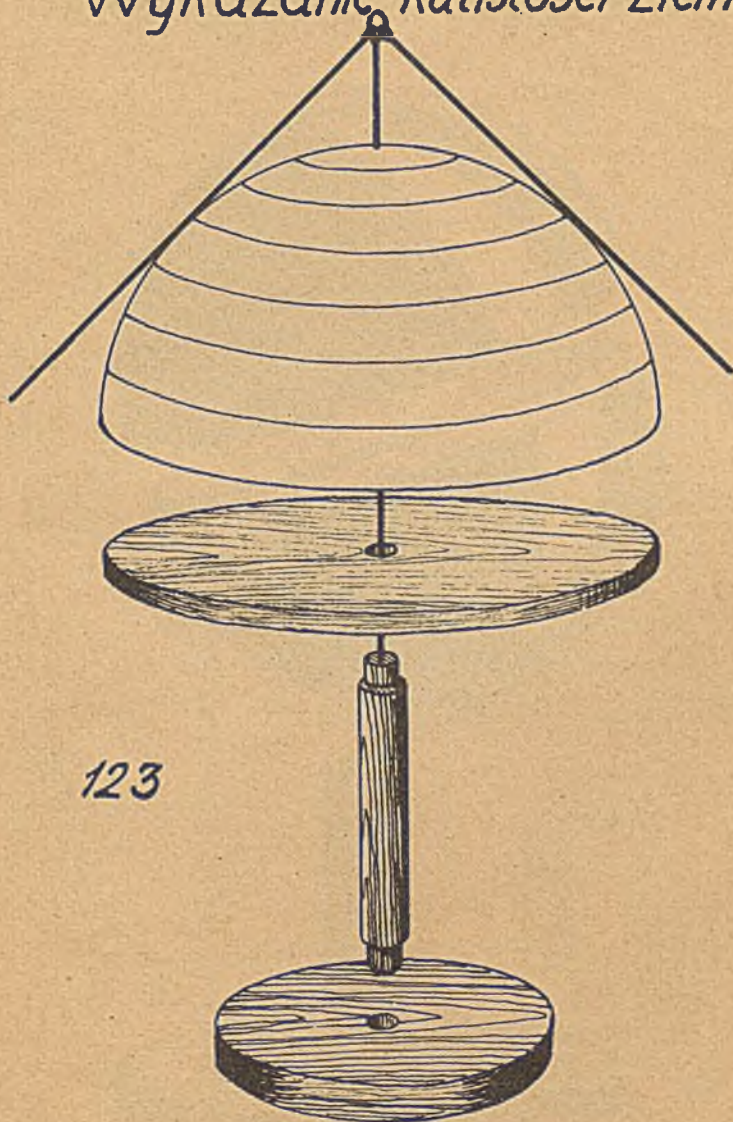


Wykazanie kulistości ziemi

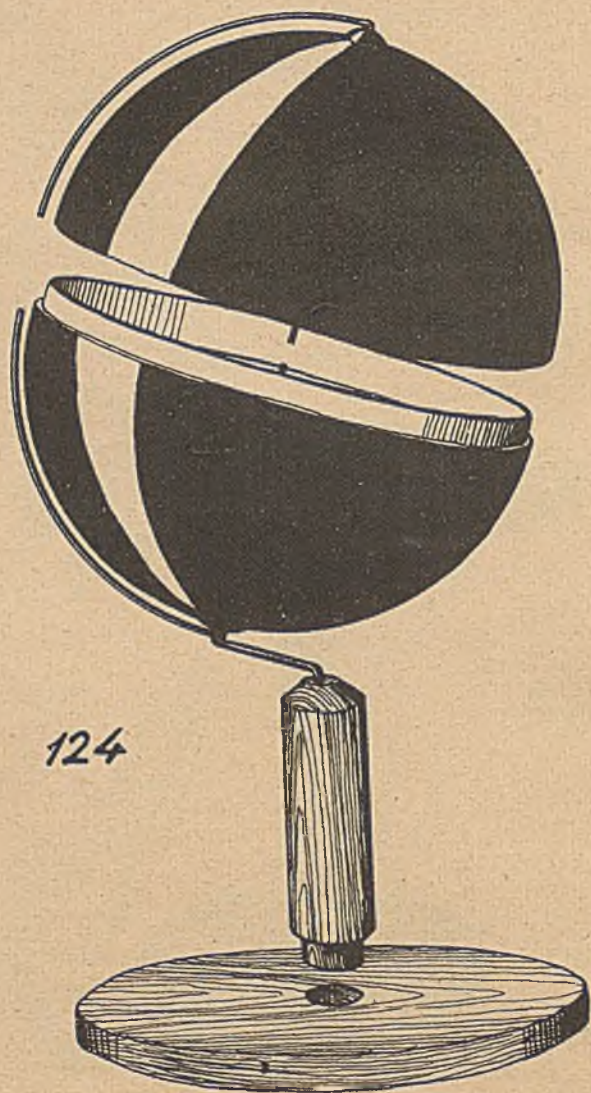
122



Wykazanie kulistości ziemi

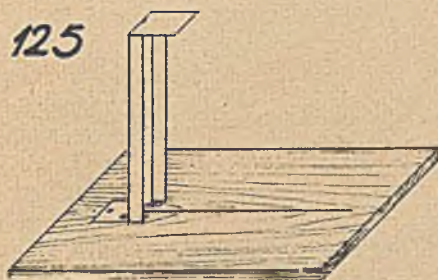


123

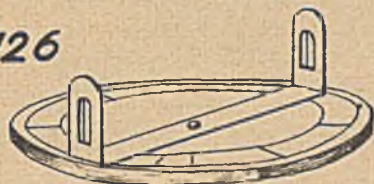
Globus indukcyjny

Gnomon, kątomierz, klinometr

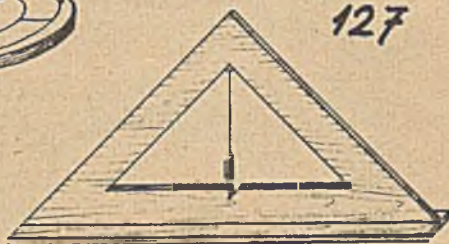
125



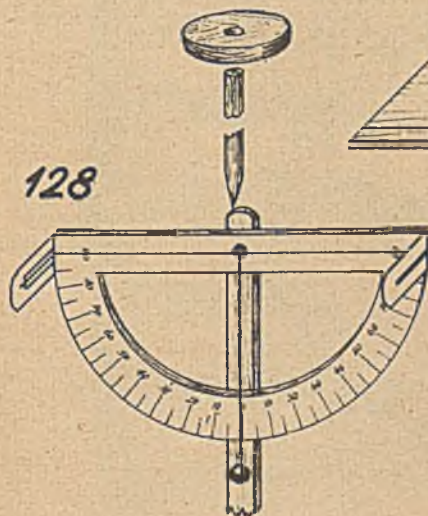
126



127

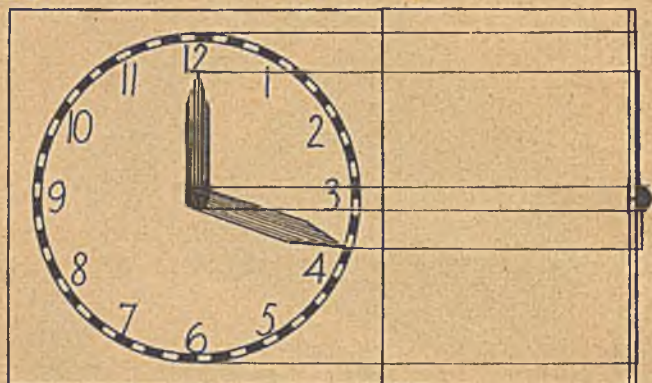


128

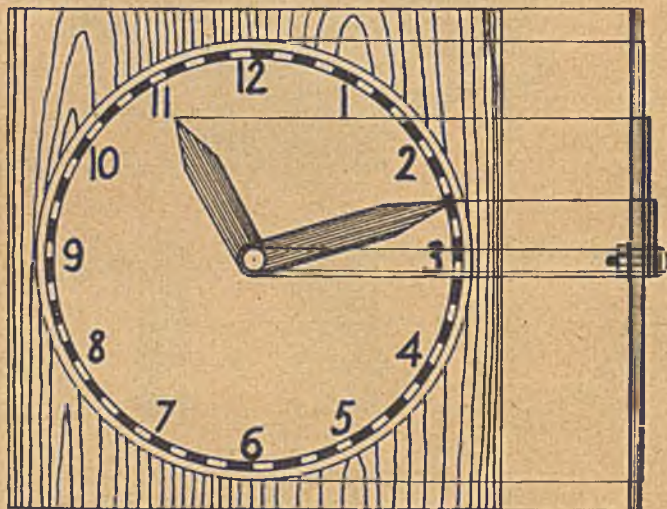


a



129 *Zegary*

130

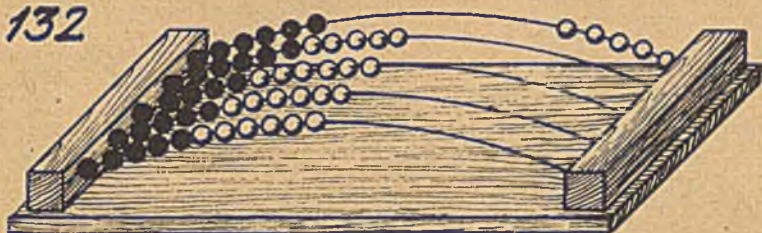


Liczydła

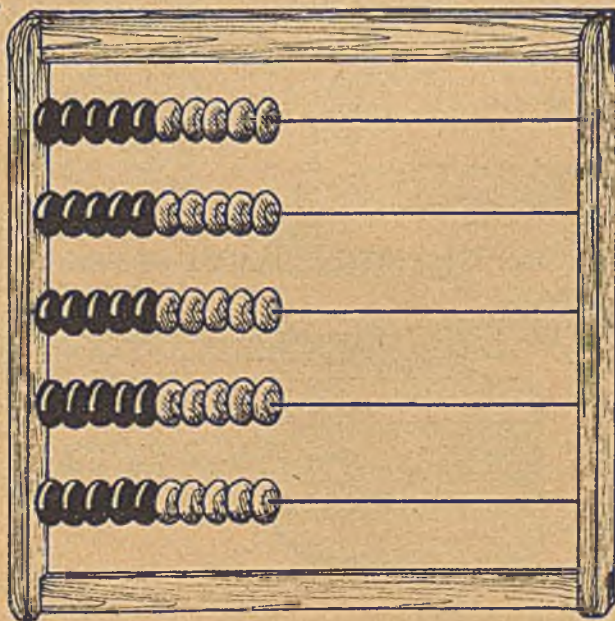
131



132



133

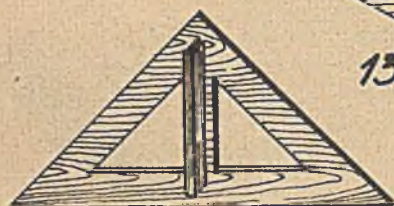


Przybory kreślarskie

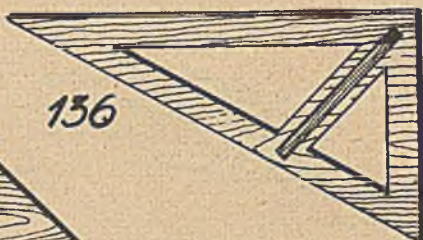
134



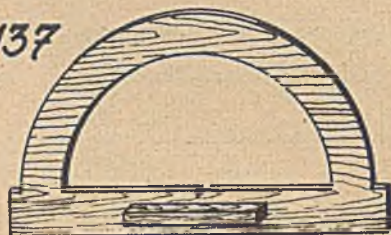
135



136



137



138



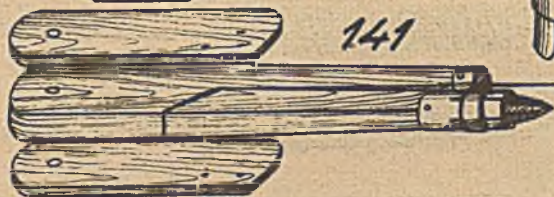
139



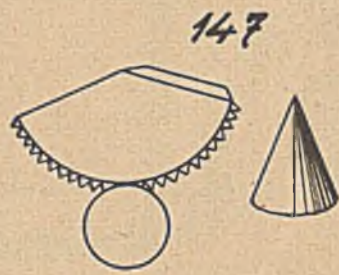
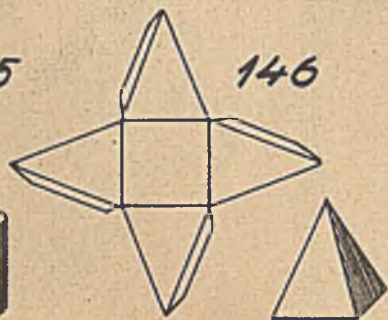
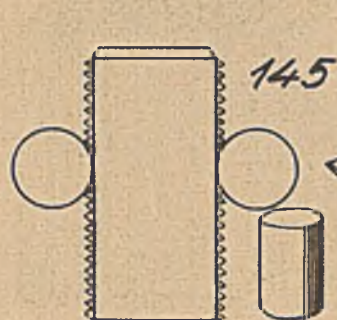
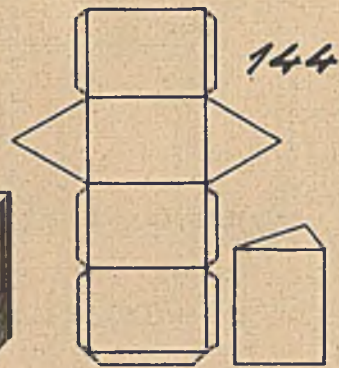
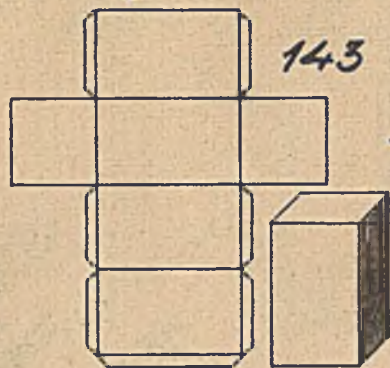
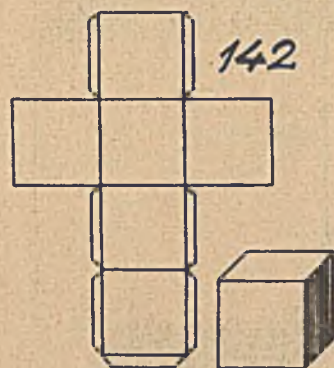
140



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Siatki brył z kartonu i tektury

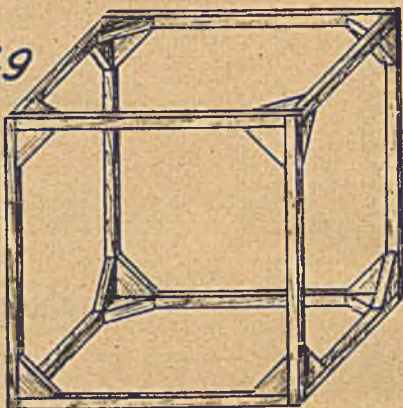


Metr kwadr., m^3 , $dc m^3$

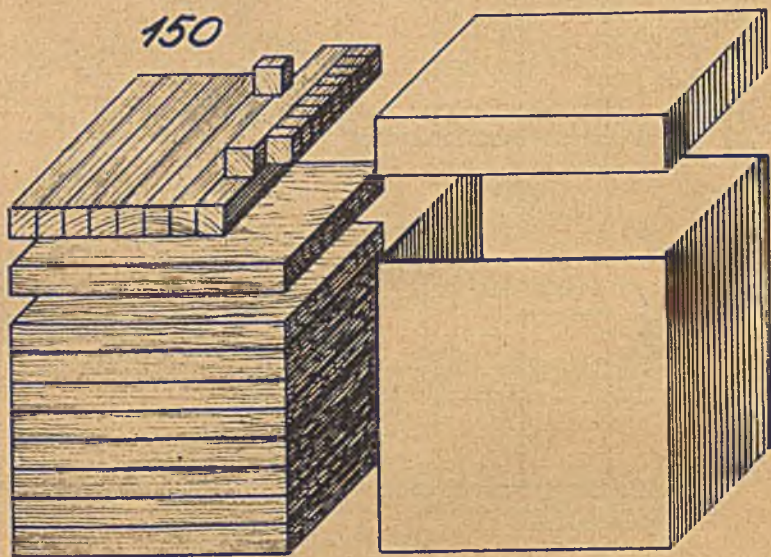
148



149

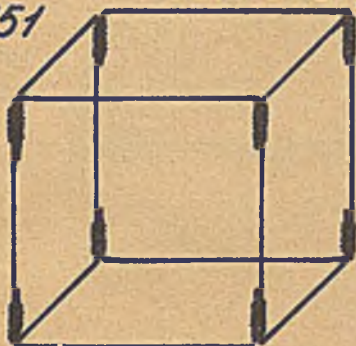


150

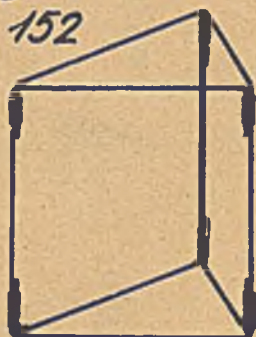


Szkielety brył

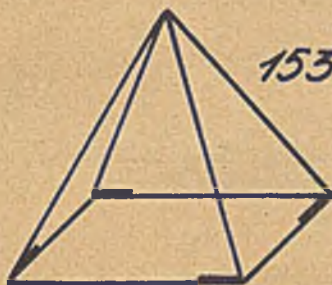
151



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Bryły z drzewa

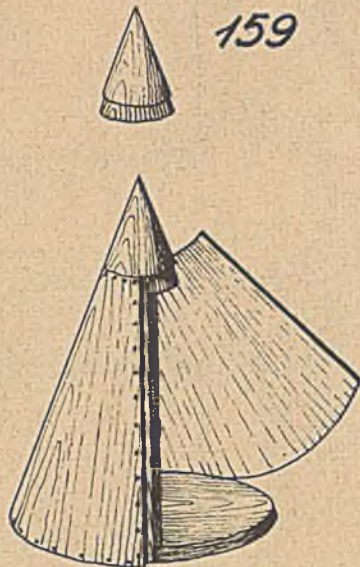
157



158

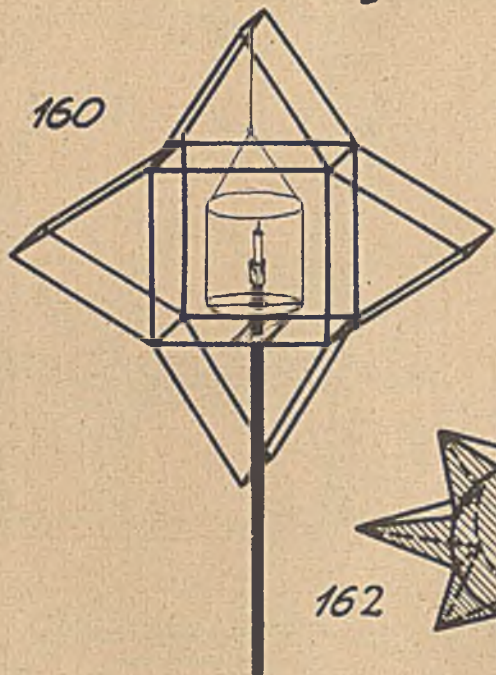


159

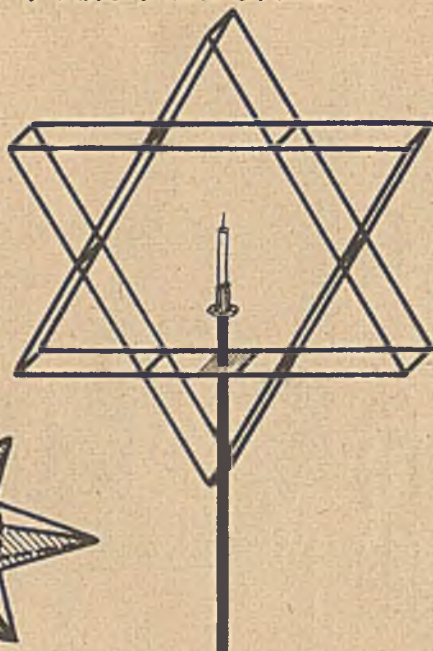


Gwiazdy na Boże Narodzenie

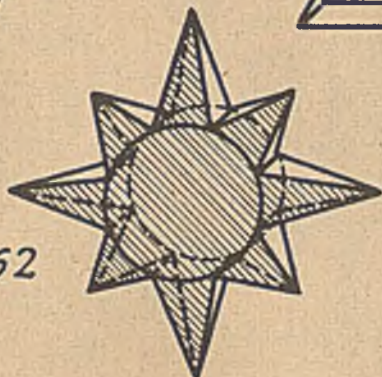
160



161

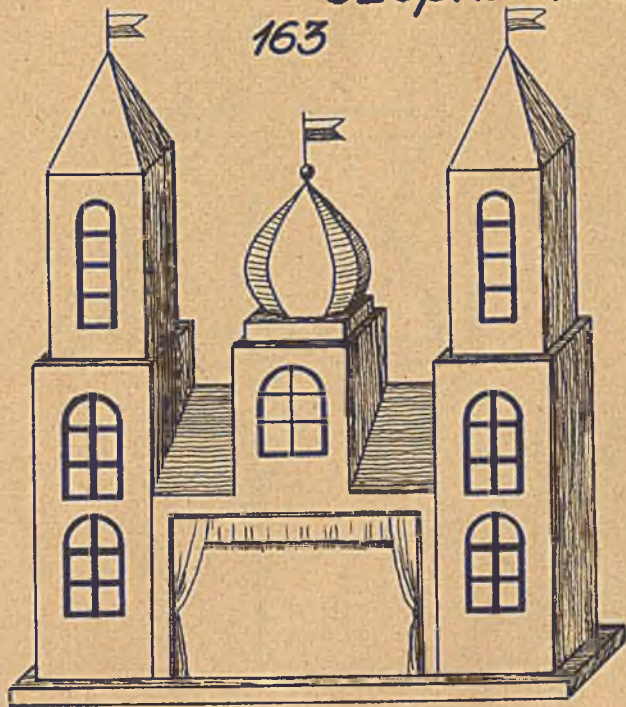


162

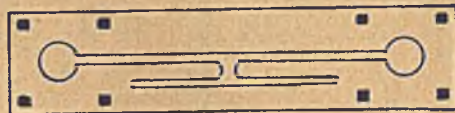
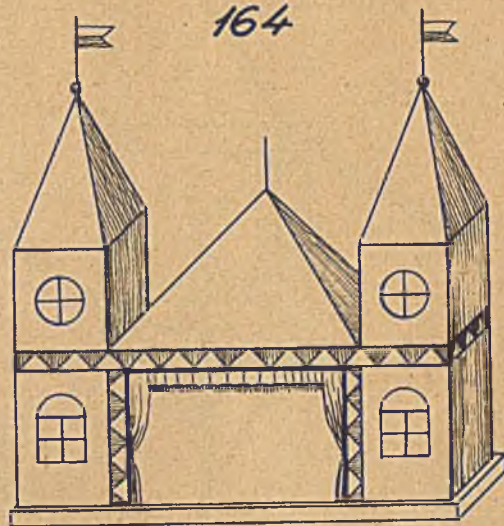


Szopki krakowskie

163

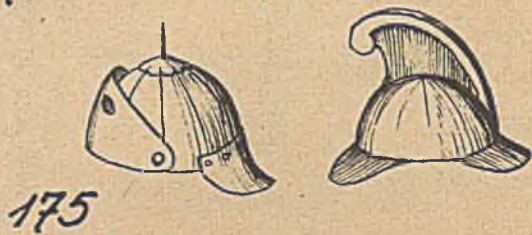
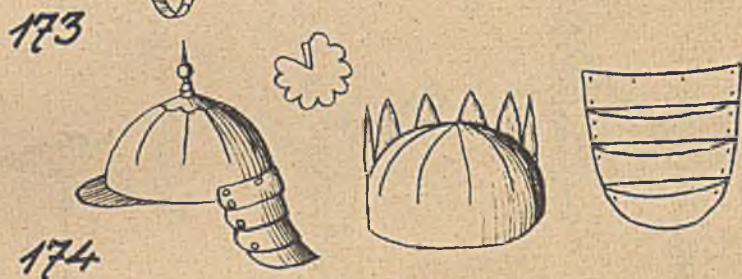
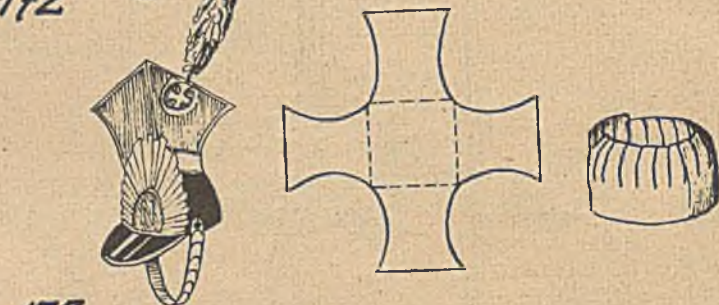


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Pomoce do przedstawień

Pomoce do przedstawień

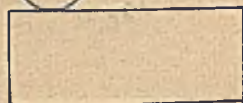


Czapki do przedstawień

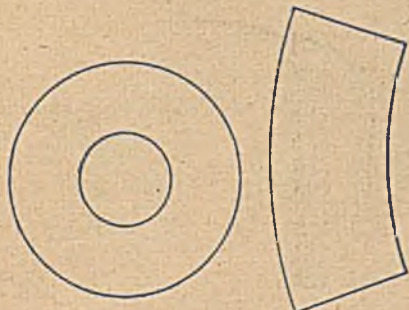
176



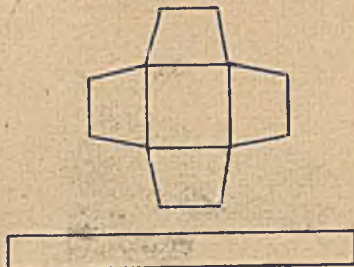
177

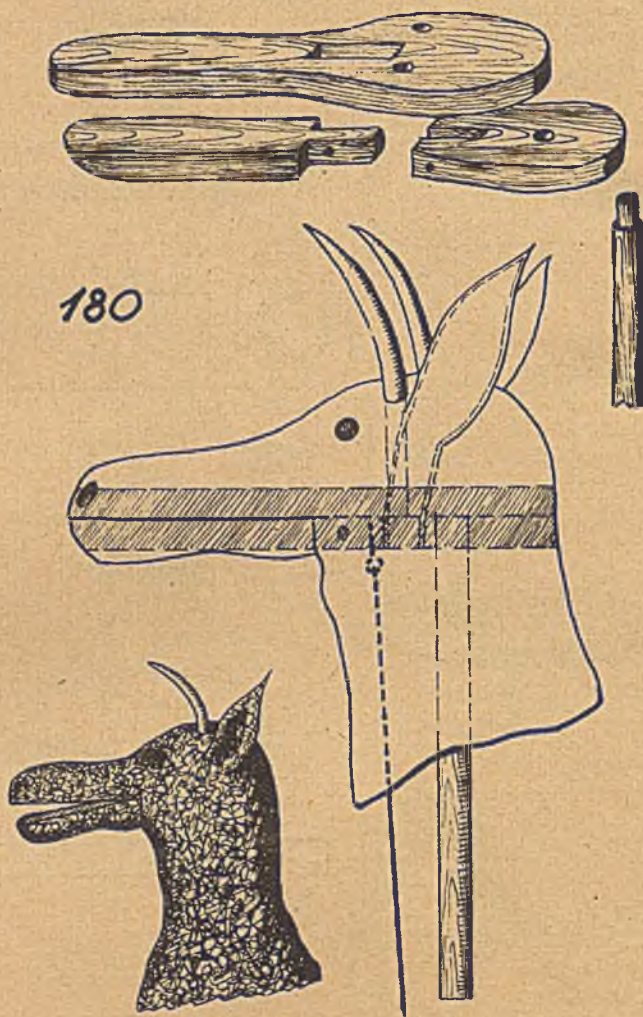


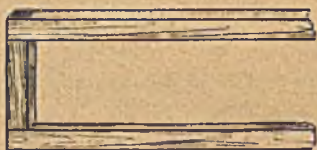
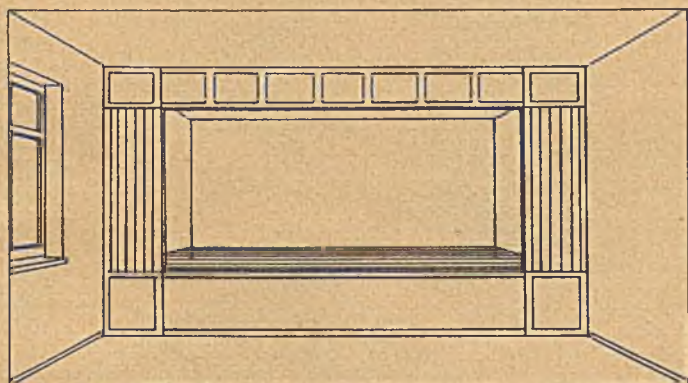
178



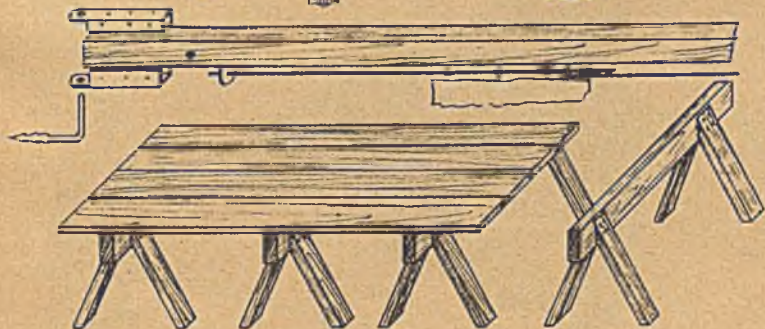
179



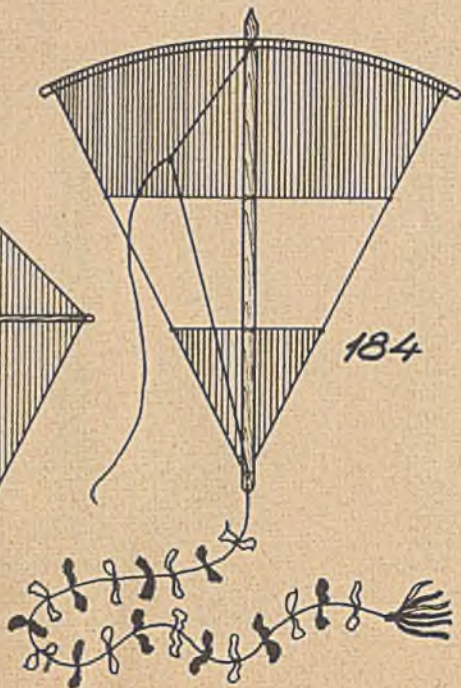
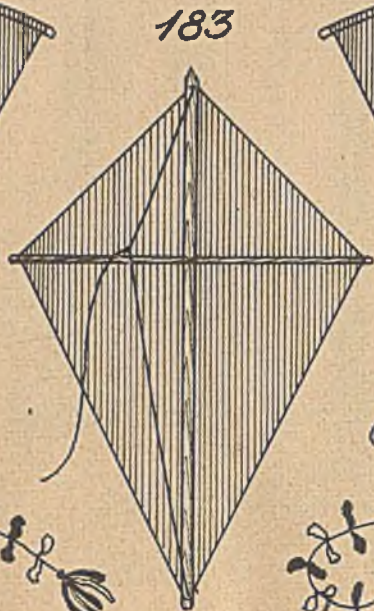
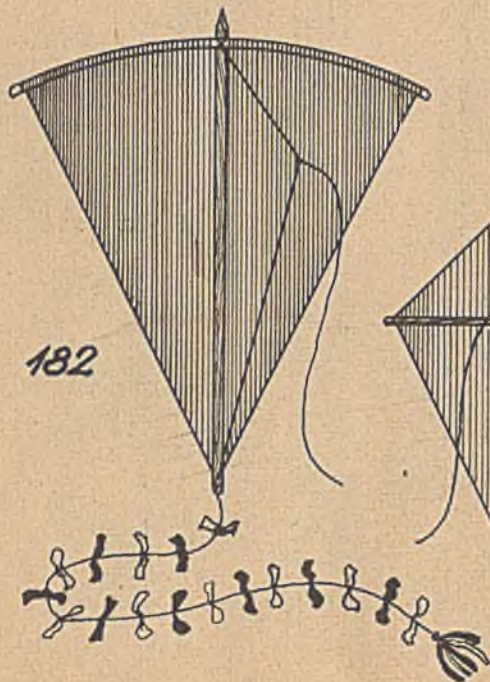
Turoñ

Składana scena szkolna

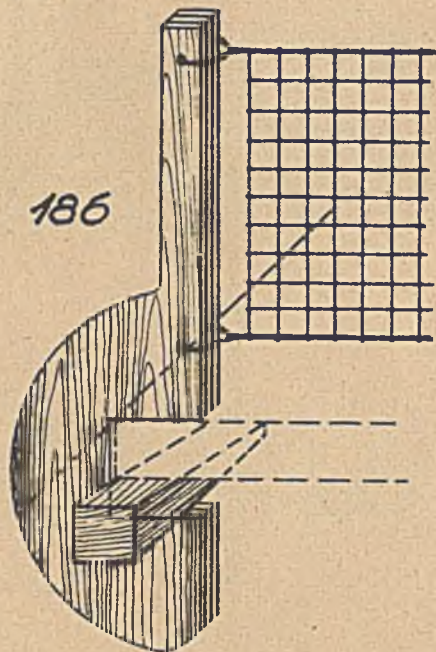
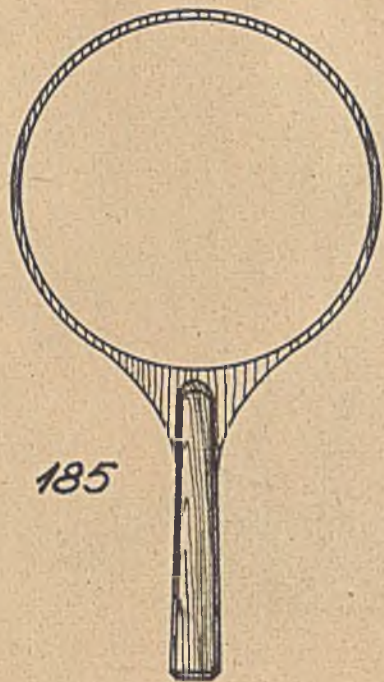
181



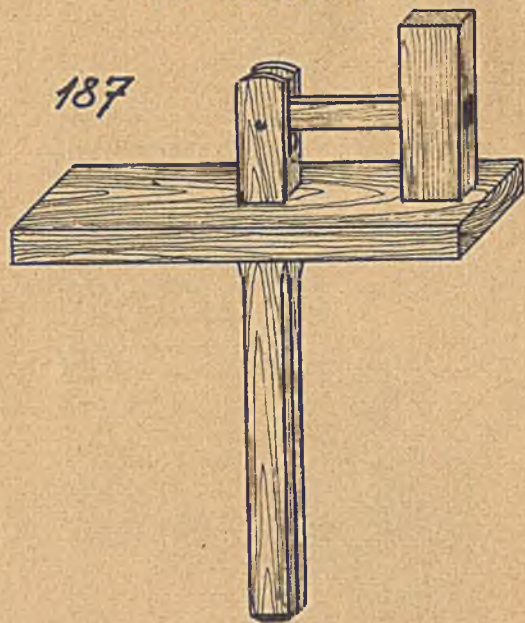
Latawce



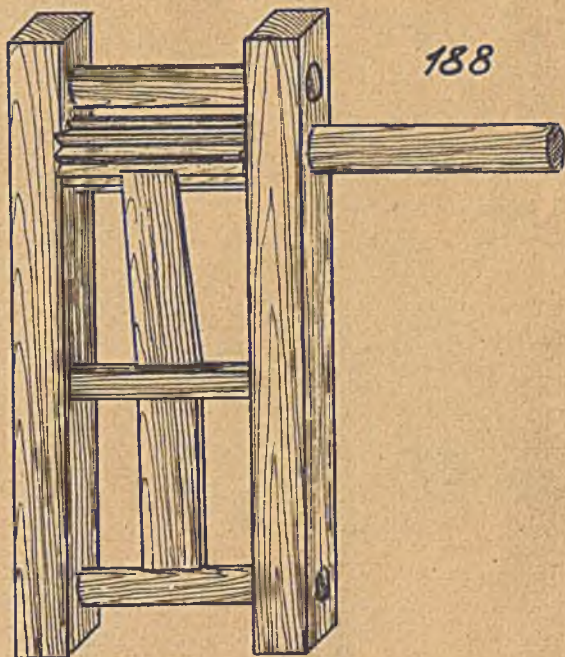
Przybory do ping-ponga



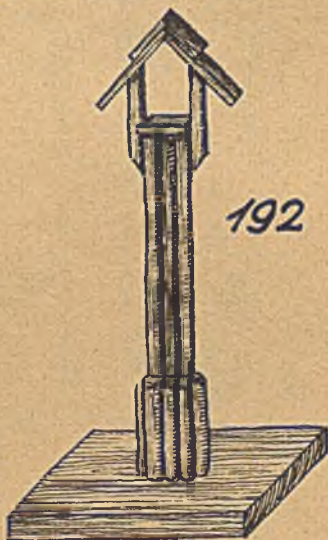
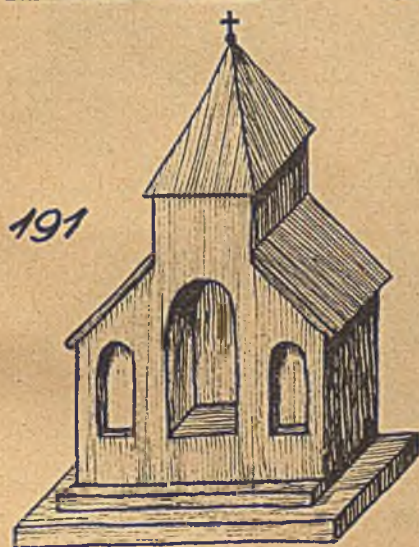
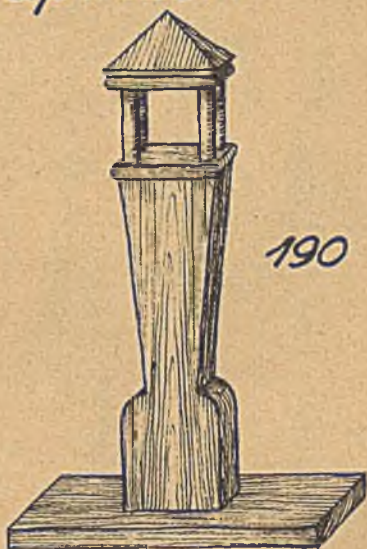
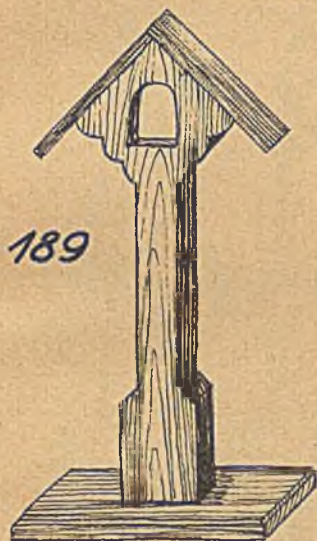
Kotatka

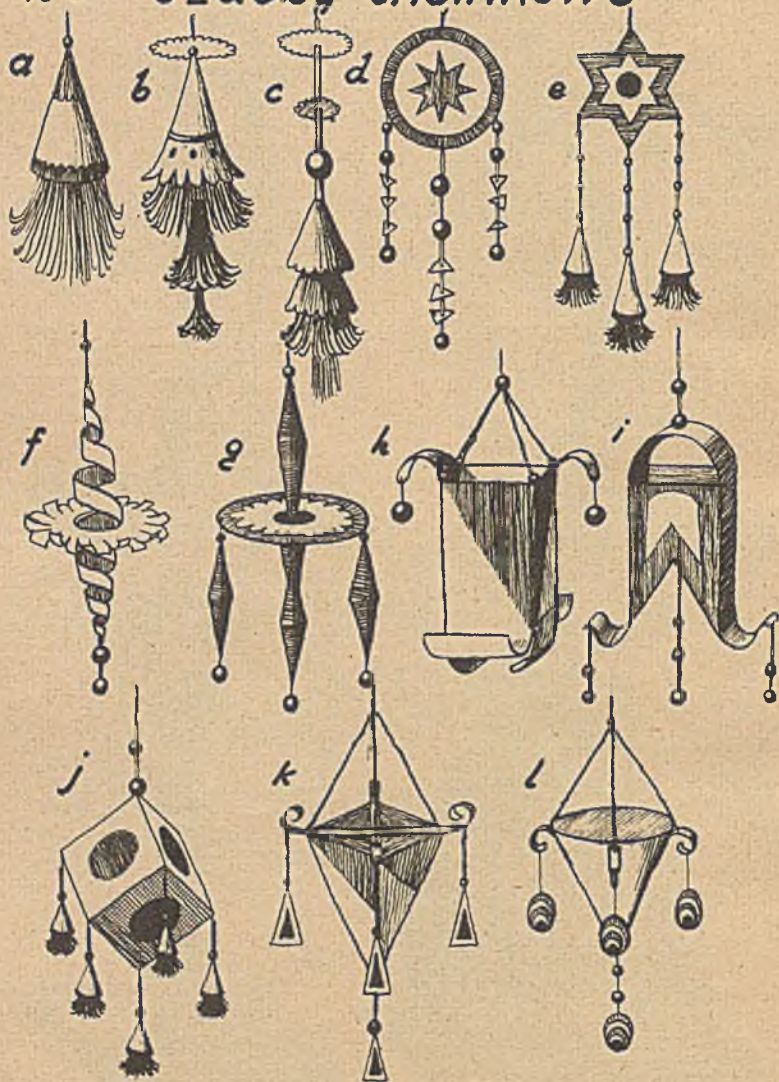


Trajkotka



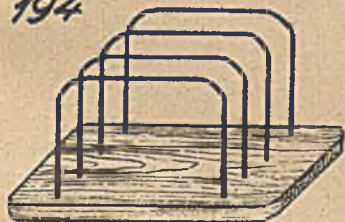
Modele kapliczek



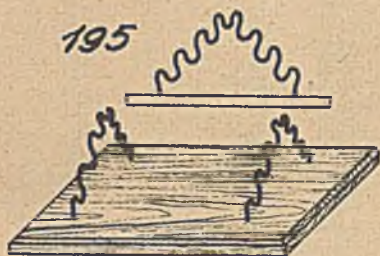
193 *Ozdoby choinkowe*

Prace z drzewa i drutu

194



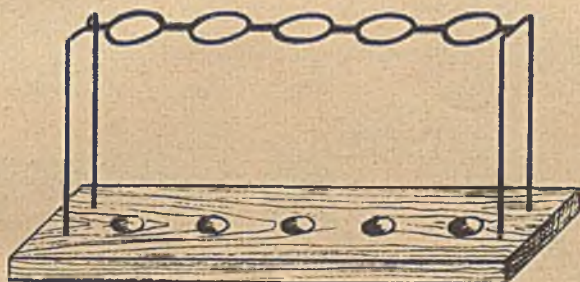
195



196

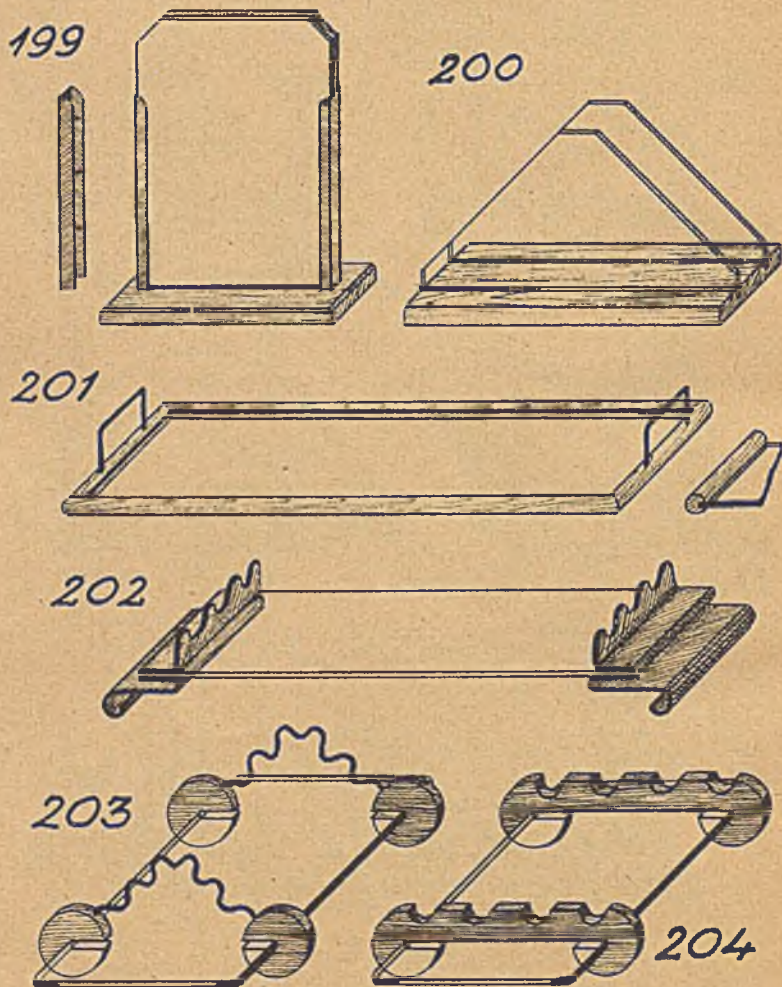


197

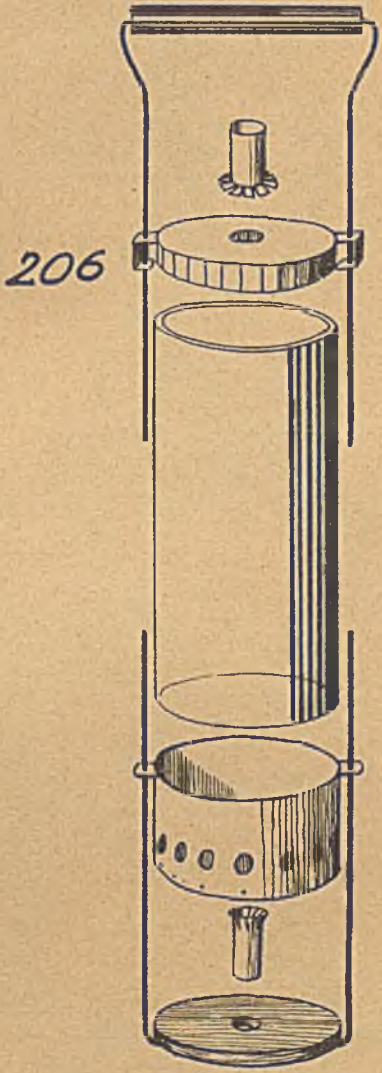


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Prace ze szkła



Latarnie



Lampy elektryczne



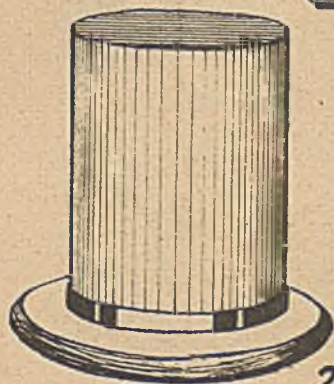
207



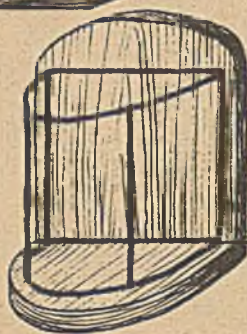
208



209

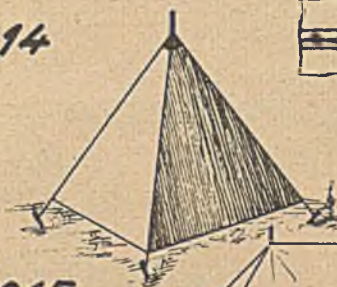
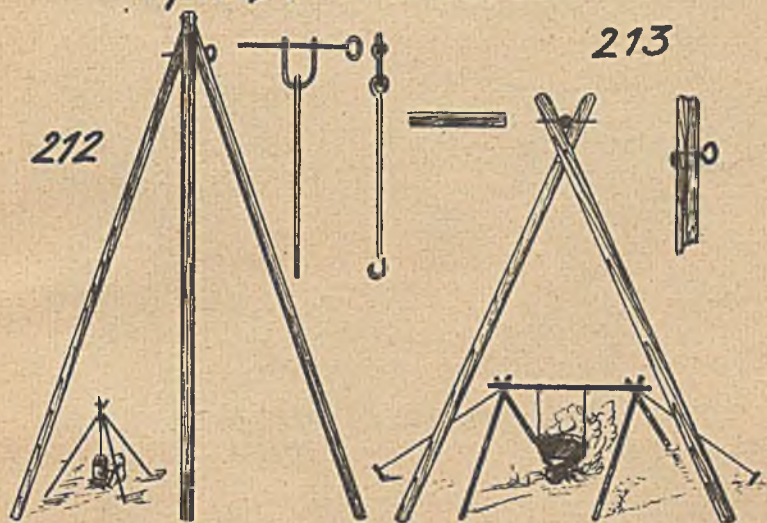


210

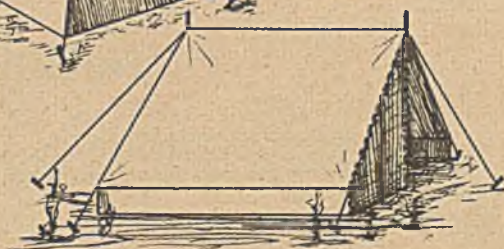


211

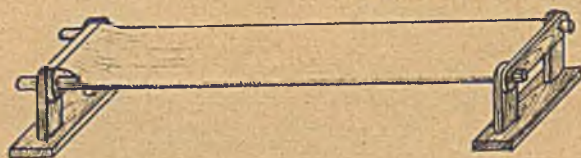
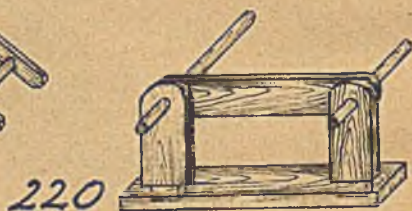
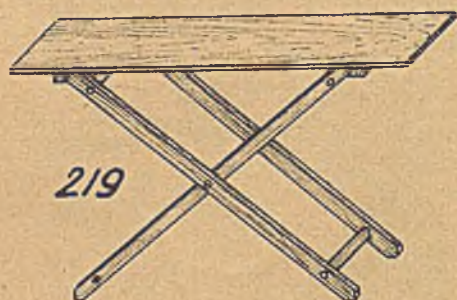
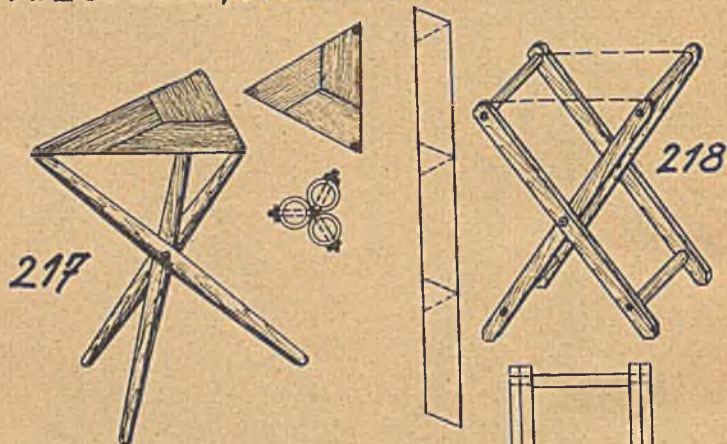
Sprzet harcerski



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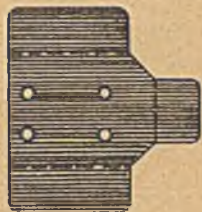


Krzesetka, stolik i tozko skladane



Łyżwy

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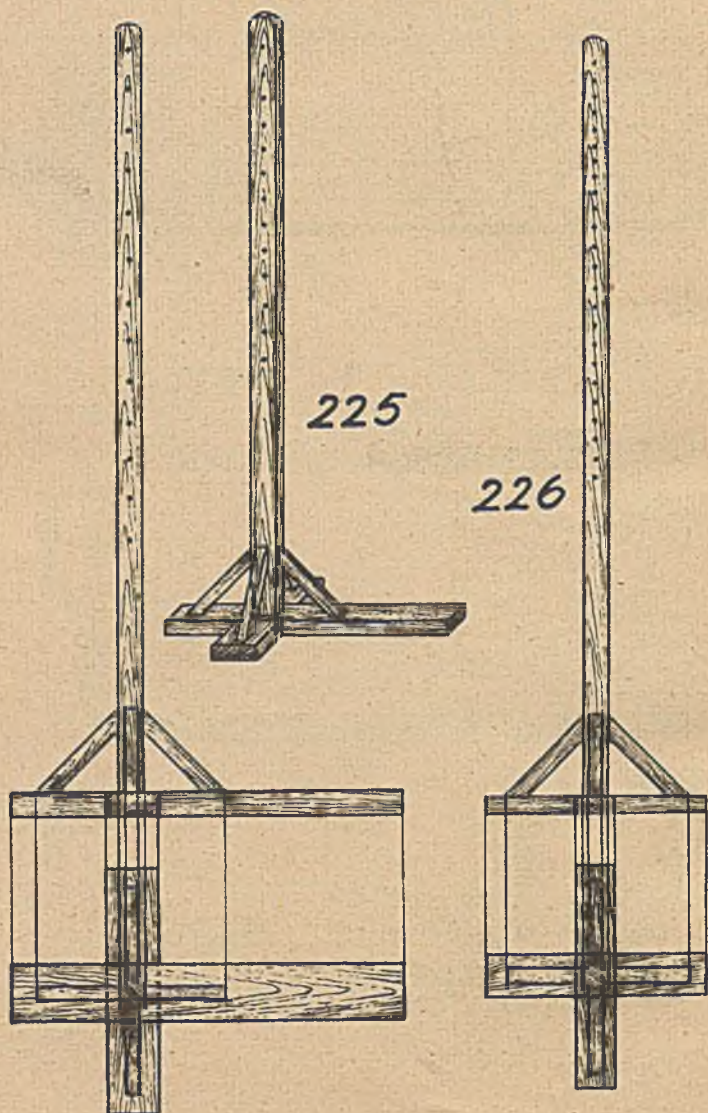


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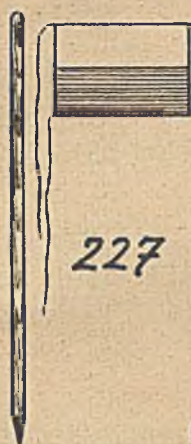


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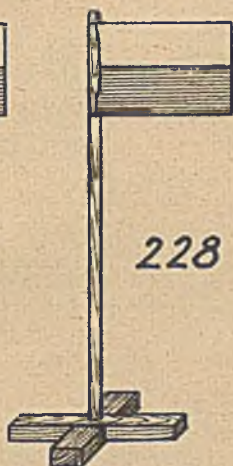


Stojaki do gier

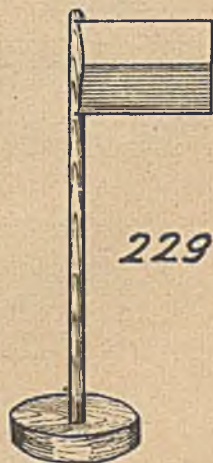
Przybory sportowe



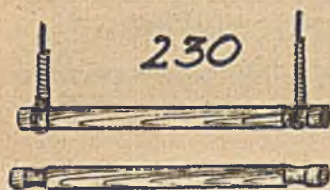
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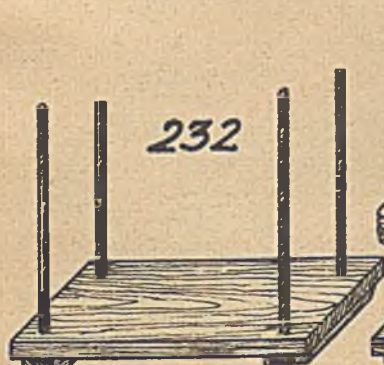
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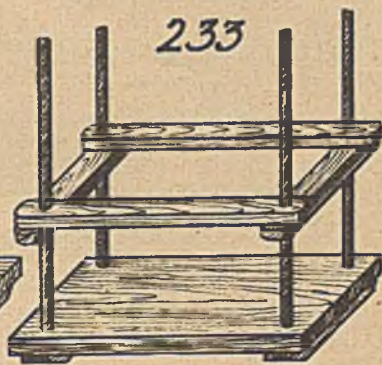
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Sanki

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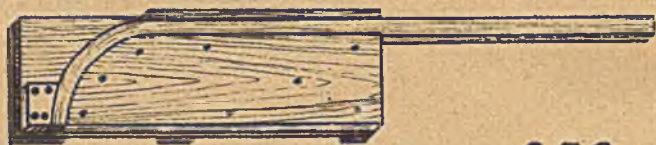
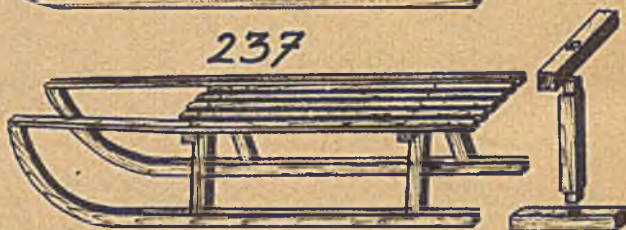
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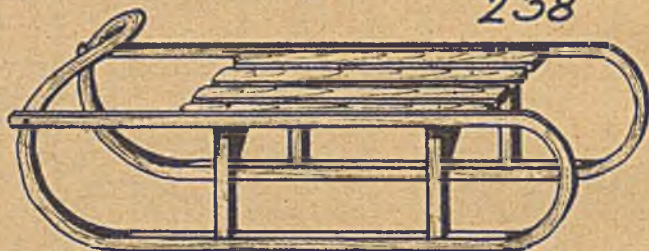
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