

AKADEMIA UMIEJĘTNOŚCI W KRAKOWIE.

SPRAWOZDANIE  
KOMISYI FIZYOGRAFICZNEJ

obejmujące  
pogląd na czynności dokonane w ciągu roku 1899

oraz

Materiały do fizyografii krajowej.

Tom trzydziesty piąty.



W KRAKOWIE

NAKŁADEM AKADEMII UMIEJĘTNOŚCI

SKŁAD GŁÓWNY W KSIĘGARNI SPÓŁKI WYDAWNICZEJ POLSKIEJ

1901

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1899

AKADEMIA UMIEJĘTNOŚCI W KRAKOWIE.  
*AKademija Umiejętności, Krakow*

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## I.

### Przegląd czynności Komisji fizyograficznej akademickiej w ciągu roku 1899/1900

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Komisya fizyograficzna odbyła w r. 1899. dwa posiedzenia, w dniach 27. marca i 18. maja. Przedmiotem pierwszego z nich były sprawy przepisane § 13. Regulaminu Komisji, na drugim zaś omówiono szczegółowo cele i sposoby zamierzonych przez Sekcyę rolniczą badań geologiczno-rolniczych kraju, a następnie uchwalono kilka zmian w Regulaminie Komisji.

Prace Komisji postępowały podług programu uchwalonego na posiedzeniu w dniu 27. marca, z którego jednak odpadły niektóre badania z powodu przeszkód niezależnych od Komisji, mianowicie Prof. M. Łomnicki, podjąwszy się napisania tekstu do map geologicznych, wykonanych przez ś. p. Prof. Bieniasza, nie mógł, dla braku czasu, zająć się zamierzonym zdjęciem dwóch map dla Atlasu geologicznego Galicyi, w Sekcyi rolniczej zaś nie doszły do skutku badania geologiczno-rolnicze.

Z Atlasu geologicznego Galicyi wydano zeszyt 8-my, zawierający mapy wykonane przez Dra W. Teisseyrego: Założce, Tarnopol, Podwołoczyska, Trembowla, Skałat i Grzymałów. Oddano do druku zeszyt 13-ty, złożony z map Prof. Dra W. Szajnochy: Przemyśl, Brzozów i Sanok, Łupków i Wola Michowa.

Niniejszy tom Sprawozdań wychodzi z dość znacznem opóźnieniem, z powodu małej ilości prac do wydania w Sprawozdaniach przeznaczonych, a złożonych Komisji przez Sekcyę geologiczną, zoologiczną, botaniczną i rolniczą.

## Sprawozdanie z czynności w Sekcyach.

### a) Sekcja meteorologiczna.

Sekcja meteorologiczna otrzymała w roku 1899. spostrzeżenia meteorologiczne z 32 stacyj, z których jednak tylko 29 było przez cały rok czynnymi. Utraciła Sekcja stale stacje w Zawoi i Jarosławiu. Stację w Obertynie przeniesiono do Horodenki, przez co w pierwszym miejscu przerwano spostrzeżenia z końcem sierpnia, w drugim zaś rozpoczęto je od grudnia. Przerwy również z powodu wakacyj nastąpiły w Bochni i Wadowicach. Było więc, wogóle biorąc, na zachód od Sanu stacyj 16, na wschód stacyj 15. Ciepłotę powietrza i opad zapisywano w 31, ciśnienie w 11 miejscach, kierunek wiatru i zachmurzenie nieba w 28 miejscowościach Galicyi.

Obliczaniem, przepisywaniem do druku i korektą tegoż zajmował się członek Komisji Dr. Wierzbicki. On też, podobnie jak w latach poprzednich, zestawił miejsca nawiedzone gradem w roku 1899.

Spostrzeżenia pojawów w świecie roślinnym i zwierzęcym nadesłane w latach 1897., 1898. i 1899. przez p. Juliana Hawrysiewicza z Ożydowa, Leona Magierowskiego z Jaćmierza i p. Zofię Birkenmajerową z Czernichowa, zestawił i przysposobił do druku sam przewodniczący Sekcyi Prof. Dr. F. Karliński.

Spostrzeżenia zboczenia i nachylenia igły magnetycznej w Krakowie wykonał jak w latach poprzedzających członek Komisji Dr. Wierzbicki.

### b) Sekcja geologiczna.

Sekcja geologiczna udzieliła zasiłków w r. 1899. pp. Drowi Friedbergowi i Wiśniowskiemu na badania geologiczne.

P. Friedberg wykonał i złożył do wydania w Atlasie geologicznym mapę (zamiast Tyczyn-Dynów): Ropczyce-Dębica, dołączając tymczasowy tekst, który zastąpiony zostanie innym obszerniejszym, gdy mapa zostanie oddaną do druku.

Dr. Wiśniowski podjął się dokończenia mapy geologicznej Dobromila i zbadania flory miocenińskiej w Myszynie i Glińsku. Komisya nie otrzymała jednak dotychczas od niego wiadomości o stanie tych robót.

Z pozostałych dwóch prac proponowanych przez Sekcyę w r. z., mianowicie: wykonania dwóch map dla Atlasu geologicznego przez Prof. Łomnickiego i napisania tekstu do map ś. p. Prof. Bieniasza, pierwsza odpadła, gdyż Prof. Łomnicki podjął się napisania tego ostatniego tekstu.

Do wydania w Atlasie oprócz wymienionej wyżej mapy Ropczyce-Dębica, otrzymała Sekcyja jeszcze od Wys. Wydziału krajowego dwie mapy Prof. Szajnochy, mianowicie mapę Wola Michowa, po przeprowadzeniu rewizyi, i mapę Brzozów-Sanok.

Doroczne posiedzenie Sekcyi geologicznej odbyło się dnia 15. marca 1900. r.; po ułożeniu programu prac i wysłuchaniu sprawozdania z czynności w roku 1899., uchwalono na niem program prac na rok 1900. i wybrano na przewodniczącego Sekcyi ponownie Prof. Dra F. Kreutza, na delegata Sekcyi do Zarządu muzealnego zaś p. J. M. Bocheńskiego.

### *c) Sekcyja zoologiczna.*

Sekcyja zoologiczna udzieliła w roku 1899. zasiłków na badania fauny krajowej pp.: M. Rybińskiemu, Fr. Schillemu i J. Łomnickiemu.

P. Rybiński zrobił siedmioletnią wycieczkę koleopterologiczną na Czarną Horę i mimo pory w wysokim stopniu słotnej zebrał do 900 gatunków chrząszczy, pomiędzy którymi znajduje się znaczna ilość nie zastąpionych w zbiorach krajowych, tudzież gatunki nowe dla nauki.

P. Fr. Schille ukończył swoje badania motyli drobnych w okolicach Rytra, polecane mu przez Sekcyę w roku 1897. a rozłożone na trzy lata. Jako wynik swych zeszłorocznych poszukiwań złożył Komisji pracę do druku p. t. Fauna lepidopterologiczna doliny Popradu i jego dopływów. Część IV, zawierającą wykaz motyli drobnych nowych dla okolic Rytra, tudzież spis rzadkich motyli większych z tejże okolicy. Nadto oddał p. Schille



do Muzeum zbiór motyli drobnych zebranych w latach 1897—99. złożony z 393 gatunków w 890 okazach.

P. J. Łomnicki zajmował się fauną chrząszczów i szarańczaków w okolicy Kołomyi, sprawozdania z swojej pracy nie mógł jednak jeszcze złożyć Komisji, oznaczenie bowiem zebranego materiału połączone jest ze znacznymi trudnościami z powodu braku porównawczych zbiorów tudzież niedostatecznej literatury, jaką p. Łomnicki rozporządza.

P. Rybiński oznaczał w Muzeum Komisji w dalszym ciągu zbiory chrząszczów. Praca ta doznała znacznej przerwy skutkiem częściowego przebudowania i urządzania lokalu zajętego przez Muzeum. Oznaczył też p. Rybiński w roku zeszłym mniej okazów, aniżeli w latach poprzednich, mianowicie około 6000 kusokrywków (*Staphylinidae*) ze zbioru Prof. B. Kotuli. Celem sprawdzenia niektórych trudnych i wątpliwych oznaczeń udał się p. Rybiński, za zasiłkiem ze strony Komisji, do znanego specjalisty koleopterologa Reittera w Paskowie tudzież do Muzeum nadwornego w Wiedniu.

Z zasiłku udzielonego Sekcyi przez Komisję fizyograficzną zakupiono nieco książek potrzebnych do pracy p. Rybińskiego, tudzież parę dzieł hymenopterologicznych. Korzystając z tych ostatnich oznaczył stypendysta Akademii Um., p. E. Niezabitowski, okazy z rodziny błonkówek *Chrysididae* znajdujące się w krajowym zbiorze ś. p. A. Wagi tudzież w innych zbiorach Komisji.

Do wydania w Sprawozdaniach otrzymała Sekcyja od p. M. Rybińskiego opis nowego gatunku chrząszcza: *Trechus fontinalis*.

Doroczne posiedzenie Sekcyi zoologicznej odbyło się dnia 10. marca 1900. r. Wzięło w niem udział 6 członków miejscowych a nadto z zamiejscowych p. J. Śnieżek z Tarnowa. Przyjęto na tem posiedzeniu do wiadomości sprawozdanie z czynności Sekcyi w r. z., ułożono program prac na rok 1900., wybrano p. S. Stobieckiego na członka do Zarządu muzealnego, uchwalono proponować na współpracownika Komisji Prof. Dra S. Klemensiewicza, wreszcie wybrano Prof. W. Kulczyńskiego na przewodniczącego Sekcyi na rok 1900.

*d) Sekcja botaniczna.*

Sekcja botaniczna otrzymała do wydania w Sprawozdaniach pracę Prof. R. Gutwińskiego, p. t. Głony Suchy i Makowa, dokonaną bez pomocy ze strony Komisji.

P. Drowi A. Zalewskiemu różne przeszkody nie dozwoliły ukończyć pracy nad porostami okolic Lwowa, którą podjął, jak w zeszłorocznym sprawozdaniu wspomniano, z polecenia Sekcji botanicznej.

Na posiedzeniu dorocznym, które się odbyło dnia 17. marca 1900 r., postanowiła Sekcja, ze względu na obfitość zgromadzonego materiału, zaprzestać na razie dalszych poszukiwań florystycznych w zakresie roślin naczyniowych, a natomiast starać się o napisanie i wydanie opisowej flory roślin naczyniowych Polski. Przewodniczącym Sekcji na rok 1900. obrano na temże posiedzeniu Prof. Dra J. Rostafińskiego, delegatem Sekcji do Zarządu muzealnego zaś Prof. Dra E. Janczewskiego.

*e) Sekcja rolnicza.*

Na już opracowanych częściach mapy, prowadzonej pod kierunkiem starszego komisarza Inspekcji leśnej, p. Nowickiego, wypełniono różne luki, uzupełniając w ten sposób obraz flory leśnej górnych dorzeczy Dniestru, Stryja, Łomnicy, Świcy, a po części i Bystrzyc. Ponieważ materiały p. Nowickiego już są wyczerpane, więc w przyszłości można będzie opracowywać mapę tylko w ten sposób, że od czasu do czasu zrobi się wycieczkę i na miejscu nakładać się będzie rezultaty obserwacji farbami na mapie.

W dziale spostrzeżeń nad wydatnością drzewostanów w lasach Galicyi zebrano materiał z 16 miejscowości na typowych siedliskach przeważnie podmokłego Nizu piaszczystego około Tarnowa, piaszczystych pagórkach z podglebiem dolomitowem w Księstwie Krakowskiem i na żyznej glebie piaszczystej z przymieszką gliny, na marglach kredowych około Sokala.

Badaniem flory łąkowej w Galicyi zajmowali się z polecenia i za zasiłkiem Sekcyi pp. Góral i Krzemieniewski. P. Góral badał okolice Oświęcima, p. Krzemieniewski zaś okolice Liszek. Rezultaty tych badań zostały przedstawione Sekcyi.

Praca Dra Domańskiego i Dra Miczyńskiego, zawierająca badania geologiczno-rolnicze w okolicach Lubaczowa i Oleszyc w powiecie cieszanowskim, w tym roku nie mogła być ukończoną.

Sekcyja robiła starania o uzyskanie od Wydziału krajowego kopii szkiców do robót melioracyjnych, a to w tej myśli, że przechowywane w biurze melioracyjnem Wydziału krajowego szkice mogłyby oddawać wielkie usługi prowadzącym badania geologiczno-rolnicze, jako pomocniczy środek orientacyjny.

Przewodniczącym swoim na rok 1900., obrała Sekcyja, ponownie, Prof. Dra E. Godlewskiego na posiedzeniu w dniu 14. marca, na którem nadto przyjęto sprawozdanie z czynności Sekcyi w roku poprzednim i ułożono program prac na rok 1900.

### Zbiory komisji.

Do Muzeum Komisji fizyograficznej przybyły od 19. marca 1899. r. do 11. marca 1900. r.:

#### *A) Zbiory złożone przez badaczy, którym Komisya udzieliła zasiłku na badanie kraju:*

1. Zbiór roślin naczyniowych z Rosyi południowej, złożony przez p. J. Paczoskiego.
2. Zbiór motyli drobnych z okolic Rytra, złożony przez p. F. Schillego.

#### *B) Dary.*

1. *Talpa europaea* z Kalwaryi, w alkoholu, dar p. E. Niezabitowskiego.

2. *Picus tridactylus*, *Picus leuconotus*, *Scolopax rusticola*, *Charadrius minor*, *Anas Penelope*, *Mergus marganser* ♂ i ♀, z Rytra, wypchane, dar p. F. Schillego.
3. Drobne kręgowce z Głębokiej, w pow. samborskim, w alkoholu, dar p. E. Niezabitowskiego.
4. *Saturnia pyri* ♂ i ♀ z Rytra, dar p. F. Schillego.
5. Zbiór szarańczaków z okolic Krakowa, dar p. St. Smreczyńskiego.
6. Ośm gatunków glonów z okolic Suchy i Makowa, dar Prof. R. Gutwińskiego.
7. Zbiór skamielin krajowych, dar Prof. Dra St. Zaręcznego.
8. *Geologische Karte der im Reichsrathe vertretenen Königreiche und Länder der österreichisch-ungarischen Monarchie*, 1. i 2. zeszyt, dar c. k. państwowego Zakładu geologicznego w Wiedniu.
9. Zapiski russkago entomologiczeskago Obszczestwa (2 tomy) i Trudy russkago entomologiczeskago Obszczestwa w S. Pieterburgie (11 tomów), dar Towarzystwa Przyjaciół nauk w Poznaniu.
10. 14 broszur hymenopterologicznych A. Radoszkowskiego, dar Towarzystwa Przyjaciół nauk w Poznaniu.
11. „Życie i zbiory ś. p. generała Oktawiusza Radoszkowskiego“, przez Dra Franciszka Chłapowskiego, dar Towarzystwa Przyjaciół nauk w Poznaniu.
12. Jahrbücher der k. k. Central-Anstalt für Meteorologie und Erdmagnetismus, roczniki: 1895—1898, dar Zakładu.
13. „Rybactwo na powszechnej wystawie we Lwowie w r. 1894“ przez Zygmunta Fiszera, dar autora.

### C) Przedmioty zakupione.

1. Skamieliny z okolic Krzeszowic.
2. Sześć przyrządów do pomiaru bydła.
3. J. Babireckiego Mapa Rzeczypospolitej Polskiej, wyd. 2.
4. Ganglbauer, *Die Käfer von Mitteleuropa*, tom 3.
5. *Bestimmungstabellen der Käfer von Mitteleuropa*, zeszyty: 17, 21—23, 25—30, 32—39.

6. *Naturgeschichte der Insekten Deutschlands, begonnen von Erichson* itd., 4 zeszyty.
7. E. Saunders, *The Hymenoptera aculeata of the British Islands*.
8. 150 skrzynek na zielnik, pudełka na minerały, sztelaz na pudła z owadami, 3 stoły, etażerka olszowa, 4 tace drewniane, sprzęty i narzędzia do pracowni.

Sprawozdanie kustosza zbiorów Komisji fizyograficznej za rok 1899/1900 sprawdzili i podpisali dnia 11. marca 1900. r. Skrutatorowie: pp. Dr. T. Garbowski i Prof. Dr. E. Jan-czewski.



Na posiedzeniu administracyjnym Komisji w dniu 27. marca 1900. r. Zarząd muzealny, złożony z przewodniczącego Komisji Prof. Dra F. Kreutza, tudzież pp. J. M. Bocheńskiego, Prof. Dra J. Rostafińskiego, S. Stobieckiego, jako delegatów Sekcyj, wreszcie Prof. W. Kulczyńskiego, sekretarza Komisji i zastępcy kustosza, przedstawił następujące sprawozdanie z postępu prac muzealnych:

Jako fakt najważniejszy dla Muzeum Komisji fizyograficznej zanotować należy w sprawozdaniu za rok 1899. rozszerzenie lokalu muzealnego i zaprowadzenie w nim oświetlenia gazowego i centralnego ogrzewania. Dawny strych nad frontową częścią gmachu Akademii Umiejętności przerobiony został na obszerną salę muzealną; w jednej ze sal dawniej zajętych przez Muzeum usunięto stary sufit, grożący zawaleniem, zwiększając przytem nieco wysokość sali; nad bocznem skrzydłem gmachu dawny dach, którego wadliwa budowa od lat 25 corocznie bywała przyczyną zamakania albo i zalewania zbiorów, zastąpiono nowym. Drobnego uszczuplenia doznał lokal muzealny przez odcięcie części przed-sionka na schody strychowe.

Wymienione zmiany, jak z jednej strony umożliwiają obecnie i na przyszłość stosowniejsze rozmieszczenie zbiorów, a przedewszyst-kiem wydatniejszą pracę nad uporządkowaniem muzeum, bez na-rażania zdrowia pracujących na szkodę, tak z drugiej strony w ubiegłym roku przyniosły znaczny uszczerbek pracom, mającym

na celu ułożenie i spisanie zbiorów Komisji. Niewielką tylko część zbiorów można było usunąć z lokalu muzealnego przed rozpoczęciem robót adaptacyjnych; opróżniono mianowicie dawny strych, a złożone tam okazy geologiczne częścią ułożono w 250 pak i umieszczono w piwnicy, częścią przeniesiono z szufladami do dawnego lokalu muzealnego. Zresztą pozostałych w lokalu zbiorów przez pół roku przeszło strzedz trzeba było, chroniąc je równocześnie przed zniszczeniem przez pył, poplamienie wapnem lub farbą; do najprzykrzejszych okresów należał czas, w którym połowa Muzeum nie miała nad sobą dachu i to w porze obfitej w gwałtowne deszcze. Wszystkie zbiory zoologiczne, botaniczne tudzież książki, przenosić trzeba było po parę razy z jednej sali do drugiej, w miarę postępu robót murarskich, malarskich itd. Mimo tych warunków, dość niebezpiecznych dla całości Muzeum, udało się je uchronić od wydatniejszej szkody.

Po urządzeniu lokalu muzealnego przeniesiono przeważną część zbiorów zoologicznych do nowej sali, przerobionej ze strychu. Okazało się przytem potrzebnem przerobienie szaf na ptaki, które też kosztem 350 złr. dokonane zostało nakładem Akademii Um. Gruntownem oczyszczeniem i odświeżeniem zbioru ptaków, który tego po wieloletnim pobycie w sali corocznie zalewanej, gwałtownie potrzebuje, zajął się stypendysta p. E. Niezabitowski; praca ta potrwa jeszcze parę miesięcy. W dziale zoologicznym wogóle ograniczały się prace — z wyjątkiem wspomnianej niżej pracy M. Rybińskiego i Niezabitowskiego nad oznaczaniem owadów — do czyszczenia okazów i chronienia od szkodników.

W dziale botanicznym spisano zbiór roślin naczyniowych południowo-rosyjskich, przysłany przez p. J. Paczoskiego, oraz część dawniejszego zbioru roślin naczyniowych obcych, spisano również mchy, porosty i śluzowce, umieszczone w ogólnym zbiorze krajowym. Zbiór roślin naczyniowych umieszczono w skrzynkach szczelnie zamkniętych.

Część zbioru geologicznego, umieszczoną dawniej w szafach na strychu (są to przeważnie okazy, które były przechowane dawniej w gabinecie mineralogicznym Uniwersytetu Jagiell., a po śmierci ś. p. Prof. A. Altha przeniesione zostały do Muzeum Komisji), ułożono podług miejscowości; rozpoczęto przenoszenie pak umieszczonych chwilowo w piwnicy i porządkowanie zawartych

w nich okazów. Spisywanie okazów w dziale geologicznym napotyka na największe trudności, i przygotowania do tej pracy potrwać jeszcze czas dłuższy.

Zbiór książek Komisji uporządkowano i sporządza się ich spis kartkowy. Praca ta jest na ukończeniu; wkrótce przystąpi się do spisania inwentarza biblioteki, liczącej około 3.000 numerów.

W Muzeum Komisji pracował, jak w latach poprzednich, p. M. Rybiński nad oznaczeniem chrząszczów, doznał jednak w tej pracy z powodów wyżej wymienionych znacznej przerwy, w czasie której czuwał nad całością Muzeum i doglądał prac adaptacyjnych i innych w Muzeum. Oznaczył zaś p. M. Rybiński ze zbioru ś. p. Kotuli część rodziny *Staphylinidae* (6.000 okazów). — P. E. Niezabitowski oznaczył w roku ubiegłym krajowe okazy z rodziny błonkówek *Chrysididae*, znajdujące się w zbiorach ś. p. A. Wagi, oraz innych zbiorach do Komisji należących.

Pracami muzealnemi zajmował się zresztą zastępca kustosa Prof. W. Kulczyński, przy pomocy stypendystów pp. E. Niezabitowskiego i S. Wasiewicza, tudzież pp. Dra E. Piaseckiego i S. Smreczyńskiego.

### Korespondencya Komisji.

Komisya fizyograficzna złożyła dnia 24. listopada 1899. r. Wys. Wydziałowi krajowemu sprawozdanie z wydawnictwa Atlasu geologicznego Galicyi za czas od 10. października 1898. r. do 23. listopada 1899. r.

Za pośrednictwem Zarządu Akademii Umiejętności zwróciła się Komisya fizyograficzna dnia 24. lutego 1900. r. do Wys. Prezydium c. k. krajowej Dyrekcyi skarbowej we Lwowie z prośbą o zasilenie jej Muzeum okazami geologicznymi z salin krajowych. Na prośbę tę otrzymała Komisya, za pośrednictwem Zarządu Akademii Um., następującą odpowiedź:

Na pismo z dnia 24. lutego 1900 r. L. 78. Prezydium c. k. krajowej Dyrekcyi skarbu ma zaszczyt oznajmić, że równocześnie poleciło Zarządom salinarnym w Wieliczce, Bochni i Katuszu, aby

przesłały c. k. Akademii Umiejętności okazy soli, tudzież minerałów i skał przychodzących ze solą a to za zwrotem kosztów opakowania i transportu, a ewentualnie i wydatków połączonych ze zebraniem tych okazów. Lwów, dnia 5. kwietnia 1900. r. *Korytowski* (m. p.).

Na wniosek Sekcyi rolniczej Komisya fizyograficzna złożyła dnia 29. czerwca 1899. r., za pośrednictwem Zarządu Akademii Umiejętności, Wys. Wydziałowi krajowemu następującą prośbę:

Sekcyja rolnicza Komisji fizyograficznej Akademii Umiejętności postawiła sobie jako jedno z najważniejszych zadań badanie gleby naszego kraju. Akademia nie rozporządza jednak odpowiednimi środkami na to, aby badania takie prowadzić systematycznie i wszelkie potrzebne do tego zdjęcia i analizy wykonywać *ad hoc*; do tego byłoby potrzeba znacznego funduszu i specjalnego personelu. Dla tego Sekcyja rolnicza Komisji fizyograficznej pragnie zdążać do powyżej określonego celu w ten sposób, aby obok podejmowania, w miarę rozporządzalnych środków i nadarzających się chętnych i specjalnych pracowników, specjalnych badań gleby pewnych okolic kraju, gromadzić także wszystkie możliwe, więcej przypadkowe materiały, t. j. rezultaty takich badań, które wykonywane są dla innych miejscowych i praktycznych celów.

Rezultaty takich badań, po zużytkowaniu ich dla celu, dla którego były podejmowane, ulegają najczęściej zatraceniu. Od tego zatracenia pragnie Sekcyja rolnicza takie rezultaty przygodnych badań uchronić i zużytkować je dla celów swoich. Do takich i to bardzo cennych materiałów należą niezawodnie prace inżynierów krajowego biura melioracyjnego przy Wysokim Wydziale krajowym.

Zarówno przy większych robotach melioracyjnych, obejmujących znaczniejsze obszary, jak i przy sporządzaniu planów melioracyi dla osób prywatnych, wykonywane bywają prócz studyów pomiarowych także wiercenia i badania gruntu w różnych miejscowościach. Gdyby się rezultaty takich badań po ich zużyciu do sporządzenia planów, nie zatracaly, ale były dostarczane Akademii Umiejętności, to stanowiłyby one mogły materiał wielce ułatwia-



jący wykonanie zadania, które sobie Sekcja rolnicza Komisji fizyograficznej wytknęła.

Z tego powodu Akademia Umiejętności ma zaszczyt upraszać Wysoki Wydział krajowy o udzielanie w odpisach i kopiach planów warstwowych zdejmowanych obszarów, sporządzanych przy projektowaniu melioracji, z oznaczeniami miejsc sondowanych. Bardzo pożądane byłyby także szkice profilów badanej gleby, podglebia i podłoża.

Według zasięgniętych informacji, od roku 1898. znajduje się przy krajowym biurze melioracyjnym laboratorium dla analiz mechanicznych ziemi. Odpisy rezultatów takich analiz (z podaniem metody ich wykonania) byłyby bardzo cennym materiałem dla Sekcji.

Nie ulega wątpliwości, że każda ekspozytura biura melioracyjnego wykonywa rok rocznie znaczną liczbę takich prac, których rezultaty mogłyby dostarczyć Sekcji rolniczej Komisji fizyograficznej ważnych materiałów dla jej celów. Przez szereg lat zostałby w ten sposób nagromadzony bez żadnych specjalnych kosztów znaczny materiał ułatwiający wykonanie zadania określonego we wstępie. Akademia Um. ufa w dobrą wolę panów inżynierów, którzy wiedząc, iż daty przez nich zbierane, obok użytkowania ich do celów praktycznych, służyć także będą do celów naukowych, tem chętniej zbierać je będą i tem większych dołożą starań, aby te daty były dokładne.

Na powyższe pismo otrzymała Komisja dnia 17. stycznia 1900 r. następującą odpowiedź:

Oдноśnie do szacownego pisma z dnia 29. czerwca 1899 r. L. 3.790 oznajmiamy Szanownemu Zarządowi, że Wydział krajowy gotów jest użyzyć wszelkiego możliwego poparcia Sekcji rolniczej Komisji fizyograficznej dla zamierzonego badania gleby w kraju, zanim jednak wydane zostanie polecenie biura melioracyjnemu i jego ekspozyturom co do dostarczenia żądanych dat i kopii planów, okazuje się koniecznem udzielenie Wydziałowi krajowemu bliższego wyjaśnienia ze strony tej Sekcji, w jaki sposób wyniki badania mają być użytkowane.

Jeżeli bowiem Sekcja rolnicza Komisji fizyograficznej ma na celu wydawnictwo kart geologiczno-agronomicznych na wzór

publikacji pruskiego zakładu geologicznego, natenczas przesyłanie kopii planów warstwowych (w skali 1:2.880) i sond (profilów ziemi) tej Sekcyi byłoby bezcelowem, gdyż z powodu trudności w oryentacyi sondy takie z map katastralnych mogą być przeniesione do planów pedograficznych, które w zupełnie innej skali (prawdopodobnie 1:25.000) będą sporządzane, tylko przez tych inżynierów bióra melioracyjnego, którzy zdjęcie na terenie przeprowadzali. W takim więc wypadku, nie kopie planów melioracyjnych miałyby być udzielane Sekcyi rolniczej, lecz przeciwnie makularze kart pedograficznych musiałyby być przesyłane Wydziałowi krajowemu, któryby polecił inżynierom wkreślenie sond w te karty, onumerowanie ich i sporządzanie profilu dla każdej sondy charakterystycznej.

Upraszamy tedy Szanowny Zarząd o udzielenie nam wyjaśnienia w powyższym kierunku, oraz nadesłanie szczegółowej instrukcyi, w jaki sposób mają być oznaczane głębokości w sondach cyframi (w metrach, decymetrach czy centymetrach), a rodzaje gleby i podglebia literami (próchnica, torf, piasek, glina, ił, margiel, wapno).

Co się tyczy wyników analizy mechanicznej ziemi (przeważnie podglebia), jaką przeprowadza laboratorium tutejszego biura melioracyjnego przyrzędem Kühna dla celów drenowania, to odpis tych wyników dla każdej sondy, może być również Sekcyi rolniczej Komisji fizyograficznej udzielony.

Przy analizie tej oznacza się w procentach wagi:

1. części spławialne (dające się wyplukać w 5 minut po zamieszaniu wody z próbką ziemi poprzednio wygotowaną);
2. piasek, który się sortuje przez sita;
  - a) na piasek miałki o średnicy mniejszej niż 0.5 milimetra;
  - b) piasek drobny o średnicy 0.5 do 1 mm.;
  - c) piasek średni 1 do 2 mm.;
  - d) piasek gruby o średnicy większej niż 2 mm.

Marszałek krajowy Badenii (m. p.). Członek Wydziału krajowego Onyszkiewicz (m. p.).

Dnia 9. maja 1900. r. przesłane zostało, w tej samej sprawie, Wys. Wydziałowi krajowemu następujące podanie:

Komisya fizyograficzna Akademii Umiejętności ma zaszczyt wyrazić żywą wdzięczność Wysokiemu Wydziałowi krajowemu za gotowość poparcia jej usiłowań w badaniach gleboznawczych, wyrażoną w cennej odpowiedzi z dnia 17. stycznia 1900. r. L. 42526.

Komisya uznaje w zupełności podniesione przez Wysoki Wydział krajowy trudności w przenoszeniu punktów sond gruntowych, oznaczonych na mapach katastralnych w skali 1:2880, na mapy w skali 1:25000 lub 1:75000, mimo to jednak uważa, że materiały, jakieby jej mogły być dostarczone przez biuro melioracyjne, mogłyby stanowić bardzo cenną pomoc przy gleboznawczych pracach Komisji fizyograficznej.

Ostatecznym celem, do którego w tych pracach zdąża Komisya, jest wydanie mapy geologiczno-rolniczej kraju; ale zdając sobie sprawę z wielkich trudności takiego przedsięwzięcia, zwłaszcza też przy niezmiernie skromnych środkach, jakimi Komisya rozporządza, nie lędzi się ona, aby do tego przedsięwzięcia mogła rychło przystąpić z większą intensywnością, i na razie pragnie przynajmniej gromadzić materiały, któreby jej z czasem do tego celu posłużyć mogły, oraz wydawać mapy pewnych okolic kraju, o ileby się do tego zebrał odpowiedni materiał.

Na razie Komisya nie powzięła jeszcze ostatecznej decyzji co do skali, w jakiejby mapa miała być wydana, i nie jest rzeczą wyłączoną, że skala ta nie byłaby jednolitą dla wszystkich części kraju, że dla pewnych jego okolic wyjątkowo użytąby nawet była skala katastralna, podczas gdy w okolicach o glebie jednostajniejszej wystarczyłaby może nawet skala 1:75000.

Z tych powodów, a bardziej jeszcze dla braku odpowiednich funduszków, nie jest dla Komisji możliwe nabycie kart fotograficznych w skali 1:2500 dla całego kraju. Natomiast Komisya fizyograficzna chętnie nabywałaby i przesyłała Wysokiemu Wydziałowi krajowemu karty fotograficzne w skali 1:2500 tych okolic kraju, na których prowadzi się na większych przestrzeniach systematyczna melioracya, z prośbą, aby Wysoki Wydział krajowy w myśl Swej odezwy z 17. stycznia 1900. r. polecił wskreślać na nich sondy. Ponieważ jednak Komisya nie jest powiadomiona, gdzie prowadzą się takie większe melioracye, dla tego musi upraszać Wysoki Wydział krajowy o każdorazowe zawiadomienie jej, które sekcyje mapy fotograficznej przysłaćby należało.

Odnośnie do zdjęć robionych przy ważniejszych melioracjach Komisya uważałaby dla siebie za pożądane kopie planów sytuacyjnych w skali 1:2880 z obszaru, na którym projektowano melioracje, z podaniem ile możliwości parcel i zaznaczeniem sond, oraz linii hipsometrycznych. Odbitki na mocniejszej papierowej lub płóciennej kalce byłyby wystarczające.

Odnośnie do wszystkich sondowań dokonywanych przez biuro melioracyjne byłyby dla Komisji pożądane:

1. Określenie gleby, podglebia i podłoża przez następujące nazwy:

g l e b a :

- a) piaszczysta,
- b) gliniasto-piaszczysta,
- c) gliniasta,
- d) marglowata (z bliższem określeniem, czy piaszczysto, czy gliniasto-marglowata),
- e) ilasta,
- f) próchniczna,
- g) torfiasta.

p o d g l e b i e i p o d ł o ż e :

- a) piasek,
- b) glina (chuda lub zwięzła),
- c) ił (szary, niebieski, zielony, czarny),
- d) marglowate,
- e) suche,
- f) kamień (wapienny, piaskowcowy),
- g) torf.

2. Wiadomość, czy sondowania dokonano na gruncie ornym, łące lub pastwisku.
3. Oznaczenie głębokości sondy i grubości każdej z warstw sondowanych w profilu.
4. Odpis wyników mechanicznej analizy gleby.

Co do analiz mechanicznych, Komisya z wdzięcznością przyjmie wyniki analiz robionych metodą przez biuro melioracyjne Wysokiego Wydziału krajowego przyjętą, jednakże byłoby dla badań gleboznawczych rzeczą niezmiernie pożądaną, gdyby ana-

lizy mogły być przeprowadzone podług norm określonych w programie Sekcji rolniczej Komisji fizyograficznej z roku 1896. Dział I, t. j. gdyby rozdzielano badany materiał na cząstki:

o średnicy mniejszej od 0·01 mm. t. j. cząstki opadające z wody z szybkością mniejszą od 0·2 mm. na sekundę,

o średnicy od 0·01—0·05, t. j. cząstki opadające z szybkością 0·2—2 mm. na sekundę,

o średnicy od 0·05—0·1 t. j. cząstki opadające z szybkością 2 m.—7 mm. na sekundę,

i piasek rozdzielony zapomocą sit na cząstki:

od 0·1 —0·25 mm. średnicy

od 0·25—0·5       "       "

o 0·5 —1         "       "

> 1 mm.

Do wykonania takich analiz najdogodniejszym i najmniejszego nakładu pracy wymagającym jest przyrząd Schönego, ale z równą dokładnością można je także wykonywać za pomocą cylindra Kühna, jeżeli się tylko odpowiednio unormuje czas od chwili wymieszania do zlania płynu z ziemi.

Nareszcie Komisya fizyograficzna uprasza jeszcze Wysok Wydział krajowy o odpisy analiz torfów, o ile takowe były lubi będą dokonywane z polecenia Wysokiego Wydziału krajowego. Analizy takie byłyby dla Komisji fizyograficznej materiałem bardzo pożądanym

### Zarząd i skład Komisji fizyograficznej.

W roku 1899/1900 skład Zarządu Komisji fizyograficznej pozostał ten sam, jak w roku poprzednim.

Należeli do niego: podpisany, jako przewodniczący Komisji i przewodniczący Sekcji geologicznej, tudzież pp. Prof. Dr. E. Godlewski, przewodniący Sekcji rolniczej, Prof. Dr. F. Karliński, przewodniczący Sekcji meteorologicznej, Prof. W. Kulczyński, przewodniczący Sekcji zoologicznej i sekretarz Komisji, Prof. Dr. J. Rostafiński, przewodniczący Sekcji botanicznej.

Z listy Członków Komisji fizyograficznej ubył: J. E. Wło.

dzimierz hr. Dzieduszycki, b. Marszałek krajowy, Członek korespondent Akademii Umiejętności, założyciel Muzeum im. Dzieduszyckich we Lwowie.

Do grona Członków Komisji fizyograficznej przybyli, wybrani na posiedzeniu w dniu 24. marca 1900. r., pp.: Andrzej Kędzior, Dyrektor krajowego bióra melioracyjnego we Lwowie, Dr. Stanisław Klemensiewicz, Profesor gimnazyalny we Lwowie, Dr. Leon Nowakowski, Profesor Szkoły rolniczej w Czernichowie i Dr. Franciszek Tomaszewski, Dyrektor gimnazyalny w Samborze.

W Krakowie, dnia 5 kwietnia 1901. r.

Przewodniczący Komisji fizyograficznej:

*Prof. Dr. Szczesny Kreutz.*

## II.

### Spis członków Komisji fizyograficznej akademickiej w Krakowie.

(Dnia 1. lipca 1900. r.).

#### 1. Członkowie miejscowi.

Dr. Bandrowski Ernest, Prof. nadzw. Uniw. Jagiell., Prof. wyższej Szkoły przemysłowej, Członek koresp. Akademii Umiejętności.

W. Bobek Kazimierz, Prof. Gimnazjum św. Anny.

„ Bocheński Józef Maryan, c. k. Radca górniczy.

„ Brzeziński Józef, Rządca pola doświadczalnego Stud. roln. Uniw. Jagiell.

„ Bujwid Odo, Prof. Uniw. Jagiell.

„ Chrzaszczewski Stanisław, Starszy Inżynier Wydziału Kraj., Szef ekspozytury biura melioracyjnego.

- Dr. Cybulski Napoleon, Prof. Uniw. Jagiell., Członek czynny Akad. Umiej.
- W. Fiszer Zygmunt, Krajowy Inspektor rybactwa.
- Dr. Garbowski Tadeusz, Docent Uniw. Jagiell.
- „ Godlewski Emil, Prof. Uniw. Jagiell., Członek czynny Akad. Umiej., Przewodniczący Sekcyi rolniczej.
- W. Goliński Stanisław, Asystent Uniw. Jagiell.
- Dr. Grzybowski Józef.
- W. Gustawicz Bronisław, Prof. Gimnazjum III.
- „ Gutwiński Roman, Prof. Gimn. w Podgórzu pod Krakowem, Sekretarz Sekcyi botanicznej.
- Dr. Janczewski Edward, Prof. Uniw. Jagiell., Członek czynny Akad. Umiej.
- „ Jentys Stefan, Prof. Uniw. Jagiell.
- „ Karliński Franciszek, Prof. Uniw. Jagiell., Członek czynny Akad. Umiej., Przewodniczący Sekcyi meteorologicznej.
- „ Klecki Waleryan, Prof. Uniw. Jagiell., Sekretarz Sekcyi rolniczej.
- „ Kreutz Feliks, Prof. Uniw. Jagiell., Członek czynny Akad. Umiej., Przewodniczący Komisji fizyogr. i Sekcyi geolog.
- W. Kulczyński Władysław, Prof. Gimnazjum św. Jacka, Członek koresp. Akad. Umiej., Przewodniczący Sekcyi zoologicznej, Sekretarz Komisji fizyograficznej.
- „ Lubomeński Władysław, Prof. Uniw. Jagiell.
- „ Nowicki Aleksander, Starszy Komisarz Inspekcji leśnej.
- Dr. Olszewski Karol, Prof. Uniw. Jagiell., Członek czynny Akad. Umiej.
- „ Rostafiński Józef, Prof. Uniw. Jagiell., Członek czynny Akad. Umiej., Przewodniczący Sekcyi botanicznej.
- „ Rudzki Maurycy, Prof. Uniw. Jagiell.
- W. Rybiński Michał.
- „ Sikorski Tadeusz, Prof. Uniw. Jagiell.
- „ Steingraber Gustaw, Prof. Szkoły przemysłowej.
- „ Stobiecki Stefan, Inżynier Wydz. Kraj., Sekretarz Sekcyj geologicznej i zoologicznej.
- Dr. Szajnocha Władysław, Prof. Uniw. Jagiell., Członek koresp. Akad. Umiej.

- W. Ściborowski Władysław, Członek nadzw. Akad. Umiej.  
 W. Walter Henryk, c. k. Radca górniczy.  
 Dr. Wierzbicki Daniel, Adjunkt Obserwat. astronom., Sekretarz Sekcyi meteorologicznej.  
 „ Wierzejski Antoni, Prof. Uniw. Jagiell., Członek koresp. Akad. Umiej.  
 „ Witkowski August, Prof. Uniw. Jagiell., Członek czynny Akad. Umiej.

## 2. Członkowie zamiejscowi.

- W. Adametz Leopold, Prof. Akad. roln. w Wiedniu.  
 „ Bartonec Franciszek, Inspektor górniczy i hutniczy w Sierszy.  
 „ Batycki Andrzej, Nauczyciel w Starym Samborze.  
 Dr. Birkenmajer Ludwik, Prof. Szkoły roln. w Czernichowie, Członek koresp. Akad. Umiej.  
 W. Blauth Jan, Starszy Inżynier Wydziału Kraj., Docent Szkoły politechn. we Lwowie.  
 „ Błocki Franciszek, Adjunkt Szkoły lasowej we Lwowie.  
 Dr. Błoński Franciszek, w Spiczyńcach na Ukrainie (p. Lipowiec).  
 „ Bośniacki Zygmunt, w San Giuliano pod Pisa.  
 W. baron Brunicki Julian, w Podhorcach.  
 „ Bryk Andrzej, Kierownik szkoły w Chyrowie.  
 Dr. Chłapowski Franciszek, Przewodniczący Wydz. przyr. w Tow. przyj. nauk w Poznaniu.  
 Dr. Chramiec Andrzej, w Zakopanem.  
 W. Claus Edward, Urzędnik arcyksiążęcy w Żywcu.  
 Dr. Habdank Dunikowski Emil, Prof. Uniw. we Lwowie.  
 W. Dziedzicki Henryk, w Warszawie.  
 „ Dziekoński Czesław, w Iwoniczu  
 „ Dziędzielewicz Józef, Sekretarz Rady Sądu krajowego we Lwowie.  
 „ Eichler B., w Międzyrzecu.  
 „ Friedberg Wilhelm, Prof. gimnazjalny w Rzeszowie.  
 „ X. Głodziński Antoni, Prof. Seminarjum naucz. w Tarnopolu.



## III.

## Obrót funduszków Komisji fizyograficznej akademickiej w roku 1899/1900.

Dochód Komisji fizyograficznej w roku 1899/1900, złożony z zasiłku udzielonego przez Akademię Umiejętności i pozostałości z roku 1898/1899<sup>1)</sup> wynosił . . . . . 14733·57 K.

### Wydatki:

I. Druk Sprawozdań Komisji, czesne za rozprawy zamieszczone w Sprawozdaniach, broszurowanie Sprawozdań i odbitek . . . . . 3179·54 K.

### II. Potrzeby Sekcyj:

a) Potrzeby Sekcji meteorologicznej: redukcya, obliczenie i t. d. spostrzeżeń meteorologicznych, korekta druków, koszta podróży w celach Sekcji do Jarosławia, zestawienie spostrzeżeń fenologicznych, koszta korespondencyi, materiały piśmienne, usługa . . . . . 539·78 „

#### b) Potrzeby Sekcji zoologicznej:

1. Renumeracya p. M. Rybińskiemu za oznaczanie chrząszczów . . . . . 1200·00 „
2. Zasiłek p. M. Rybińskiemu na wycieczkę koleopterologiczną na Czarną Horę . . . . . 500·00 „
3. Zasiłek p. J. Łomnickiemu na badanie owadów w okolicach Kołomyi . . . . . 200·00 „
4. Zasiłek p. F. Schillemu na badanie motyli drobnych w okolicach Rytra . . . . . 200·00 „
5. Zakupno książek . . . . . 129·20 „

#### c) Potrzeby Sekcji geologicznej:

1. Zasiłek p. Drowi W. Friedbergowi na wykonanie mapy geologicznej Ropczyce-Dębica . . . . . 400·00 „
2. Zasiłek p. Prof. M. Łomnickiemu na napisanie tekstu do map ś p. Prof. F. Bieniasza . . . . . 400·00 „
3. Zasiłek p. Prof. Drowi T. Wiśniowskiemu na dalsze badania geologiczne w Karpatach i wykonanie jednej mapy geologicznej . . . . . 500·00 „

Do przeniesienia . . . . . 7248·52 K.

<sup>1)</sup> Sprawozdanie Komisji fizyograficznej, Tom XXXIV, str. XVIII.

Z przeniesienia . . . 7248·52 K.

d) Potrzeby Sekcyi rolniczej:

|                                                                                 |          |
|---------------------------------------------------------------------------------|----------|
| 1. Zasiłek p. S. Golińskiemu na badanie flory łąk (reszta za rok 1898). . . . . | 100·00 „ |
| 2. Zasiłek temuż na takiesame badania w roku 1899. . . . .                      | 400·00 „ |
| 3. Zakupno narzędzi do pomiarów bydła . . . . .                                 | 183·68 „ |
| 4. Zwrot kosztów podróży p. Drowi K. Miczyńskiemu . . . . .                     | 50·00 „  |

III. Koszta urządzenia i utrzymania Muzeum, koszta administracyi, łącznie z remuneracją zastępcy kustosza (800 K.), jego pomocników (311·80 K.), sekretarza Komisji (600 K.) . . . 3280·30 „

Suma wydatków . . . 11262·50 K

Pozostaje zatem reszta na rok 1900 . . . 3471·07 K.

mianowicie w Kasie Akademii Umiejętności reszta: 3483·38 K., w rękach Przewodniczącego Sekcyi meteorologicznej reszta: 2·43 K., a w rachunku muzealnym niedobór: 14·74 K.

Przewodniczący Komisji fizyograficznej  
*Prof. Dr. Szczęsny Kreutz.*

#### IV.

**Stan funduszu przeznaczzonego na zakupno narzędzi meteorologicznych dla Sekcyi meteorologicznej Komisji fizyograficznej z końcem roku 1899.**

|                                                           |           |
|-----------------------------------------------------------|-----------|
| Do wymienionego funduszu, który z końcem r. 1898. wynosił | 275·66 K. |
| przybyło w roku 1899. za odprzedane narzędzia . . . . .   | 91·58 „   |
| nadto procent dopisany w roku 1899. . . . .               | 15·64 „   |

co czyni razem . . . 382·88 K

Z tego wydano na dwie miary do deszczu . . . . . 14·00 „

pozostaje na rok 1900 . . . 368·88 K



## V.

## Stan zbioru narzędzi meteorologicznych Komisji fizyograficznej z końcem roku 1899.

Z końcem roku 1898. posiadała Komisya:

|                                                 |    |
|-------------------------------------------------|----|
| a) Aneroidów sztuk . . . . .                    | 2  |
| b) Barometrów sztuk . . . . .                   | 9  |
| c) Zawieszadeł do nich sztuk . . . . .          | 6  |
| d) Termometrów z podziałką Réaumura . . . . .   | 1  |
| e) Termometrów z podziałką Celsiusza . . . . .  | 17 |
| f) Zbiorników na opad sztuk . . . . .           | 15 |
| g) Miar szklanych do opadu sztuk . . . . .      | 16 |
| h) Rurki barometryczne nie wypełnione . . . . . | 2  |

Z tego odprzedano w roku 1899:

|                                                 |   |
|-------------------------------------------------|---|
| ad b) Barometr Nr. 960 sztuka . . . . .         | 1 |
| ad c) Zawieszadło do barometru sztuka . . . . . | 1 |
| ad e) Termometr Celsiusza sztuka . . . . .      | 1 |
| ad g) Miare szklaną do deszczu sztuka . . . . . | 1 |

Wskutek użycia zniszczono w roku 1899:

|                                          |   |
|------------------------------------------|---|
| ad f) Zbiornik do opadu sztuka . . . . . | 1 |
|------------------------------------------|---|

Natomiast dokupiono w roku 1899:

|                                               |   |
|-----------------------------------------------|---|
| ad g) Miar szklanych do opadu sztuk . . . . . | 2 |
|-----------------------------------------------|---|

Posiada zatem Komisya w dniu 1-go stycznia 1900. r.:

|                                             |    |
|---------------------------------------------|----|
| Aneroidów sztuk . . . . .                   | 2  |
| Barometrów sztuk . . . . .                  | 8  |
| Zawieszadeł do nich sztuk . . . . .         | 5  |
| Termometrów z podziałką Réaumura . . . . .  | 1  |
| Termometrów z podziałką Celsiusza . . . . . | 16 |
| Zbiorników na opad sztuk . . . . .          | 14 |
| Miar szklanych do opadu sztuk . . . . .     | 17 |
| Rurki barometryczne niewypełnione . . . . . | 2  |

Następująca tabelka wykazuje, gdzie i u kogo się te narzędzia znajdują oddane do użytku lub przechowania.

| Miejsce,<br>w którym się narzędzie znajduje | Osoba albo zakład,<br>któremu narzędzia powierzono | Aneroidy | Barometry |                                    | Zawieszadła | Termometry |        | Deszczomiary   |        | Rurki barom. niewypełn. | U w a g i                                   |
|---------------------------------------------|----------------------------------------------------|----------|-----------|------------------------------------|-------------|------------|--------|----------------|--------|-------------------------|---------------------------------------------|
|                                             |                                                    |          | Sztuk     | Numer                              |             | R          | C      | Zbior-<br>niki | Miary  |                         |                                             |
| 1. Żywiec . . .                             | W. E. Claus . . . . .                              | —        | 1         | 993                                | 1           | —          | 1      | —              | —      | —                       | Barometr z futerałem skórzanym              |
| 2. Wadowice . . .                           | Prof. L. Guńkiewicz . . .                          | —        | 1         | 992                                | 1           | —          | 1      | 1              | 1      | —                       |                                             |
| 3. Zakopane . . .                           | Dr. A. Chramiec . . .                              | —        | 1         | 1062                               | 1           | —          | —      | —              | —      | —                       |                                             |
| 4. Kraków . . .                             | Muzem Komisji fizyogr.<br>Obserwatorium . . . . .  | 2<br>—   | —<br>5    | —<br>670,991,<br>995,1259,<br>1325 | —<br>2      | —<br>1     | —<br>3 | —<br>1         | —<br>4 | —<br>2                  | Jedno zawieszadło do barometru naczynkowego |
| 5. Bochnia . . .                            | W. F. Hahn . . . . .                               | —        | —         | —                                  | —           | —          | —      | 1              | 1      | —                       |                                             |
| 6. Tarnów . . .                             | Seminaryum biskupie . . .                          | —        | —         | —                                  | —           | —          | 1      | 1              | 1      | —                       |                                             |
| 7. Pilzno . . .                             | W. L. Jacobi . . . . .                             | —        | —         | —                                  | —           | —          | 1      | 1              | 1      | —                       |                                             |
| 8. Rzeszów . . .                            | W. Cz. Zubrzycki . . . . .                         | —        | —         | —                                  | —           | —          | 1      | 1              | 1      | —                       |                                             |
| 9. Smolnik . . .                            | W. JX. Marków . . . . .                            | —        | —         | —                                  | —           | —          | 1      | 1              | 1      | —                       |                                             |
| 10. Sanok . . .                             | Prof. L. Lemoch . . . . .                          | —        | —         | —                                  | —           | —          | 1      | 1              | 1      | —                       |                                             |
| 11. Przemyśl . . .                          | Straż ogniowa . . . . .                            | —        | —         | —                                  | —           | —          | 1      | 1              | 1      | —                       |                                             |
| 12. Sambor . . .                            | Dyr. Dr. Tomaszewski . . .                         | —        | —         | —                                  | —           | —          | 1      | 1              | 1      | —                       |                                             |
| 13. Bohorodczany .                          | W. Hans Pokorny . . . . .                          | —        | —         | —                                  | —           | —          | 1      | 1              | 1      | —                       |                                             |
| 14. Ożydów . . .                            | W. J. Hawrysiewicz . . . . .                       | —        | —         | —                                  | —           | —          | 1      | 1              | 1      | —                       |                                             |
| 15. Krzyworównia .                          | W. St. Przybyłowski . . . . .                      | —        | —         | —                                  | —           | —          | 1      | 1              | 1      | —                       |                                             |
| 16. Horodenka . .                           | W. J. Zaborski . . . . .                           | —        | —         | —                                  | —           | —          | 1      | 1              | 1      | —                       |                                             |
| Razem . . .                                 |                                                    | 2        | 8         |                                    | 5           | 1          | 16     | 14             | 17     | 2                       |                                             |

Kraków, dnia 16. stycznia 1900. r.

*Prof. Dr. Karliński,*  
przewodniczący Sekcyi.



## DODATEK


do XXXV Tomu Sprawozdań Komisji fizyograficznej akademickiej  
w Krakowie.

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# REGULAMIN

## KOMISJI FIZYOGRAFICZNEJ AKADEMII UMIEJĘTNOŚCI

W KRAKOWIE.



### **Cel Komisji i środki do jego osiągnięcia zmierzające.**

1) Zadaniem Komisji fizyograficznej jest wszechstronne zbadanie i opisanie kraju pod względem fizyograficznym. (Porów. § 20. Regulaminu Akad.).

2) Do tego celu zdąża Komisya:

a) przez powiększanie istniejącego Muzeum fizyograficznego i opracowywanie naukowe znajdującego się w niem materiału,  
b) przez ogłaszanie spostrzeżeń fizyograficznych w swoich corocznych publikacjach,

c) przez udzielanie pracownikom na tem polu zasiłków pieniężnych i dostarczanie im odpowiednich środków naukowych,

d) przez staranie się o powiększenie Biblioteki Akademii dziełami z zakresu fizyografii,

e) przez zakupywanie narzędzi do badań fizyograficznych służących.

### **Skład Komisji.**

3) Komisya składa się:

a) z członków zwyczajnych Wydziału matematyczno-przyrodniczego Akademii, oraz

b) z członków przybranych z poza grona Akademii, których Komisya na wniosek jednej z Sekcyi przedstawia, a Wydział matematyczno-przyrodniczy zatwierdza. Służy im tytuł: Spółpracowników Komisji fizyograficznej akademickiej<sup>1)</sup>.

4) Komisya dzieli się na sekcyje, których liczba może się zmieniać stosownie do potrzeb Komisji. Nową sekcyję może założyć Komisya, jeżeli pięciu członków Komisji tego zażąda i oświadczy gotowość wstąpienia do powstającej Sekcyi.

5) Każda Sekcyja wybiera sobie na przeciąg jednego roku przewodniczącego, który zaprasza jednego z członków Sekcyi na jej sekretarza, również na przeciąg jednego roku.

6) Komisya wybiera sobie przewodniczącego z pośród należących do niej członków czynnych Akademii i sekretarza z grona wszystkich członków bezwzględną większością głosów obecnych na posiedzeniu. Wybór przewodniczącego ponawia się co rok, sekretarza co dwa lata<sup>2)</sup>. Nowy zarząd rozpoczyna swoje czynności z dniem 1. kwietnia.

7) Przewodniczący Komisji, przewodniczący wszystkich Sekcyj i sekretarz Komisji stanowią razem Komitet administracyjny.

8) Komisya ma prawo utrzymywać z własnych funduszków kustosa Muzeum; korzysta prócz tegoż z pomocy stypendystów Akademii, którzy pozostają pod zwierzchnictwem Zarządu muzealnego.

9) Sekretarz Komisji może także otrzymywać wynagrodzenie za swe czynności. Wszystkie inne urzędy Komisji są bezpłatne.

### Posiedzenia Komisji.

10) Komisya odbywa posiedzenia ogólne i sekcyjne.

11) Ogólne posiedzenia Komisji bywają naukowe i administracyjne.

12) Na posiedzeniach naukowych rozbierają się sprawy ogólnego znaczenia dla fizyografii krajowej.

<sup>1)</sup> § 21. Regulaminu Akademii.

<sup>2)</sup> § 24. Statutu Akademii.

13) Na porządku dziennym jednego z posiedzeń administracyjnych, które odbywa się corocznie w końcu marca, będą pomieszczone następujące sprawy:

a) wysłuchanie sprawozdania z czynności Komisji, tudzież sprawozdania rachunkowego i udzielenie absolutorium za ubiegły rok słoneczny,

b) wysłuchanie sprawozdania Zarządu muzealnego za rok ubiegły, wybór Komisji kontrolującej muzealnej, złożonej z trzech członków, wreszcie zatwierdzenie delegatów do Zarządu muzealnego wybranych przez sekcje: geologiczną, botaniczną i zoologiczną,

c) przedłożenie budżetowe Komitetu administracyjnego na rok bieżący, które Komisja przyjmuje lub odsyła z uwagami do Komitetu,

d) wybory, mianowicie: wybór przewodniczącego Komisji, jej sekretarza, dwu skrutatorów i dwu ich zastępców na rok następny,

f) obradowanie nad wnioskami Komitetu administracyjnego

14) Posiedzenie administracyjne jest prawomocne, jeżeli jest na niem obecnych przynajmniej połowa zamieszkałych w Krakowie członków. W razie nie dościa pierwszego posiedzenia administracyjnego, następne zwołane przynajmniej o tydzień później jest prawomocne bez względu na ilość przybyłych na nie członków.

15) Na posiedzeniach Komisji uchwały zapadają prostą większością głosów członków na nich obecnych. W razie równości głosów rozstrzyga głos przewodniczącego.

### Członkowie.

16) Prawa członków Komisji są następujące:

1. korzystanie ze zbiorów i biblioteki Akademii,
2. otrzymywanie bezpłatne drukowanych Sprawozdań Komisji w razie czynnego udziału w jej pracach,
3. miewanie wykładów z zakresu fizyografii na posiedzeniach naukowych Komisji,
4. zabieranie głosu na posiedzeniach administracyjnych i udział w uchwałach tychże,



5. proponowanie członków przybranych,
6. stawianie wniosków dotyczących się ustroju czy spraw wewnętrznych Komisji,
7. prawo bierne wybieralności.

17) Propozycje kandydatów na członków przybranych Komisji, jakoteż wnioski dotyczące się ustroju i czynności Komisji, winni wnioskodawcy złożyć na piśmie przynajmniej na dni 10 przed posiedzeniem administracyjnym przewodniczącemu Komisji. Wnioski takie tylko w razie, jeżeli są opatrzone podpisami przynajmniej 5 członków, będą bezwzględnie pomieszczone na porządku dziennym posiedzenia administracyjnego; w braku takiej ilości podpisów tylko w tym razie pójdą pod obrady, jeżeli uzyskają większość głosów na posiedzeniu Komitetu administracyjnego.

18) Obowiązkiem członków jest popieranie celów Komisji:

- a) przez branie czynnego udziału w jej pracach,
- b) przez starania o zwiększanie muzeum i biblioteki Akademii w dziale fizyografii.

19) Kto z członków przybranych przez pięć lat nie bierze udziału w pracach Komisji, będzie uważany za występującego z Komisji.

### Sekcje.

20) Każda Sekcja Komisji składa się: z członków Komisji, którzy przy zawarciu Sekcji do niej wstąpili, z członków przez Sekcję do udziału w jej pracach zaproszonych, z członków na wniosek tej Sekcji przez Komisję przybranych, wreszcie z tych członków Komisji, którzy oświadczą chęć przystąpienia do Sekcji a przez nią przyjęci zostaną.

21) Członkowie Sekcji wybierają z pomiędzy siebie przewodniczącego na przeciąg jednego roku, większością głosów w tajnym głosowaniu.

Nowy przewodniczący obejmuje czynności zaraz po dokonanych wyborze. Przewodniczący Sekcji zaprasza z pomiędzy członków Sekcji sekretarza, który prowadzi protokoły obrad Sekcji i załatwia w porozumieniu z przewodniczącym wszelką korespondencję w sprawach Sekcji.

22) Przewodniczący zwołuje posiedzenie Sekcyi przynajmniej raz w roku albo więcej, w razie zachodzącej potrzeby; winien je również zwołać na piśmienny wniosek dwu członków.

23) Każda Sekcyja zajmuje się następującymi sprawami:

a) opracowuje instrukcje dla zbieraczy i plan właściwych jej badań fizyograficznych,

b) proponuje dzieła, które uzna za potrzebne, do biblioteki Akademii,

c) uchwała corocznie w początkach marca program prac mających się wykonać w roku bieżącym i propozycję budżetu sekcyjnego dla Komitetu administracyjnego,

d) decyduje o przyjęciu prac nadesłanych do publikacji Komisji po wysłuchaniu dwóch sprawozdawców,

e) ocenia zbiory i materiały nieoznaczone, przedłożone Komisji przez osoby niebiorące zasiłków, i przedstawia Komitetowi administracyjnemu wnioski co do wysokości wynagrodzenia ich.

f) czyni wnioski co do wyboru nowych współpracowników Komisji.

24) Uchwały Sekcyj tyczące się spraw wymienionych w § 23. zapadają prostą większością głosów wszystkich członków obecnych na posiedzeniu. W razie równości głosów rozstrzyga głos przewodniczącego.

25) Głosowanie nad sprawami budżetowymi jest tajne.

26) Przewodniczący Sekcyi jest członkiem Komitetu administracyjnego i wnosi na jego posiedzenia uchwały Sekcyi.

Stara się on o współpracowników na polu fizyografii w zakresie danej Sekcyi i znosi się z nimi piśmiennie.

27) Ustępujący przewodniczący Sekcyi obowiązany jest wygotować sprawozdanie z czynności Sekcyi za rok ubiegły i złożyć je łącznie z protokołem wyboru nowego przewodniczącego przewodniczącemu Komisji. Sprawozdania z czynności Sekcyj mają być odczytane na posiedzeniu administracyjnym marcowym Komisji.

28) Z chwilą wyboru nowego przewodniczącego Komisji ustają w każdym razie także mandaty wszystkich dawniejszych przewodniczących Sekcyi; choćby nawet która z nich nie dokonała nowego wyboru.

Jeżeli która z Sekcyj nie nadeszła do dnia 1. kwietnia do-

rocznego sprawozdania ze swych czynności i protokołu wyboru nowego przewodniczącego, wtedy przewodniczący Komisji obowiązany jest najdalej do 1. maja zwołać posiedzenie tej Sekcji celem wyboru nowego przewodniczącego. Gdyby mimo dwukrotnego zaproszenia przewodniczącego Komisji nie zebrało się na posiedzenie przynajmniej trzech członków Sekcji, to, w takim przypadku Sekcję uważa się za rozwiązaną, a pełna Komisja orzeka na pierwszym posiedzeniu, jakie się potem odbędzie, czy badania wchodzące w zakres czynności rozwiązanej Sekcji mają być na razie zaniechane, czy też przydzielone będą jednej z pozostałych Sekcyj.

### Komitet administracyjny.

29) Komitet administracyjny na początku każdego roku wybiera ze swego grona jednego członka, który w razie choroby lub wyjazdu z Krakowa przewodniczącego Komisji jest jego prawomocnym zastępcą. (§ 31. Urzadz. wewn. Akad.).

30) Komitet zajmuje się sprawami administracyjnymi i budżetowymi Komisji.

31) Komitet reguluje propozycje budżetowe Sekcyj, orzekając, które z nich mogą być ze względu na ogólną rozporządzalną sumę Komisji przyjęte w danym roku, tudzież zestawia z nich odpowiedni dział projektu budżetowego na posiedzenia administracyjne Komitetu.

32) W razie odesłania budżetu z uwagami przez posiedzenie administracyjne Komisji Komitet zastanawia się nad nimi i decyduje ostatecznie o budżecie.

33) Komitet w porozumieniu z Zarządem muzealnym wybiera kustosza zbiorów muzealnych tudzież wydaje opinię o kandydatach na stypendystów obowiązanych do pracowania w zbiorach muzealnych Komisji.

34) Posiedzenia Komitetu zwołuje w miarę zachodzącej potrzeby przewodniczący Komisji; winien je też zwołać na ustne życzenie objawione przez dwu członków Komitetu.

35) Do prawomocności uchwał Komitetu potrzebną jest obecność na posiedzeniu przynajmniej połowy przewodniczących

Sekcyj. Na posiedzenie, które zajmuje się wypracowaniem budżetu, winni przybyć wszyscy przewodniczący Sekcyj albo przynajmniej nadesłać piśmiennie propozycje budżetowe uchwalone przez Sekcye, bez czego żadna uchwała powzięta być nie może.

36) Uchwały na posiedzeniach Komitetu zapadają prostą większością głosów, w razie równości rozstrzyga głos przewodniczącego.

### **Przewodniczący Komisji i jego pomocnicy.**

37) Przewodniczący Komisji reprezentuje ją na zewnątrz i podpisuje wszelkie pisma Komisji, znosi się z Zarządem Akademii, zwołuje posiedzenia Komisji, Komitetu administracyjnego i Zarządu muzealnego, przewodniczy tym zebraniom i przy głosowaniach w razie równości głosów ma głos rozstrzygający, zarządza funduszami Komisji stósownie do uchwał Komitetu administracyjnego i zbiorami stósownie do uchwał Zarządu muzealnego oraz przewodniczy w redakcyi wydawnictw Komisji.

38) Sekretarz Komisji prowadzi wszystkie jej biurowe czynności i jest stałym pomocnikiem przewodniczącego Komisji.

39) Kustosz spisuje inwentarz, konserwuje zbiory, utrzymuje je w porządku i urządza według poleceń Zarządu muzealnego.

### **Zasiłki.**

40) Komisya fizyograficzna udziela pracownikom na polu fizyografii zasiłki. Zasiłki te nie mają być uważane za zwrot kosztów wyłożonych na podjęte badania, ale mają na celu ułatwienie tych badań.

41) Zasiłki udzielane przez Komisję są trojakiemu rodzaju, a mianowicie:

a) na badanie fizyograficzne lokalne w dwumilowym mniej więcej promieniu miejsca zamieszkania badacza,

b) dla podejmujących w celach fizyograficznych dalsze wycieczki,

c) dla zbierających okazy dla Muzeum Komisji.

42) Na badania lokalne udziela Komisja zasiłek w rocznej kwocie do 200 złr. stosownie do warunków miejscowych i trudności badanego przedmiotu.

43) Wyjeżdżający na wycieczki mogą otrzymać zasiłki wyższe, które stosownie do odległości mającej się badać okolicy od miejsca zamieszkania badacza i przedstawionego programu pracy są różne.

44) Zbierającym okazy udziela Komisja zasiłki z góry, a po złożeniu okazów stosownie do ich wartości osobne wynagrodzenia.

45) Kto chce korzystać z zasiłku w myśl § 41, winien w przeciągu pierwszego kwartału każdego roku zgłosić się do Komisji na ręce jej przewodniczącego z dokładnym piśmiennym programem prac zamierzonych, w którym wskaże okolice i poda co zamierza badać, oraz czas, w którym badanie wykonać zamierza.

46) Zasiłki przyznane wypłacane będą z góry. Zasiłki te, równie jak wszystkie kwoty przeznaczone na potrzeby Komisji wypłaca kasa akademicka tylko za asygnacjami Sekretarza Generalnego Akademii na wniosek przewodniczącego Komisji. W tych asygnacjach wyrażonem zawsze będzie przeznaczenie kwoty asygnowanej.

47) Kto otrzymał zasiłek Komisji w myśl (§ 41. a, b), winien do końca grudnia zawiadomić przewodniczącego Komisji, o ile program wypełnił, i zarazem wskazać termin, w którym sprawozdanie naukowe wraz z zebrany materjałem złoży Komisji.

48) Z zebranego materjału można zatrzymać tylko dublety. Materjał oddany do zbiorów Komisji musi zawierać wszystko, co do uzasadnienia szczegółów podanych w sprawozdaniu jest potrzebne. Nieoznaczone okazy powinny bezwarunkowo oddane być do zbiorów Komisji. Ocenienie, czy zbiór oddany powyższymi wymaganiami czyni zadość, należy do Sekcji.

49) Kto materjału oznaczonego wraz z wyczerpującym sprawozdaniem naukowym w czasie określonym własnym programem piśmiennym (§ 47) Komisji nie nadesłał, nowego zasiłku otrzymać nie może.

50) Każdy podejmujący badania w myśl § 1. i 2. bez porozumienia się z Komisją może pracę już dokonaną, t. j. sprawozdanie samo albo wraz z materiałem, przedłożyć Komisji, a jeżeli ta, na podstawie orzeczenia właściwej Sekcyi, uzna ją za pożyteczną, to udzieli badaczowi odpowiednie wynagrodzenie.

51) Komisya przyjmuje również zebrane materiały fizyograficzne nieoznaczone, opatrzone tylko dokładnymi datami miejsca i czasu zbierania, i wynagradza je odpowiednio do wartości.




**MATERIAŁY**  
**do fizyografii krajowej.**

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**Część I.**

**Materiały zebrane przez sekcję meteorologiczną.**

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## Wypadki spostrzeżeń meteorologicznych

dokonanych w Galicyi w roku 1899,

zestawione w c. k. Obserwatoryum astronom. krakowskiem  
pod nadzorem Prof. Dra Fr. Karlińskiego.

W roku 1899 otrzymała Komisya fizyograficzna c. k. Akademii Umiejętności w Krakowie spostrzeżenia meteorologiczne z 32 miejsc następujących: z Kamitzer Platte i z Bielska (na Szląsku), z Żywca, Wadowic, Czernichowa, Zakopanego, Krakowa, Bochni, Szczawnicy, Krynicy, Tarnowa, Pilzna, Iwonicza, Rzeszowa, Smolnika ad Baligród, Sanoka, Przemyśla, Łomny, Chyrowa, Starego Miasta, Sambora, Doliny, Lwowa, Dublan, Delatyna, Ożydowa, Krzyworówni, Kołomyi, Obertyna, Horodenki, Tarnopola i Jagielnicy.

Tablica następująca obejmuje: położenie geograficzne powyższych miejsc, ich wzniesienie nad poziom morza oraz nazwiska Szanownych P. P. Obserwatorów.

| Miejsce<br>sposrzeżeń   | Długość<br>od<br>Greenwich | Szerokość<br>północna | Wzniesienie<br>nad morze<br>w metrach | Nazwiska Obserwatorów                            |
|-------------------------|----------------------------|-----------------------|---------------------------------------|--------------------------------------------------|
| 1. Kamitzer Platte      | 19° 0'                     | 49° 45'               | 1001                                  | JP. Karol Sikora, dozorca domu podróżnych.       |
| 2. Bielsko . . . . .    | 19 3                       | 49 49                 | 344                                   | W. K. Kolbenheyer, prof. gimnazyalny.            |
| 3. Żywiec . . . . .     | 19 12                      | 49 41                 | 354                                   | W. E. Claus, urzędnik arcyksiążęcy.              |
| 4. Wadowice . . . . .   | 19 30                      | 49 53                 | 268                                   | W. L. Guńkiewicz, prof. gimnazyalny.             |
| 5. Czernichów . . . . . | 19 41                      | 49 59                 | 223                                   | W. Dr. L. Birkenmajer, prof. Szkoły Rolniczej.   |
| 6. Zakopane . . . . .   | 19 57                      | 49 18                 | 837                                   | W. Dr. A. Chramiec, właściciel zakładu lecznicz. |
| 7. Kraków . . . . .     | 19 58                      | 50 4                  | 220                                   | Obserwatoryum astronom. c. k. Uniwersytetu.      |

| Miejsce<br>spozrzezeń                  | Długość<br>od<br>Greenwich | Szero-<br>kość<br>północna | Wzniesienie<br>nad morze<br>w metrach | Nazwiska Obserwatorów                             |
|----------------------------------------|----------------------------|----------------------------|---------------------------------------|---------------------------------------------------|
| 8. Bochnia . . .                       | 20° 26'                    | 49° 58'                    | 226                                   | W. Fr. Hahn, dyrektor<br>em szkoły wydziałowej.   |
| 9. Szczawnica . .                      | 20 30                      | 49 26                      | 484                                   | JP. W. Wojakowski, urzę-<br>dnik zdrojowy.        |
| 10. Krynica . . .                      | 20 57                      | 49 25                      | 586                                   | JP. T. Kubicki z zakładu<br>zdrojowego.           |
| 11. Tarnów . . .                       | 21 0                       | 50 1                       | 225                                   | Alumni Seminarium dye-<br>cezyalnego.             |
| 12. Pilzno . . . .                     | 21 18                      | 49 59                      | 217                                   | W. L. Jacobi, nauczyciel<br>miejscowy.            |
| 13. Iwonicz . . .                      | 21 48                      | 49 36                      | 304                                   | JP. C. Dziekoński, urzę-<br>dnik zdrojowy.        |
| 14. Rzeszów . . .                      | 22 0                       | 50 3                       | 215                                   | W. C. Wieniawa Zubrzy-<br>cki, wł. apteki.        |
| 15. Smolnik ad Ba-<br>ligród . . . . . | 22 7                       | 49 16                      | 527                                   | {W. JX. J. Markow, gr.<br>kat. proboszcz.         |
| 16. Sanok . . . . .                    | 22 12                      | 49 33                      | 314                                   | W. L. Lemoch, profesor<br>gimnazyalny.            |
| 17. Przemyśl . . .                     | 22 46                      | 49 47                      | 209                                   | JP. J. Zagórski, naczeln-<br>nik straży ogniowej. |
| 18. Łomna . . . .                      | 22 50                      | 49 15                      | 509                                   | W. JX. K. Jaworski, gr.<br>kat. proboszcz.        |
| 19. Chyrów . . . .                     | 22 51                      | 49 32                      | 366                                   | W. A. Bryk, kierownik<br>szkoły miejscowej.       |
| 20. Stare-Miasto .                     | 23 0                       | 49 26                      | 358                                   | W. A. Batycki, nauczyciel<br>miejscowy.           |
| 21. Sambor . . . .                     | 23 12                      | 49 31                      | 309                                   | W. Dr. Fr. Tomaszewski,<br>dyrektor gimnazjum.    |
| 22. Dolina . . . .                     | 24 0                       | 48 58                      | 450                                   | C. k. Zarząd salinarny.                           |
| 23. Lwów . . . . .                     | 24 0                       | 49 50                      | 374                                   | Obserwatorium c. k. Szko-<br>ły Politechnicznej.  |
| 24. Dublany . . .                      | 24 5                       | 49 54                      | 255                                   | W. K. Szule, prof. Wyż-<br>szej Szkoły Rolniczej. |
| 25. Delatyn . . . .                    | 24 38                      | 48 32                      | 424                                   | C. k. Zarząd salinarny.                           |
| 26. Ożydów . . . .                     | 24 49                      | 49 58                      | 239                                   | W. J. Hawrysiewicz, nau-<br>czyciel miejscowy.    |
| 27. Krzyworównia                       | 24 54                      | 48 10                      | 545                                   | W. St. Przybyłowski, wła-<br>ściciel dóbr.        |
| 28. Kołomyja . . .                     | 25 3                       | 48 32                      | 295                                   | W. Z. Sobolewski, c. k.<br>adjunkt budownictwa.   |
| 29. Obertyn . . . .                    | 25 11                      | 48 42                      | 306                                   | W. J. Zaborski, nauczy-<br>ciel miejscowy.        |
| 30. Horodenka . .                      | 25 30                      | 48 40                      | 290                                   | Tenże.                                            |
| 31. Tarnopol . . .                     | 25 36                      | 49 33                      | 318                                   | W. Wł. Satke, profesor<br>Seminarium żeńskiego.   |
| 32. Jagielnica . .                     | 25 45                      | 48 56                      | 314                                   | Kraj. niższa Szkoła Roln.                         |

Z powyższych 32 stacyj, dwadzieścia dziewięć nadesłało spostrzeżenia z całego roku, jedna (Bochnia) z dziesięciu miesięcy, jedna (Obertyn) z ośmiu miesięcy, a jedna (Horodenka) tylko z jednego miesiąca. W pierwszych sześciu miesiącach oraz w grudniu było czynnych 31 stacyj, zaś w lipcu, sierpniu, wrześniu i listopadzie tylko 30. Stacya w Horodence rozpoczęła swą czynność dopiero od grudnia.

Z nadesłanych spostrzeżeń podajemy, podobnie jak w latach poprzedzających obliczone i synoptycznie zestawione:

1. Ciepłotę powietrza z 32 miejscowości, z tych zupełnych jest tylko 29. Podane są: średnie dzienne i miesięczne wyrażone w stopniach Celsiusza. Średnie dzienne są zwykłemi średniemi arytmetycznemi ze spostrzeżeń wykonanych o godzinach w nagłówku pod nazwiskiem każdej stacyi wymienionych. Podobnie i średnie miesięczne są tylko średniemi arytmetycznemi ze średnich dziennych. Pod średniemi miesięcznemi umieszczone są maxima i minima ciepłoty, oraz dni, w których były dostrzeżonemi; absolutne są z Bielska, Krakowa, Szczawnicy, Lwowa, Dublan i Tarnopola.

2. Ciśnienie powietrza z 12 miejscowości (z tych 9 całorocznych), sprowadzone do 0° C. wyrażone w milimetrach. Tu również podajemy średnie dzienne arytmetyczne ze spostrzeżeń wykonanych o godzinach w nagłówku pod nazwiskiem każdej stacyi wymienionych; dalej arytmetyczne średnie miesięczne oraz maxima i minima ciśnienia powietrza w każdym miesiącu, z dodatkiem dni i godzin, w których zostały dostrzeżonemi. Absolutne maxima i minima są z Bielska i Krakowa. Stałe poprawki barometrów nie zostały uwzględnione.

3. Kierunek wiatru średni dzienny z 29 stacyj (ale tylko z 27 całorocznych), oraz liczbę dostrzeżonych poszczególnych kierunków wiatru i cisz, jednakże tylko z tych stacyj, które kierunek wiatru podały ze wszystkich trzech godzin dziennie. Znaki na oznaczenie kierunku wiatru pozostały też same, co w roku poprzedzającym. Wiatry silne uwydatnione są pismem grubszem.

4. Stan zachmurzenia nieba średni dzienny i miesięczny z 28 stacyj, jednak tylko z 26 stacyj całoroczny. Średnie, jak w latach poprzedzających, podane są według skali idącej od 0·0, co znaczy niebo całkiem pogodne, do 10·0 co znaczy niebo całkiem zachmurzone.

5. Opad mierzony w 32 miejscowościach, z których jednak tylko 29 jest całorocznych. W szczególności zaś podana jest wyrażona w milimetrach wysokość warstwy wodnej tak z każdego dnia, jak z całego miesiąca. Podobnie jak w latach poprzedzających znak ≡ oznacza mgłę, ● deszcz, ✕ śnieg, † zamieć śnieżną, Δ krupy, ▲ grad, ⚡ burzę z grzmotami i błyskawicami, ⚡ błyskawice bez grzmotu.

Należące tu gradobicia zaszły w roku 1899 zestawione są osobno poniżej przez Dra D. Wierzbickiego, podobnie jak w latach poprzedzających.

W tablicy następującej podajemy z owych stacyj, które nadały spostrzeżenia całoroczne 1) ciepłotę średnią roczną wyrównaną (to jest do 24-godzinnej sprowadzoną) za pomocą poprawek podanych w latach 1896 i 1897; 2) roczną sumę opadu atmosferycznego wyrażoną w milimetrach czyli co na jedno wychodzi, w litrach na metr kwadratowy, 3) ciśnienie powietrza średnie roczne z uwzględnieniem poprawek podanych w latach poprzedzających.

| Miejsce<br>spostrzeżeń    | Ciepłota<br>C.     | Opad<br>mm. | Ciśnienie<br>powietrza<br>mm. |
|---------------------------|--------------------|-------------|-------------------------------|
| Kamitzer Platte . . . . . | +3 <sup>0</sup> ·9 | 1192·7      | —                             |
| Bielsko . . . . .         | 7·9                | 1036·9      | 731·7                         |
| Żywiec . . . . .          | 8·1                | 1265·4      | 730·7                         |
| Wadowice . . . . .        | 8·8                | 624·3       | —                             |
| Czernichów . . . . .      | 8·0                | 906·8       | 742·3                         |
| Zakopane . . . . .        | 4·8                | 1285·2      | —                             |
| Kraków . . . . .          | 8·4                | 863·0       | 742·3                         |
| Szczawnica . . . . .      | 6·9                | 1084·4      | 718·5                         |
| Krynica . . . . .         | 5·7                | 990·3       | 708·2 (?)                     |
| Tarnów . . . . .          | 9·1                | 986·6       | —                             |
| Pilzno . . . . .          | 8·1                | 887·7       | —                             |
| Iwonicz . . . . .         | 7·9                | 840·1       | —                             |
| Rzeszów . . . . .         | 8·0                | 730·0       | —                             |
| Smolnik . . . . .         | 6·4                | 1014·3      | —                             |
| Sanok . . . . .           | 7·5                | 1057·8      | —                             |
| Przemyśl . . . . .        | 8·2                | 710·2       | —                             |
| Lomna . . . . .           | 3·7                | 373·2       | —                             |
| Chyrów . . . . .          | 6·6                | 811·8       | —                             |
| Stare-Miasto . . . . .    | 7·8                | 930·6       | —                             |
| Sambor . . . . .          | 8·0                | 466·1       | —                             |
| Dolina . . . . .          | 7·9                | 592·4       | —                             |
| Lwów . . . . .            | 7·7                | 817·7       | 731·9                         |
| Dublany . . . . .         | 8·0                | 682·0       | 738·9                         |
| Delatyn . . . . .         | 6·9                | 687·7       | —                             |
| Ożydów . . . . .          | 7·9                | 742·6       | —                             |
| Krzyworównia . . . . .    | 6·2                | 746·4       | —                             |
| Kołomyja . . . . .        | 7·6                | 817·7       | —                             |
| Tarnopol . . . . .        | 6·9                | 547·6       | 733·0                         |
| Jagielnica . . . . .      | 7·1                | 601·8       | —                             |

W porównaniu z rokiem poprzedzającym ciepłota była na pięciu stacyach zachodnich niższą o  $-1^{\circ}3$  C., na szesnastu środkowych niższą o  $-0^{\circ}8$ , a na sześciu wschodnich tylko o  $-0^{\circ}4$  C. niższą.

W ogóle najniższą była temperatura na Kamitzer Platte (ubytek o  $-1^{\circ}.5$ ), najwyższą w Dolinie (przybytek o  $+0^{\circ}.3$ ).

Opad był w roku 1899 w całym kraju większym niż w r. 1898 ale podobnie jak w roku poprzedzającym bardzo nierówno rozłożonym. Najmniejszy przybytek opadu był w Dolinie o 9·4 milimetra, największy w Szczawnicy, bo aż o 345·9 milimetrów. Wśród tych granic wynosił tegoroczny przybytek opadu na sześciu stacyach + 65·4, na siedmiu + 146·1 na dziesięciu + 239·4, i na pięciu + 336·4 milimetrów w przecięciu.

Ciśnienie powietrza, z wyjątkiem Krynicy, Lwowa i Dublan, gdzie różnice z rokiem przeszłym były nieco znaczniejsze, tylko o  $-0\cdot2$  milimetra mniejsze niż w r. 1898. We Lwowie i Dublanach był ten ubytek ciśnienia mniejszym od jednego milimetra, w Krynicy jednak dosięgnął  $-1\cdot9$  milimetrów, co jak się zdaje idzie na rachunek miesięcy letnich.

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Nadesłane nam łaskawie bądź w oryginałach, bądź w odpisach spostrzeżenia, z wyjątkiem przeznaczonych do c. k. Zakładu meteorologicznego centralnego w Wiedniu oraz do c. k. Oddziału hydrograficznego we Lwowie, złożone zostały do przechowania w aktach Komisji fizyograficznej.

Wszystkim Szanownym Panom Obserwatorom za ich gorliwe a bezinteresowne współdziałanie, jak również świetnemu c. k. Oddziałowi hydrograficznemu we Lwowie składając serdeczne podziękowanie, pozostaje mi tylko dodać, że i w tym roku redukcye i obliczenia (o ile takowych sami pp. Obserwatorowie nie wykonali), równie jak sporządzenie rękopisu do druku i korektę tegoż przeprowadził członek Komisji fizyograficznej, adjunkt c. k. Obserwatorium astronomicznego Dr. D. Wierzbicki.

Kraków, dnia 6 lutego 1900.

*Prof. Dr. Karliński.*

## Ciepłota powietrza

Średnie

Styczeń 1899 roku.

| Dzień      | Kami-<br>tzer<br>Platte<br>8. 2. 8 | Biel-<br>sko<br>8. 2. 8 | Ży-<br>wiec<br>7. 2. 9 | Wado-<br>wice<br>7. 1. 10 | Czer-<br>ni-<br>chów<br>7. 2. 7 | Zako-<br>pane<br>7. 2. 9 | Kra-<br>ków<br>6. 2. 10 |
|------------|------------------------------------|-------------------------|------------------------|---------------------------|---------------------------------|--------------------------|-------------------------|
| 1          | -0.6                               | +2.8                    | +4.1                   | +1.3                      | +1.2                            | -1.3                     | +0.5                    |
| 2          | -0.8                               | 5.5                     | 4.9                    | 4.7                       | 2.3                             | +4.3                     | 2.4                     |
| 3          | -3.6                               | 1.3                     | 1.8                    | 2.1                       | 1.8                             | -1.1                     | 1.9                     |
| 4          | -6.7                               | -3.7                    | -3.0                   | -1.4                      | -0.5                            | -5.0                     | -1.1                    |
| 5          | -9.2                               | -5.9                    | -6.9                   | -3.9                      | -4.4                            | -8.9                     | -3.4                    |
| 6          | -3.4                               | +1.0                    | +1.1                   | +2.1                      | +2.2                            | -1.5                     | +1.7                    |
| 7          | -6.6                               | -3.3                    | -1.8                   | -2.4                      | -3.1                            | -7.9                     | -3.8                    |
| 8          | -0.4                               | +2.3                    | +0.6                   | +2.4                      | -0.6                            | -3.7                     | -0.8                    |
| 9          | +2.4                               | -0.9                    | 2.1                    | 0.4                       | +0.2                            | -1.9                     | +0.5                    |
| 10         | 3.3                                | +6.0                    | 4.1                    | 4.4                       | -0.2                            | -0.9                     | 1.3                     |
| 11         | 4.4                                | 9.2                     | 7.5                    | 6.5                       | +2.2                            | +4.7                     | 3.0                     |
| 12         | 0.6                                | 4.0                     | 5.0                    | 4.4                       | 1.8                             | -                        | 1.6                     |
| 13         | -0.8                               | 3.9                     | 3.7                    | 5.7                       | 4.9                             | 0.8                      | 5.1                     |
| 14         | -3.3                               | 0.6                     | 1.4                    | 1.9                       | 1.7                             | -1.6                     | 1.7                     |
| 15         | -4.1                               | 0.0                     | 1.1                    | 1.7                       | 1.8                             | -2.4                     | 1.6                     |
| 16         | 0.0                                | 6.7                     | 3.5                    | 6.5                       | 5.2                             | +2.5                     | 5.0                     |
| 17         | +1.5                               | 5.0                     | 5.3                    | 5.7                       | 5.8                             | 2.6                      | 5.3                     |
| 18         | -4.2                               | 0.4                     | 1.1                    | 0.9                       | 1.3                             | -4.4                     | 0.8                     |
| 19         | +0.8                               | 6.3                     | 4.3                    | 5.7                       | 3.2                             | +2.2                     | 3.2                     |
| 20         | 1.6                                | 9.3                     | 4.9                    | 9.3                       | 6.7                             | 6.1                      | 7.2                     |
| 21         | 3.7                                | 9.7                     | 8.3                    | 9.6                       | 8.4                             | 6.7                      | 8.5                     |
| 22         | 8.8                                | 6.0                     | 8.5                    | 2.8                       | 3.8                             | 3.4                      | 4.6                     |
| 23         | 1.3                                | 3.6                     | 5.7                    | 2.7                       | 1.5                             | -1.8                     | 2.5                     |
| 24         | -0.6                               | 2.6                     | 3.5                    | 2.5                       | 1.7                             | -1.8                     | 1.9                     |
| 25         | -0.1                               | 1.1                     | 2.0                    | 1.5                       | 1.5                             | -1.2                     | 1.2                     |
| 26         | -1.1                               | -2.5                    | -2.1                   | -2.1                      | -0.9                            | -6.1                     | -1.4                    |
| 27         | -3.5                               | -3.6                    | -3.3                   | -2.3                      | -4.6                            | -9.5                     | -4.6                    |
| 28         | -7.3                               | -0.5                    | +0.2                   | -1.6                      | -3.3                            | -7.8                     | -1.6                    |
| 29         | -4.5                               | +0.7                    | 1.3                    | +1.5                      | +1.7                            | -3.3                     | +1.3                    |
| 30         | -7.5                               | -2.5                    | -1.5                   | -2.1                      | -1.3                            | -5.0                     | -1.8                    |
| 31         | -10.1                              | -2.7                    | -1.6                   | -1.2                      | -2.7                            | -10.2                    | -1.9                    |
| Średnia    | -1.6                               | +2.0                    | +2.2                   | +2.2                      | +1.3                            | -1.7                     | +1.4                    |
| Max.<br>d. | +10.8<br>22                        | +12.1<br>21 i 22        | +12.2<br>22            | +11.8<br>21               | +10.8<br>21                     | +9.6<br>21               | +12.0<br>21             |
| Min.<br>d. | -10.6<br>5                         | -9.0<br>5               | -9.4<br>5              | -7.6<br>28                | -8.9<br>28                      | -15.2<br>31              | -7.3<br>28              |

w stopniach Celsjusza.  
dzienne.

| Boch-<br>nia | Szczaw-<br>nica | Kry-<br>nica | Tar-<br>nów | Pilzno  | Iwo-<br>nicz | Rze-<br>szów | Smol-<br>nik |
|--------------|-----------------|--------------|-------------|---------|--------------|--------------|--------------|
| 7. 1. 9      | 7. 1. 9         | 7. 2. 9      | 7. 1. 9     | 7. 1. 9 | 6. 2. 10     | 8. 2. 8      | 7. 1. 9      |
| 0            | 0               | 0            | 0           | 0       | 0            | 0            | 0            |
| - 0'7        | + 0'5           | + 1'3        | + 2'5       | + 3'3   | + 3'5        | + 3'5        | + 2'9        |
| 1'7          | 5'2             | 2'8          | 4'9         | 4'6     | 3'5          | 4'7          | 4'1          |
| 1'6          | 0'7             | 0'3          | 2'1         | 1'6     | 1'9          | 1'1          | 1'8          |
| - 1'2        | - 2'6           | - 0'6        | - 0'6       | - 0'6   | + 0'2        | - 1'1        | - 2'4        |
| - 3'5        | - 8'1           | - 5'2        | - 3'5       | - 3'7   | - 5'4        | - 2'6        | - 7'6        |
| + 0'8        | - 1'2           | - 0'9        | + 1'3       | + 0'4   | + 0'7        | - 2'9        | - 2'1        |
| - 3'8        | - 6'9           | - 5'7        | - 3'4       | - 4'3   | - 2'8        | - 3'5        | - 8'8        |
| - 0'3        | - 5'0           | - 4'2        | - 0'5       | - 2'1   | - 4'5        | - 2'9        | - 5'6        |
| + 0'6        | - 5'2           | - 2'6        | + 1'6       | - 0'1   | - 2'8        | - 0'5        | - 1'8        |
| 1'2          | + 2'7           | + 0'0        | 2'1         | + 1'2   | + 1'5        | + 2'3        | + 1'8        |
| 4'0          | 4'3             | 1'7          | 4'7         | 3'6     | 3'1          | 3'2          | 3'7          |
| 1'8          | - 0'3           | 1'1          | 2'9         | 1'7     | 3'1          | 2'3          | 3'6          |
| 4'3          | + 4'1           | 2'4          | 4'8         | 3'3     | 3'1          | 1'9          | 1'6          |
| 1'3          | - 0'1           | 1'9          | 2'2         | 1'5     | 1'1          | 2'0          | 0'7          |
| 0'8          | + 0'3           | 1'0          | 1'5         | 1'5     | 0'3          | 1'9          | - 0'3        |
| 4'3          | 2'2             | 0'4          | 5'2         | 2'1     | 1'1          | 3'3          | - 0'6        |
| 5'3          | 4'2             | 2'1          | 6'5         | 4'1     | 1'7          | 3'9          | + 1'6        |
| 0'2          | - 2'4           | 0'7          | 0'8         | 0'9     | - 1'1        | 0'2          | - 1'5        |
| 2'7          | + 1'3           | - 1'1        | 2'8         | 1'1     | - 1'0        | 3'2          | - 1'9        |
| 6'2          | 3'4             | + 0'3        | 6'7         | 3'3     | + 1'6        | 3'6          | + 3'2        |
| 8'0          | 4'8             | 1'4          | 8'4         | 4'9     | 2'5          | 4'3          | 3'8          |
| 4'2          | 2'4             | 1'6          | 6'0         | 4'4     | 4'3          | 6'1          | 4'5          |
| 1'8          | - 0'3           | - 0'7        | 5'3         | 1'5     | 4'1          | 6'2          | 4'6          |
| 2'5          | - 2'0           | - 2'2        | 3'9         | 2'8     | 2'7          | 7'5          | 1'7          |
| 1'7          | + 0'9           | + 0'7        | 2'0         | - 1'3   | 2'3          | 1'5          | 1'7          |
| - 1'9        | - 3'9           | - 3'5        | - 1'5       | - 2'1   | - 2'1        | - 2'9        | - 1'4        |
| - 6'0        | - 9'1           | - 11'3       | - 4'0       | - 4'9   | - 6'3        | - 5'1        | - 6'1        |
| - 2'7        | - 9'4           | - 10'2       | - 2'4       | - 2'5   | - 5'2        | - 2'3        | - 4'0        |
| + 1'0        | - 0'8           | - 2'6        | + 1'6       | + 0'9   | - 2'7        | - 1'7        | - 1'7        |
| - 1'4        | - 1'7           | - 4'1        | - 1'8       | - 1'3   | - 1'7        | - 2'1        | - 4'2        |
| -            | - 6'1           | - 7'8        | - 1'1       | - 2'3   | - 4'1        | - 0'7        | - 5'7        |
| + 1'2        | - 0'9           | - 1'4        | + 2'0       | + 0'8   | + 0'1        | + 1'1        | - 0'5        |
| + 10'0       | + 8'2           | + 5'0        | + 10'2      | + 7'4   | + 5'8        | + 11'0       | + 6'8        |
| 20           | 21              | 17           | 21          | 17      | 24           | 24           | 24           |
| - 8'0        | - 15'3          | - 17'0       | - 7'0       | - 8'2   | - 9'8        | - 8'0        | - 11'4       |
| 27 i 28      | 28              | 28           | 27          | 27      | 27           | 27           | 27           |

## Ciepłota powietrza Średnie

*Styczeń 1899 roku.*

| Dzień      | Sanok<br>7. 2. 9 | Prze-<br>myśl<br>7. 1. 9 | Lom-<br>na<br>7. 2. 9 | Chy-<br>rów<br>7. 2. 9 | Stare-<br>miasto<br>7. 2. 9 | Sam-<br>bor<br>7. 1. 9 | Doli-<br>na<br>6. 2. 9 | Lwów<br>7. 2. 9 |
|------------|------------------|--------------------------|-----------------------|------------------------|-----------------------------|------------------------|------------------------|-----------------|
| 1          | + 3.4            | + 1.5                    | + 0.5                 | + 1.4                  | + 3.2                       | + 4.9                  | + 3.3                  | + 2.4           |
| 2          | 5.6              | 6.8                      | 1.4                   | 5.6                    | 6.3                         | 4.3                    | 5.3                    | 5.5             |
| 3          | 2.2              | 3.9                      | -2.4                  | 3.4                    | 4.4                         | 3.7                    | 6.3                    | 4.3             |
| 4          | -1.4             | -0.7                     | -5.5                  | -2.8                   | -1.9                        | -1.5                   | -1.3                   | -1.5            |
| 5          | -5.6             | -2.8                     | -7.4                  | -6.2                   | -5.0                        | -5.7                   | -4.0                   | -5.5            |
| 6          | -1.5             | + 0.5                    | -6.3                  | -1.4                   | 0.1                         | -1.4                   | -4.0                   | -1.2            |
| 7          | -5.9             | -4.8                     | -9.3                  | -7.9                   | -5.2                        | -6.4                   | -1.7                   | -4.5            |
| 8          | -4.5             | -1.1                     | -7.1                  | -3.9                   | -2.0                        | -3.7                   | -1.7                   | -3.9            |
| 9          | -0.3             | + 1.2                    | -5.7                  | + 0.8                  | + 0.8                       | + 0.7                  | + 0.3                  | + 1.0           |
| 10         | + 2.0            | 1.0                      | -2.2                  | 1.7                    | 2.7                         | 3.0                    | 1.1                    | 0.3             |
| 11         | 4.8              | 5.5                      | + 0.7                 | 5.6                    | 6.4                         | 5.8                    | 4.0                    | 2.3             |
| 12         | 4.1              | 3.2                      | 1.7                   | 5.6                    | 6.3                         | 5.7                    | 4.3                    | 3.9             |
| 13         | 3.1              | 5.8                      | -0.3                  | 4.2                    | 4.8                         | 6.1                    | 4.0                    | 3.9             |
| 14         | 1.2              | 2.2                      | -0.9                  | 0.8                    | 1.3                         | 2.2                    | 2.0                    | 1.4             |
| 15         | 0.4              | 1.3                      | -3.3                  | -0.1                   | 0.9                         | 1.0                    | 2.7                    | 0.1             |
| 16         | 0.9              | 2.6                      | -0.8                  | + 1.1                  | 1.5                         | 2.1                    | 2.0                    | 1.1             |
| 17         | 3.1              | 5.1                      | -0.3                  | 3.8                    | 4.7                         | 5.0                    | 1.7                    | 4.3             |
| 18         | -0.8             | 0.6                      | -3.4                  | -1.0                   | -0.2                        | -0.9                   | 1.7                    | -0.9            |
| 19         | 0.1              | 1.2                      | -3.2                  | + 0.7                  | + 1.0                       | + 1.7                  | 3.3                    | + 0.7           |
| 20         | 4.1              | 6.4                      | + 1.7                 | 4.9                    | 6.1                         | 5.6                    | 6.0                    | 5.6             |
| 21         | 5.2              | 6.5                      | 1.0                   | 5.5                    | 6.2                         | 6.0                    | 6.3                    | 5.4             |
| 22         | 6.9              | 7.4                      | 2.7                   | 6.3                    | 8.2                         | 7.7                    | 9.0                    | 6.3             |
| 23         | 5.3              | 3.6                      | 2.0                   | 4.8                    | 6.6                         | 6.3                    | 7.3                    | 4.9             |
| 24         | 3.2              | 2.4                      | -0.5                  | 3.1                    | 4.9                         | 4.4                    | 4.0                    | 4.1             |
| 25         | 1.3              | 1.8                      | -2.5                  | 0.9                    | 1.1                         | 1.4                    | 2.3                    | 1.5             |
| 26         | -9.7             | -3.5                     | -6.0                  | -5.7                   | -3.8                        | -2.5                   | -2.0                   | -4.0            |
| 27         | -4.5             | -6.8                     | -6.8                  | -7.4                   | -5.6                        | -2.1                   | -8.0                   | -4.1            |
| 28         | -3.3             | -3.0                     | -6.2                  | -2.0                   | -1.3                        | -1.9                   | -7.0                   | -2.1            |
| 29         | -1.0             | + 0.9                    | -2.2                  | 0.0                    | 1.1                         | 0.0                    | + 0.0                  | + 0.4           |
| 30         | -3.3             | -1.8                     | -6.8                  | -3.6                   | -2.6                        | -4.1                   | 2.0                    | -3.1            |
| 31         | -2.5             | -2.3                     | -6.7                  | -5.3                   | -3.1                        | -1.8                   | 3.7                    | -3.6            |
| Średnia    | + 0.6            | + 1.4                    | -2.7                  | + 0.4                  | + 1.5                       | + 1.5                  | + 1.7                  | + 0.8           |
| Max.<br>d. | + 8.6<br>22      | + 10.4<br>22             | + 7.3<br>23           | + 8.0<br>24            | + 10.8<br>22                | + 10.0<br>22           | + 12.0<br>22           | + 10.6<br>22    |
| Min.<br>d. | - 10.0<br>28     | - 10.0<br>27             | - 13.4<br>27          | - 13.6<br>7            | - 10.0<br>27                | - 9.0<br>27            | - 14.0<br>27 i 28      | - 9.7<br>27     |



w stopniach Celsiusza  
dziennie.

| Du-<br>blany | Dela-<br>tyn | Oży-<br>dów | Krzy-<br>wo-<br>równia | Koło-<br>myja | Ober-<br>tyn | Tar-<br>nopol | Jagiel-<br>nica |
|--------------|--------------|-------------|------------------------|---------------|--------------|---------------|-----------------|
| 7. 2. 9      | 7. 2. 8      | 7. 2. 9     | 7. 2. 9                | 7. 12. 8      | 7. 2. 9      | 7. 2. 9       | 7. 2. 9         |
| 0<br>+ 1'3   | 0<br>+ 3'4   | 0<br>+ 3'3  | 0<br>—                 | 0<br>— 0'2    | 0<br>+ 2'4   | 0<br>— 0'6    | 0<br>— 0'6      |
| 5'9          | 7'0          | 5'4         | + 1'9                  | + 1'5         | 4'2          | + 0'2         | — 0'9           |
| 3'9          | 2'4          | 4'5         | — 0'6                  | 0'1           | 3'2          | 0'7           | + 0'2           |
| — 1'9        | 1'0          | — 1'0       | + 4'0                  | — 1'1         | 1'8          | — 0'6         | — 0'7           |
| — 5'3        | — 6'7        | — 4'9       | — 9'2                  | — 5'1         | — 2'6        | — 6'6         | — 6'6           |
| — 0'7        | — 3'3        | — 1'4       | — 4'3                  | — 4'7         | — 3'6        | — 2'7         | — 3'5           |
| — 3'9        | — 5'0        | — 3'5       | — 8'2                  | — 5'4         | — 2'8        | — 4'7         | — 4'7           |
| — 3'7        | — 7'0        | — 3'4       | — 3'8                  | — 7'7         | — 5'5        | — 5'0         | — 5'8           |
| + 1'6        | + 1'7        | + 1'5       | — 4'5                  | — 2'1         | — 1'7        | — 0'1         | — 1'7           |
| 2'0          | 0'3          | 2'8         | — 3'8                  | — 5'7         | — 1'3        | + 0'4         | — 2'6           |
| 2'9          | 0'0          | 2'1         | + 1'1                  | — 6'3         | — 2'2        | — 2'8         | — 4'5           |
| 4'3          | 4'0          | 3'9         | 5'4                    | — 1'5         | — 0'3        | — 0'5         | — 2'1           |
| 5'0          | 4'6          | 4'1         | 2'0                    | + 2'4         | + 2'6        | + 1'5         | — 3'8           |
| 1'7          | 1'0          | 1'5         | 3'6                    | 0'9           | 2'5          | 0'6           | + 0'6           |
| 0'9          | 1'0          | 0'9         | 4'9                    | 1'7           | 2'8          | 0'1           | — 0'3           |
| 1'5          | 1'7          | 1'4         | — 0'2                  | 1'5           | 2'1          | 0'7           | — 0'6           |
| 4'7          | 5'8          | 4'8         | — 0'3                  | 5'3           | 4'3          | 2'9           | 0'0             |
| — 0'7        | — 0'8        | — 0'1       | + 6'4                  | — 0'1         | 2'8          | — 1'3         | — 0'7           |
| + 0'3        | — 1'0        | + 0'4       | 6'9                    | — 1'7         | 1'8          | — 1'3         | — 0'9           |
| 5'9          | + 7'8        | 5'9         | 4'0                    | + 3'1         | 2'4          | + 2'9         | + 1'3           |
| 5'6          | 5'8          | 5'5         | 3'1                    | 5'1           | 4'5          | 3'8           | 2'5             |
| 7' 2         | 7'1          | 6'7         | 7'5                    | 6'7           | 5'6          | 4'4           | 1'7             |
| 4'7          | 5'0          | 4'2         | 2'6                    | 2'4           | 3'5          | 1'9           | 1'0             |
| 3'5          | 3'0          | 3'7         | 0'2                    | 1'9           | 2'2          | 2'3           | 2'3             |
| 0'9          | 2'3          | 1'5         | 2'5                    | 1'2           | 2'5          | 0'6           | 1'5             |
| — 3'8        | — 3'3        | — 3'6       | — 4'4                  | — 4'1         | — 1'7        | — 5'5         | — 2'7           |
| — 3'5        | — 6'4        | — 3'5       | — 9'0                  | — 10'7        | — 6'4        | — 4'9         | — 6'7           |
| — 0'5        | — 2'4        | — 2'1       | — 6'2                  | — 7'9         | — 6'3        | — 3'3         | — 5'3           |
| + 0'9        | + 0'5        | + 0'8       | — 1'0                  | — 2'5         | — 2'5        | — 0'2         | — 2'1           |
| — 2'9        | — 1'7        | — 3'5       | — 2'0                  | — 0'5         | 0'0          | — 3'6         | — 2'5           |
| — 2'9        | — 4'1        | — 2'4       | — 5'5                  | — 3'8         | — 1'0        | — 4'1         | — 2'6           |
| + 1'1        | + 0'8        | + 1'1       | — 0'2                  | — 1'2         | + 0'5        | — 0'8         | — 1'6           |
| + 11'6       | + 11'0       | + 12'0      | + 8'4                  | + 14'2        | + 10'1       | + 9'2         | + 5'0           |
| 22           | 22           | 22          | 22                     | 22            | 22           | 22            | 22              |
| — 8'5        | — 10'0       | — 8'3       | — 15'0                 | — 15'8        | — 10'4       | — 8'5         | — 10'4          |
| 27           | 27           | 30          | 5                      | 27            | 28           | 27            | 27              |

## Ciepłota powietrza Średnie

Luty 1899 roku.

| Dzień      | Kami-<br>tzer<br>Platte<br>8. 2. 8 | Biel-<br>sko<br>8. 2. 8 | Ży-<br>wiec<br>7. 2. 9 | Wado-<br>wice<br>7. 1. 10 | Czer-<br>ni-<br>chów<br>7. 2. 7 | Zako-<br>pane<br>7. 2. 9. | Kra-<br>ków<br>6. 2. 10 |
|------------|------------------------------------|-------------------------|------------------------|---------------------------|---------------------------------|---------------------------|-------------------------|
| 1          | -2.2                               | 0.0                     | + 2.0                  | + 0.1                     | + 0.3                           | -1.5                      | + 0.1                   |
| 2          | -6.4                               | -1.8                    | 0.0                    | -1.6                      | -2.2                            | -5.0                      | -1.9                    |
| 3          | -7.5                               | -3.6                    | -3.1                   | -2.0                      | -0.7                            | -5.4                      | -1.9                    |
| 4          | -9.5                               | -5.2                    | -4.2                   | -3.4                      | -3.3                            | -8.0                      | -3.7                    |
| 5          | -8.0                               | -1.6                    | -2.3                   | -0.4                      | -0.9                            | -10.6                     | -1.0                    |
| 6          | -5.1                               | -5.4                    | -6.5                   | -3.8                      | -5.3                            | -10.5                     | -5.7                    |
| 7          | -2.8                               | -2.9                    | -5.9                   | -4.5                      | -8.6                            | -9.4                      | -8.7                    |
| 8          | + 0.4                              | + 4.6                   | + 2.9                  | + 4.3                     | + 2.7                           | + 3.0                     | + 2.2                   |
| 9          | 3.5                                | 8.7                     | 6.5                    | 6.3                       | 3.3                             | 2.2                       | 3.7                     |
| 10         | 9.4                                | 12.9                    | 10.5                   | 10.5                      | 4.6                             | 7.4                       | 6.1                     |
| 11         | 11.1                               | 10.7                    | 11.1                   | 7.3                       | 4.6                             | 4.0                       | 6.2                     |
| 12         | 9.2                                | 5.9                     | 7.5                    | 4.8                       | 3.1                             | 2.7                       | 4.0                     |
| 13         | 0.5                                | 7.2                     | 5.6                    | 7.4                       | 6.4                             | 4.4                       | 7.1                     |
| 14         | 7.3                                | 10.3                    | 9.2                    | 9.2                       | 8.0                             | 4.4                       | 8.3                     |
| 15         | 6.1                                | 9.1                     | 5.9                    | 6.5                       | 5.1                             | 3.6                       | 5.7                     |
| 16         | 5.5                                | 8.9                     | 7.3                    | 7.9                       | 6.4                             | 3.7                       | 6.8                     |
| 17         | 1.9                                | 5.0                     | 5.5                    | 5.7                       | 5.8                             | 2.5                       | 5.0                     |
| 18         | -2.3                               | 3.2                     | 2.7                    | 3.5                       | 4.3                             | -1.7                      | 4.4                     |
| 19         | + 1.2                              | 3.2                     | 3.0                    | 2.9                       | 3.2                             | -1.4                      | 3.2                     |
| 20         | 1.2                                | 4.3                     | 4.6                    | 5.1                       | 5.6                             | -0.4                      | 4.0                     |
| 21         | -5.4                               | 0.1                     | - 0.2                  | 1.1                       | 1.7                             | -2.8                      | 1.2                     |
| 22         | -5.6                               | -0.5                    | -0.9                   | -0.1                      | 0.4                             | -4.4                      | 0.0                     |
| 23         | -8.9                               | -3.8                    | -4.1                   | -3.5                      | -3.0                            | -8.1                      | -4.0                    |
| 24         | -12.5                              | -7.3                    | -8.3                   | -6.9                      | -6.0                            | -12.5                     | -7.0                    |
| 25         | -14.5                              | -8.7                    | -9.1                   | -7.1                      | -5.9                            | -13.0                     | -7.1                    |
| 26         | -11.9                              | -7.1                    | -6.4                   | -4.9                      | -4.3                            | -10.9                     | -5.5                    |
| 27         | -9.2                               | -4.8                    | -3.8                   | -3.4                      | -2.8                            | -7.4                      | -3.2                    |
| 28         | -6.4                               | -2.8                    | -1.3                   | -0.7                      | -0.4                            | -4.5                      | -0.6                    |
| Średnia    | -2.2                               | + 1.4                   | + 1.0                  | + 1.4                     | + 0.8                           | -2.8                      | + 0.6                   |
| Max.<br>d. | + 12.2<br>11                       | + 16.5<br>10            | + 17.0<br>11           | + 15.6<br>14              | + 13.4<br>14                    | + 13.2<br>10              | + 14.4<br>14            |
| Min.<br>d. | -17.2<br>26                        | -15.5<br>25             | -13.2<br>6             | -11.2<br>7                | -14.7<br>7                      | -20.6<br>7                | -16.4<br>7              |

w stopniach Celsiusza.  
dzienne.

| Bochnia | Szczawnica | Krynica | Tarnów  | Pilzno  | Iwonicz  | Rzeszów | Smolnik |
|---------|------------|---------|---------|---------|----------|---------|---------|
| 7. 1. 9 | 7. 1. 9    | 7. 2. 9 | 7. 1. 9 | 7. 1. 9 | 6. 2. 10 | 8. 2. 8 | 7. 1. 9 |
| 0       | 0          | 0       | 0       | 0       | 0        | 0       | 0       |
| -0.6    | + 1.9      | -0.4    | + 2.0   | + 0.3   | - 0.3    | + 0.3   | + 1.7   |
| -2.2    | -2.1       | -1.1    | -1.7    | -1.5    | -1.4     | -2.2    | -2.4    |
| -1.5    | -3.3       | -3.3    | -1.6    | -2.0    | -1.9     | -2.6    | -3.2    |
| -4.0    | -5.8       | -5.7    | -3.7    | -3.9    | -5.4     | -4.5    | -6.2    |
| -2.0    | -9.2       | -5.0    | -2.5    | -5.6    | -5.7     | -5.1    | -10.5   |
| -5.2    | -8.4       | -9.9    | -5.9    | -7.2    | -8.7     | -7.0    | -9.0    |
| -5.8    | -8.7       | -10.7   | -6.5    | -9.0    | -10.2    | -9.0    | -8.3    |
| + 3.1   | + 1.2      | -3.2    | + 3.0   | + 0.5   | - 2.4    | - 1.0   | - 1.7   |
| 4.0     | 1.2        | -0.7    | 4.3     | 2.7     | + 0.7    | + 2.5   | + 1.1   |
| 6.7     | 4.9        | + 1.0   | 7.6     | 4.5     | 2.7      | 5.3     | 3.2     |
| 6.3     | 3.3        | -0.6    | 7.7     | 5.2     | 5.0      | 9.2     | 5.6     |
| 5.0     | 2.7        | + 1.5   | 8.1     | 5.6     | 5.8      | 7.9     | 5.4     |
| 6.7     | 1.6        | 4.6     | 8.2     | 6.3     | 3.0      | 9.5     | 2.7     |
| 8.1     | 5.9        | 2.6     | 9.3     | 7.5     | 6.5      | 11.1    | 6.8     |
| 5.7     | 6.6        | 3.7     | 8.9     | 6.6     | 7.7      | 10.4    | 6.4     |
| 6.9     | 4.1        | 1.2     | 8.5     | 6.5     | 6.0      | 11.1    | 4.3     |
| 5.0     | 3.2        | 2.2     | 4.7     | 4.6     | 3.3      | 4.8     | 2.4     |
| 3.5     | 1.8        | 1.5     | 4.3     | 3.9     | 1.5      | 6.4     | 1.0     |
| 2.5     | 2.4        | 0.7     | 3.6     | 3.1     | 1.4      | 4.3     | 0.4     |
| 5.0     | 2.2        | 0.4     | 5.4     | 4.3     | 2.3      | 4.5     | 1.1     |
| 0.1     | 0.2        | - 0.5   | 1.1     | 2.9     | 0.9      | 0.5     | - 0.3   |
| - 0.7   | - 2.2      | - 2.6   | - 0.6   | - 1.3   | - 1.1    | - 2.4   | - 9.8   |
| - 4.2   | - 6.6      | - 4.5   | - 4.0   | - 5.5   | - 6.8    | - 4.5   | - 9.6   |
| - 7.7   | - 10.8     | - 5.8   | - 6.8   | - 7.5   | - 8.5    | - 6.2   | - 9.7   |
| - 6.8   | - 10.8     | - 7.5   | - 6.7   | - 7.4   | - 8.9    | - 7.2   | - 11.4  |
| - 5.5   | - 8.8      | - 7.0   | - 6.5   | - 9.6   | - 8.7    | - 7.7   | - 11.7  |
| - 3.4   | - 6.2      | - 4.9   | - 2.9   | - 6.5   | - 5.8    | - 3.7   | - 5.9   |
| - 1.0   | - 2.6      | - 2.6   | - 0.1   | - 0.3   | - 3.3    | - 0.8   | - 2.5   |
| + 0.7   | - 1.5      | - 2.0   | + 1.3   | 0.1     | - 1.2    | + 0.8   | - 2.1   |
| + 13.5  | + 11.6     | + 6.0   | + 14.2  | + 12.6  | + 9.8    | + 17.0  | + 11.6  |
| 14      | 15         | 15      | 14      | 14      | 15       | 14      | 14      |
| - 12.0  | - 17.6     | - 19.8  | - 14.0  | - 15.3  | - 17.6   | - 17.8  | - 20.8  |
| 6.7     | 6          | 7       | 7       | 7       | 7        | 7       | 5       |

Ciepłota powietrza  
Średnie

Luty 1899 roku.

| Dzień      | Sanok                      | Prze-<br>myśl              | Łom-<br>na                 | Chy-<br>rów                | Stare-<br>miasto           | Sam-<br>bor                     | Dolina                           | Lwów                       |
|------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|---------------------------------|----------------------------------|----------------------------|
|            | 7. 2. 9                    | 7. 1. 9                    | 7. 2. 9                    | 7. 2. 9                    | 7. 2. 9                    | 7. 1. 9                         | 7. 2. 9                          | 7. 2. 9                    |
| 1          | + 3 <sup>0</sup> .4        | + 0 <sup>0</sup> .9        | - 1 <sup>0</sup> .4        | + 1 <sup>0</sup> .0        | + 4 <sup>0</sup> .6        | - 0 <sup>0</sup> .5             | + 3 <sup>0</sup> .3              | - 0 <sup>0</sup> .1        |
| 2          | - 1 <sup>0</sup> .0        | - 1 <sup>0</sup> .2        | - 2 <sup>0</sup> .9        | - 1 <sup>0</sup> .5        | - 1 <sup>0</sup> .3        | - 0 <sup>0</sup> .9             | 2 <sup>0</sup> .7                | - 2 <sup>0</sup> .2        |
| 3          | - 1 <sup>0</sup> .8        | - 0 <sup>0</sup> .9        | - 4 <sup>0</sup> .7        | - 2 <sup>0</sup> .9        | - 1 <sup>0</sup> .7        | - 2 <sup>0</sup> .1             | 0 <sup>0</sup> .7                | - 1 <sup>0</sup> .5        |
| 4          | - 3 <sup>0</sup> .9        | - 3 <sup>0</sup> .2        | - 10 <sup>0</sup> .1       | - 5 <sup>0</sup> .6        | - 3 <sup>0</sup> .9        | - 4 <sup>0</sup> .9             | - 1 <sup>0</sup> .3              | - 5 <sup>0</sup> .4        |
| 5          | - 6 <sup>0</sup> .5        | - 4 <sup>0</sup> .2        | - 8 <sup>0</sup> .3        | - 6 <sup>0</sup> .5        | - 4 <sup>0</sup> .3        | - 5 <sup>0</sup> .3             | - 2 <sup>0</sup> .7              | - 7 <sup>0</sup> .3        |
| 6          | - 7 <sup>0</sup> .4        | - 1 <sup>0</sup> .5        | - 12 <sup>0</sup> .2       | - 7 <sup>0</sup> .9        | - 7 <sup>0</sup> .2        | - 6 <sup>0</sup> .2             | - 7 <sup>0</sup> .3              | - 5 <sup>0</sup> .4        |
| 7          | - 8 <sup>0</sup> .7        | - 7 <sup>0</sup> .5        | - 16 <sup>0</sup> .9       | - 9 <sup>0</sup> .3        | - 7 <sup>0</sup> .4        | - 7 <sup>0</sup> .2             | - 8 <sup>0</sup> .7              | - 9 <sup>0</sup> .1        |
| 8          | 0 <sup>0</sup> .0          | + 1 <sup>0</sup> .9        | - 2 <sup>0</sup> .1        | + 0 <sup>0</sup> .9        | + 2 <sup>0</sup> .3        | + 1 <sup>0</sup> .7             | —                                | + 0 <sup>0</sup> .9        |
| 9          | + 1 <sup>0</sup> .5        | 3 <sup>0</sup> .7          | - 3 <sup>0</sup> .6        | 0 <sup>0</sup> .7          | 3 <sup>0</sup> .7          | 3 <sup>0</sup> .7               | - 3 <sup>0</sup> .0              | 1 <sup>0</sup> .6          |
| 10         | 4 <sup>0</sup> .9          | 6 <sup>0</sup> .7          | - 0 <sup>0</sup> .1        | 5 <sup>0</sup> .9          | 5 <sup>0</sup> .7          | 7 <sup>0</sup> .0               | 0 <sup>0</sup> .0                | 5 <sup>0</sup> .6          |
| 11         | 6 <sup>0</sup> .8          | 8 <sup>0</sup> .2          | + 2 <sup>0</sup> .2        | 8 <sup>0</sup> .2          | 9 <sup>0</sup> .8          | 8 <sup>0</sup> .6               | + 5 <sup>0</sup> .7              | 7 <sup>0</sup> .6          |
| 12         | 8 <sup>0</sup> .4          | 9 <sup>0</sup> .8          | 2 <sup>0</sup> .3          | 8 <sup>0</sup> .1          | 10 <sup>0</sup> .7         | 10 <sup>0</sup> .3              | 11 <sup>0</sup> .0               | 8 <sup>0</sup> .5          |
| 13         | 3 <sup>0</sup> .9          | 5 <sup>0</sup> .4          | - 0 <sup>0</sup> .2        | 4 <sup>0</sup> .8          | 6 <sup>0</sup> .4          | 5 <sup>0</sup> .7               | 11 <sup>0</sup> .3               | 4 <sup>0</sup> .9          |
| 14         | 7 <sup>0</sup> .9          | 8 <sup>0</sup> .8          | + 3 <sup>0</sup> .8        | 7 <sup>0</sup> .0          | 8 <sup>0</sup> .9          | 7 <sup>0</sup> .9               | 9 <sup>0</sup> .0                | 6 <sup>0</sup> .5          |
| 15         | 8 <sup>0</sup> .7          | 8 <sup>0</sup> .9          | 5 <sup>0</sup> .1          | 8 <sup>0</sup> .8          | 10 <sup>0</sup> .7         | 9 <sup>0</sup> .1               | 9 <sup>0</sup> .0                | 8 <sup>0</sup> .6          |
| 16         | 6 <sup>0</sup> .4          | 6 <sup>0</sup> .8          | 1 <sup>0</sup> .2          | 6 <sup>0</sup> .1          | 7 <sup>0</sup> .4          | 7 <sup>0</sup> .5               | 9 <sup>0</sup> .3                | 6 <sup>0</sup> .5          |
| 17         | 3 <sup>0</sup> .6          | 4 <sup>0</sup> .4          | - 0 <sup>0</sup> .7        | 2 <sup>0</sup> .9          | 3 <sup>0</sup> .8          | 9 <sup>0</sup> .7               | 8 <sup>0</sup> .3                | 2 <sup>0</sup> .6          |
| 18         | 2 <sup>0</sup> .1          | 2 <sup>0</sup> .6          | - 2 <sup>0</sup> .0        | 0 <sup>0</sup> .7          | 1 <sup>0</sup> .9          | 4 <sup>0</sup> .7               | 8 <sup>0</sup> .7                | 1 <sup>0</sup> .3          |
| 19         | 1 <sup>0</sup> .5          | 1 <sup>0</sup> .4          | - 3 <sup>0</sup> .0        | - 0 <sup>0</sup> .3        | 0 <sup>0</sup> .4          | - 0 <sup>0</sup> .7             | 1 <sup>0</sup> .3                | 0 <sup>0</sup> .3          |
| 20         | 2 <sup>0</sup> .8          | 2 <sup>0</sup> .1          | - 1 <sup>0</sup> .9        | + 0 <sup>0</sup> .9        | 2 <sup>0</sup> .5          | + 0 <sup>0</sup> .9             | 0 <sup>0</sup> .7                | 1 <sup>0</sup> .3          |
| 21         | 0 <sup>0</sup> .2          | 0 <sup>0</sup> .9          | - 3 <sup>0</sup> .7        | - 0 <sup>0</sup> .7        | 0 <sup>0</sup> .2          | 0 <sup>0</sup> .1               | - 0 <sup>0</sup> .7              | - 0 <sup>0</sup> .2        |
| 22         | - 2 <sup>0</sup> .8        | - 1 <sup>0</sup> .3        | - 5 <sup>0</sup> .9        | - 1 <sup>0</sup> .1        | - 2 <sup>0</sup> .7        | - 3 <sup>0</sup> .1             | 0 <sup>0</sup> .0                | - 3 <sup>0</sup> .6        |
| 23         | - 7 <sup>0</sup> .2        | - 5 <sup>0</sup> .5        | - 11 <sup>0</sup> .1       | - 8 <sup>0</sup> .4        | - 7 <sup>0</sup> .6        | - 8 <sup>0</sup> .2             | - 4 <sup>0</sup> .3              | - 8 <sup>0</sup> .2        |
| 24         | - 9 <sup>0</sup> .0        | - 7 <sup>0</sup> .5        | - 12 <sup>0</sup> .7       | - 10 <sup>0</sup> .4       | - 9 <sup>0</sup> .1        | - 10 <sup>0</sup> .0            | - 7 <sup>0</sup> .0              | - 9 <sup>0</sup> .7        |
| 25         | - 9 <sup>0</sup> .7        | - 7 <sup>0</sup> .8        | - 12 <sup>0</sup> .8       | - 11 <sup>0</sup> .0       | - 9 <sup>0</sup> .3        | - 10 <sup>0</sup> .0            | - 8 <sup>0</sup> .0              | - 9 <sup>0</sup> .2        |
| 26         | - 10 <sup>0</sup> .7       | - 8 <sup>0</sup> .1        | 12 <sup>0</sup> .8         | - 11 <sup>0</sup> .9       | - 8 <sup>0</sup> .6        | - 10 <sup>0</sup> .3            | - 5 <sup>0</sup> .0              | - 9 <sup>0</sup> .0        |
| 27         | - 6 <sup>0</sup> .2        | - 3 <sup>0</sup> .2        | - 10 <sup>0</sup> .5       | - 5 <sup>0</sup> .7        | - 5 <sup>0</sup> .7        | - 5 <sup>0</sup> .7             | - 3 <sup>0</sup> .0              | - 4 <sup>0</sup> .9        |
| 28         | - 1 <sup>0</sup> .7        | - 0 <sup>0</sup> .2        | - 5 <sup>0</sup> .7        | - 1 <sup>0</sup> .6        | - 0 <sup>0</sup> .9        | - 1 <sup>0</sup> .1             | - 0 <sup>0</sup> .7              | - 0 <sup>0</sup> .1        |
| Średnia    | - 0 <sup>0</sup> .5        | + 0 <sup>0</sup> .7        | - 4 <sup>0</sup> .7        | - 1 <sup>0</sup> .1        | + 0 <sup>0</sup> .3        | 0 <sup>0</sup> .0               | + 1 <sup>0</sup> .0              | - 0 <sup>0</sup> .7        |
| Max.<br>d. | + 12 <sup>0</sup> .4<br>16 | + 14 <sup>0</sup> .2<br>15 | + 11 <sup>0</sup> .0<br>14 | + 13 <sup>0</sup> .4<br>11 | + 14 <sup>0</sup> .7<br>15 | + 12 <sup>0</sup> .4<br>11 i 15 | + 16 <sup>0</sup> .0<br>13       | + 13 <sup>0</sup> .8<br>15 |
| Min.<br>d. | - 19 <sup>0</sup> .0<br>7  | - 18 <sup>0</sup> .0<br>7  | - 28 <sup>0</sup> .5<br>7  | - 20 <sup>0</sup> .7<br>7  | - 19 <sup>0</sup> .1<br>7  | - 15 <sup>0</sup> .6<br>7       | - 21 <sup>0</sup> .0<br>ad. d. 8 | - 16 <sup>0</sup> .5<br>7  |

w stopniach Celsiusza.  
dzienne.

| Dubla-<br>ny | Dela-<br>tyn | Oży-<br>dów | Krzy-<br>wo-<br>równia | Koło-<br>myja | Ober-<br>tya | Tar-<br>nopol | Jagiel-<br>nica |
|--------------|--------------|-------------|------------------------|---------------|--------------|---------------|-----------------|
| 7. 2. 9      | 7. 2. 8      | 7. 2. 9     | 7. 2. 9                | 7. 2. 9       | 7. 2. 9      | 7. 2. 9       | 7. 2. 9         |
| 0            | 0            | 0           | 0                      | 0             | 0            | 0             | 0               |
| - 0.5        | - 1.0        | + 0.7       | - 0.7                  | - 2.9         | - 0.7        | - 1.0         | - 1.4           |
| - 1.2        | + 2.0        | - 0.4       | + 2.8                  | - 0.9         | + 1.1        | - 1.0         | + 1.0           |
| - 1.3        | - 0.7        | - 0.1       | 1.8                    | - 0.7         | 0.5          | - 0.7         | - 0.6           |
| - 5.3        | - 4.0        | - 3.9       | - 4.0                  | - 4.6         | - 1.2        | - 4.6         | - 3.7           |
| - 6.1        | - 9.0        | - 6.4       | - 6.1                  | - 9.8         | - 5.6        | - 7.7         | - 6.4           |
| - 5.3        | - 4.3        | - 5.3       | - 3.5                  | - 9.5         | - 4.1        | - 6.4         | - 5.2           |
| - 9.1        | - 8.7        | - 7.2       | - 7.0                  | - 9.1         | - 7.3        | - 9.7         | - 8.0           |
| + 1.2        | + 2.7        | + 0.8       | + 2.3                  | + 1.1         | + 0.4        | - 0.7         | - 1.3           |
| 1.7          | 2.0          | 1.3         | 1.2                    | 3.0           | 1.2          | - 0.8         | - 1.4           |
| 7.2          | 8.0          | 5.3         | 2.7                    | 5.7           | 3.7          | + 4.1         | + 3.2           |
| 8.7          | 8.7          | 6.6         | 6.9                    | 8.7           | 5.1          | 4.6           | 2.6             |
| 10.3         | 12.0         | 7.2         | 4.8                    | 5.7           | 3.5          | 2.8           | 3.3             |
| 5.4          | 7.1          | 4.9         | 4.9                    | 5.3           | 5.2          | 4.7           | 5.5             |
| 7.3          | 7.5          | 5.3         | 2.8                    | 6.2           | 6.1          | 3.2           | 5.6             |
| 8.7          | 9.9          | 8.8         | 6.1                    | 8.3           | 5.7          | 4.1           | 1.9             |
| 7.6          | 6.7          | 6.1         | 2.4                    | 8.0           | 5.6          | 4.7           | 5.8             |
| 3.5          | 4.9          | 2.6         | - 0.2                  | 2.9           | 3.9          | 1.9           | 2.6             |
| 1.9          | 0.3          | 1.5         | - 2.1                  | 0.5           | 2.2          | 0.4           | 0.3             |
| 0.7          | 0.3          | 1.0         | - 1.9                  | - 1.1         | 0.2          | - 0.3         | 0.5             |
| 2.3          | - 0.3        | 1.9         | - 0.2                  | - 2.3         | 0.6          | - 0.7         | - 1.9           |
| 0.5          | + 1.5        | 0.4         | - 3.5                  | + 0.8         | 1.5          | - 0.4         | + 0.1           |
| - 3.3        | - 1.5        | - 2.8       | - 7.5                  | - 2.1         | - 0.9        | - 4.4         | - 3.3           |
| - 8.1        | - 7.3        | - 6.8       | - 8.4                  | - 7.7         | - 4.4        | - 8.7         | - 9.3           |
| - 9.5        | - 7.1        | - 9.0       | - 8.2                  | - 8.3         | - 5.2        | - 10.1        | - 8.1           |
| - 9.1        | - 7.5        | - 8.1       | - 8.4                  | - 8.7         | - 6.2        | - 9.2         | - 7.0           |
| - 9.1        | - 7.0        | - 8.4       | - 5.6                  | - 8.7         | - 6.5        | - 9.1         | - 9.0           |
| - 3.3        | - 5.3        | - 5.5       | - 1.4                  | - 5.3         | - 4.7        | - 7.1         | - 8.1           |
| + 0.4        | - 0.7        | + 0.7       | - 5.4                  | - 0.6         | - 0.4        | - 0.1         | - 1.4           |
| - 0.1        | + 0.3        | - 0.3       | - 1.3                  | - 0.8         | - 0.5        | - 1.9         | - 1.6           |
| + 15.0       | + 15.0       | + 14.0      | + 13.2                 | + 17.4        | + 9.4        | + 9.4         | + 9.2           |
| 15           | 11           | 15          | 15                     | 15            | 15           | 14            | 11              |
| - 16.5       | - 14.0       | - 14.2      | - 18.2                 | - 17.6        | - 11.4       | - 16.1        | - 12.8          |
| 7            | 5 17         | 27          | 5                      | 7             | 7            | 7             | 27              |

## Ciepłota powietrza

### Średnie

Marzec 1899 roku.

| Dzień      | Kami-<br>tzer<br>Platte<br>8. 2. 8 | Biel-<br>sko<br>8. 2. 8 | Ży-<br>wiec<br>7. 2. 9 | Wado-<br>wiec<br>7. 1. 10 | Czer-<br>ni-<br>chów<br>7. 2. 7 | Zako-<br>pane<br>7. 2. 9 | Kra-<br>ków<br>6. 2. 10 |
|------------|------------------------------------|-------------------------|------------------------|---------------------------|---------------------------------|--------------------------|-------------------------|
| 1          | 0<br>-1.5                          | 0<br>+ 0.2              | 0<br>+ 0.7             | 0<br>+ 1.9                | 0<br>+ 1.6                      | 0<br>-1.5                | 0<br>+ 1.1              |
| 2          | -0.6                               | 4.2                     | 3.8                    | 5.6                       | 4.5                             | + 1.1                    | 3.9                     |
| 3          | -1.3                               | 4.9                     | 5.1                    | 5.9                       | 5.1                             | 1.0                      | 4.9                     |
| 4          | + 0.8                              | 7.0                     | 4.7                    | 7.0                       | 6.6                             | 2.9                      | 6.8                     |
| 5          | -6.7                               | - 1.8                   | -2.2                   | 0.9                       | -0.9                            | -4.9                     | - 2.1                   |
| 6          | -11.2                              | - 6.5                   | -5.7                   | -2.9                      | -4.9                            | -12.2                    | -5.0                    |
| 7          | -4.3                               | + 0.4                   | -0.9                   | + 1.0                     | -0.4                            | -6.9                     | -0.4                    |
| 8          | -2.0                               | 5.0                     | + 2.3                  | 5.3                       | + 3.6                           | -3.9                     | + 3.2                   |
| 9          | + 3.1                              | 6.1                     | 5.4                    | 6.0                       | 5.2                             | + 0.7                    | 4.7                     |
| 10         | 4.5                                | 10.4                    | 6.9                    | 10.1                      | 7.2                             | -1.8                     | 6.9                     |
| 11         | 3.7                                | 5.4                     | 7.4                    | 7.1                       | 5.7                             | + 0.4                    | 6.1                     |
| 12         | 5.9                                | 6.6                     | 8.7                    | 7.3                       | 7.0                             | 1.8                      | 6.4                     |
| 13         | 3.5                                | 6.1                     | 5.7                    | 5.2                       | 7.4                             | 1.4                      | 6.8                     |
| 14         | 1.6                                | 5.0                     | 3.6                    | 4.6                       | 4.8                             | -0.1                     | 4.3                     |
| 15         | 3.7                                | 8.1                     | 6.6                    | 9.3                       | 8.1                             | --                       | 7.7                     |
| 16         | 4.6                                | 7.0                     | 6.1                    | 9.3                       | 7.8                             | --                       | 7.5                     |
| 17         | -0.2                               | 5.0                     | 6.3                    | 6.0                       | 6.3                             | --                       | 5.9                     |
| 18         | + 4.6                              | 6.5                     | 6.0                    | 5.6                       | 8.1                             | -5.3                     | 6.1                     |
| 19         | -2.9                               | -1.7                    | -2.1                   | -3.2                      | -0.2                            | -5.2                     | -1.6                    |
| 20         | -5.6                               | + 0.2                   | 0.0                    | + 1.0                     | + 0.6                           | -3.2                     | -0.2                    |
| 21         | -8.6                               | -3.5                    | -3.2                   | -2.2                      | -2.3                            | -5.3                     | -2.5                    |
| 22         | -9.6                               | -5.5                    | -5.1                   | -3.1                      | -3.7                            | -6.5                     | -4.8                    |
| 23         | -5.9                               | + 0.8                   | + 0.1                  | + 1.0                     | + 1.3                           | -5.0                     | 0.0                     |
| 24         | -8.0                               | -2.7                    | -3.3                   | -3.3                      | -3.3                            | -5.4                     | -1.5                    |
| 25         | -9.9                               | -4.6                    | -4.9                   | -3.2                      | -2.9                            | -8.0                     | -3.5                    |
| 26         | -8.6                               | -3.0                    | + 0.4                  | -0.3                      | -1.3                            | -8.5                     | -1.9                    |
| 27         | -4.2                               | + 1.0                   | 0.1                    | + 1.0                     | + 1.1                           | -2.2                     | + 0.9                   |
| 28         | + 1.1                              | 8.4                     | 6.5                    | 7.4                       | 6.0                             | + 2.2                    | 5.9                     |
| 29         | 6.9                                | 9.8                     | 8.3                    | 9.7                       | 8.7                             | 4.1                      | 9.2                     |
| 30         | 0.9                                | 7.9                     | 8.3                    | 8.6                       | 7.9                             | 4.5                      | 7.6                     |
| 31         | -4.8                               | 1.0                     | 0.1                    | 0.9                       | 2.7                             | -0.6                     | 1.1                     |
| Średnia    | -1.8                               | + 2.8                   | + 2.4                  | + 3.5                     | + 3.2                           | -2.1                     | + 2.7                   |
| Max.<br>d. | + 9.1<br>12                        | + 14.6<br>29            | + 14.4<br>29           | + 16.5<br>29              | + 15.2<br>29                    | + 14.6<br>18             | + 16.2<br>10            |
| Min.<br>d. | -15.5<br>22                        | -10.3<br>6              | -9.4<br>22             | -9.0<br>19                | -8.3<br>24                      | -17.2<br>6               | -7.9<br>6               |

w stopniach Celsiusza.  
dzienne.

| Boch-<br>nia | Szezaw-<br>nica | Kry-<br>nica | Tar-<br>nów | Pilzno  | Iwo-<br>niez | Rze-<br>szów | Smol-<br>nik |
|--------------|-----------------|--------------|-------------|---------|--------------|--------------|--------------|
| 7. 1. 9      | 7. 1. 9         | 7. 2. 9      | 7. 1. 9     | 7. 1. 9 | 6. 2. 10     | 8. 2. 8      | 7. 1. 9      |
| 0            | 0               | 0            | 0           | 0       | 0            | 0            | 0            |
| + 0'3        | + 0'1           | + 0'1        | + 1'1       | + 0'9   | - 1'1        | + 0'3        | - 1'0        |
| 3'5          | 2'2             | 2'5          | 3'1         | 2'6     | - 0'4        | 2'5          | - 0'1        |
| 4'3          | 3'6             | 2'8          | 5'3         | 4'4     | + 2'6        | 3'6          | + 1'8        |
| 6'5          | 4'8             | 2'2          | 7'2         | 5'4     | 1'7          | 5'3          | 2'6          |
| - 1'7        | - 2'6           | - 2'6        | - 0'9       | - 1'2   | - 9'5        | - 2'6        | - 2'8        |
| - 6'3        | - 8'5           | - 9'6        | - 5'0       | - 4'9   | - 11'7       | - 3'4        | - 10'4       |
| - 0'5        | - 5'8           | - 5'9        | + 0'5       | + 0'0   | - 7'5        | + 0'7        | - 6'5        |
| + 1'8        | + 0'4           | - 1'1        | 2'3         | 1'6     | - 1'0        | 2'5          | - 2'6        |
| 5'0          | 1'9             | + 0'4        | 5'3         | 3'7     | + 2'2        | 5'0          | - 0'4        |
| 7'0          | 4'9             | 2'7          | 8'6         | 6'9     | 6'3          | 9'8          | + 4'0        |
| 6'3          | 5'0             | 3'3          | 8'0         | 7'4     | 8'1          | 10'3         | 3'8          |
| 6'7          | 5'4             | 3'7          | 8'5         | 7'8     | 7'3          | 10'4         | 4'3          |
| 6'2          | 5'0             | 4'2          | 5'9         | 5'5     | 4'9          | 10'2         | 4'2          |
| 5'2          | 2'3             | 2'4          | 4'7         | 3'5     | 2'1          | 9'9          | 1'8          |
| 7'3          | 5'2             | 6'6          | 9'1         | 8'8     | 7'4          | 8'9          | 2'8          |
| 7'0          | 7'2             | 6'0          | 8'0         | 7'7     | 8'1          | 9'9          | 5'6          |
| 6'0          | 4'5             | 3'8          | 5'7         | 7'1     | 5'3          | 10'8         | 3'2          |
| 6'8          | 7'4             | 3'4          | 4'9         | 7'3     | 2'1          | 7'9          | 4'0          |
| - 1'7        | - 2'9           | - 3'2        | - 1'9       | - 1'7   | - 1'3        | - 1'5        | - 4'3        |
| - 0'2        | - 3'5           | - 2'8        | + 0'3       | - 0'7   | - 2'7        | - 1'4        | - 4'7        |
| + 1'1        | - 4'1           | - 2'8        | - 0'2       | - 0'5   | - 3'0        | - 0'5        | - 2'4        |
| - 5'0        | - 7'4           | - 6'1        | - 4'3       | - 4'5   | - 3'5        | - 2'3        | - 7'5        |
| + 0'3        | - 0'8           | - 2'3        | + 0'4       | + 0'1   | - 1'1        | + 0'9        | - 3'0        |
| - 1'7        | - 2'2           | - 2'6        | 0'1         | 0'2     | - 0'9        | - 1'5        | - 1'5        |
| - 3'3        | - 5'8           | - 4'2        | - 2'9       | - 2'8   | - 3'9        | - 2'1        | - 4'6        |
| - 2'8        | - 7'2           | - 6'9        | - 1'2       | - 2'8   | - 2'5        | - 2'3        | - 7'2        |
| + 0'3        | - 3'7           | - 2'8        | + 0'4       | - 1'5   | - 3'7        | - 1'0        | - 3'0        |
| 4'7          | - 1'6           | - 0'9        | 3'7         | + 0'8   | 0'0          | + 2'7        | - 1'6        |
| 8'3          | + 6'2           | + 0'9        | 8'3         | 6'2     | + 4'1        | 9'0          | + 2'1        |
| 8'2          | 5'3             | 4'2          | 7'8         | 7'8     | 4'3          | 5'7          | 5'5          |
| 0'8          | - 1'5           | - 1'2        | 0'6         | 0'4     | 0'9          | 0'1          | - 1'3        |
| + 2'6        | + 0'4           | - 0'2        | + 3'0       | + 2'4   | + 0'4        | + 3'5        | - 0'6        |
| + 14'0       | + 14'6          | + 10'8       | + 13'8      | + 13'4  | + 10'4       | + 18'0       | + 14'3       |
| 29           | 18              | 16           | 10          | 18      | 10           | 10           | 10           |
| - 11'0       | - 16'2          | - 15'6       | - 7'8       | - 7'2   | - 15'6       | - 7'6        | - 17'4       |
| 6            | 7               | 6            | 22          | 6       | 6            | 22           | 6            |

## Ciepłota powietrza Średnie

Marzec 1899 roku.

| Dzień      | Sanok       | Prze-<br>myśl | Łom-<br>na  | Chy-<br>rów | Stare-<br>miasto | Sam-<br>bor | Doli-<br>na | Lwów        |
|------------|-------------|---------------|-------------|-------------|------------------|-------------|-------------|-------------|
|            | 7. 2. 9     | 7. 1. 9       | 7. 2. 9     | 7. 2. 9     | 7. 2. 9          | 7. 1. 9     | 6. 2. 9     | 7. 2. 9     |
| 1          | 0<br>-0.6   | 0<br>+0.6     | 0<br>-4.0   | 0<br>-0.4   | 0<br>+0.1        | 0<br>-1.1   | 0<br>+3.7   | 0<br>-0.3   |
| 2          | +0.5        | 1.1           | -3.5        | -0.3        | 1.1              | -0.3        | 2.3         | -1.4        |
| 3          | 2.9         | 3.6           | -0.8        | +1.0        | 3.1              | +2.5        | -0.3        | +2.5        |
| 4          | 4.1         | 6.4           | +0.6        | 4.5         | 5.6              | 5.5         | -2.0        | 4.9         |
| 5          | -2.5        | -1.0          | -4.0        | -2.4        | -1.5             | -2.2        | -1.0        | -1.2        |
| 6          | -6.6        | -0.2          | -11.9       | -7.3        | -5.7             | -5.9        | +2.0        | -5.8        |
| 7          | -3.0        | -0.8          | -9.4        | -2.1        | -1.5             | -0.3        | 4.7         | -0.9        |
| 8          | -0.1        | +0.7          | -4.5        | +0.1        | 1.2              | +0.8        | 6.3         | +0.8        |
| 9          | +3.3        | 3.2           | +0.3        | 2.1         | 5.1              | 4.0         | 6.3         | 4.0         |
| 10         | 6.2         | 4.7           | 1.6         | 3.1         | 7.6              | 6.0         | 7.7         | 6.0         |
| 11         | 7.4         | 6.8           | 2.3         | 6.1         | 8.7              | 9.0         | 6.7         | 7.9         |
| 12         | 6.8         | 6.9           | 3.0         | 6.9         | 8.0              | 8.0         | 6.7         | 5.8         |
| 13         | 4.5         | 6.5           | 1.6         | 5.2         | 5.9              | 5.1         | 8.3         | 6.2         |
| 14         | 2.5         | 3.1           | 0.3         | 2.6         | 4.1              | 5.7         | 4.0         | 3.7         |
| 15         | 6.7         | 8.6           | 2.5         | 8.3         | 9.2              | 9.0         | 8.0         | 6.3         |
| 16         | 5.6         | 7.2           | 2.8         | 6.6         | 7.7              | 7.3         | 9.0         | 6.6         |
| 17         | 4.4         | 5.4           | -0.3        | 3.9         | 4.9              | 4.7         | 6.0         | 5.1         |
| 18         | 6.3         | 5.4           | +1.7        | 6.3         | 7.3              | 5.3         | 7.7         | 7.1         |
| 19         | -2.4        | -1.5          | -6.4        | -3.4        | -1.6             | -2.3        | -2.0        | -1.7        |
| 20         | -2.6        | -0.4          | -7.2        | -3.3        | -2.5             | +0.9        | -3.0        | -1.8        |
| 21         | -2.5        | +0.2          | -4.4        | -2.6        | -1.5             | -1.1        | -1.0        | -0.3        |
| 22         | -6.2        | -5.7          | -11.9       | -8.4        | -5.7             | -5.7        | -4.0        | -6.2        |
| 23         | -0.9        | -1.4          | -5.5        | -2.3        | -0.8             | -1.5        | -4.3        | -3.1        |
| 24         | -0.3        | +1.2          | -4.2        | -0.5        | 0.0              | -1.8        | +0.7        | -0.7        |
| 25         | -3.0        | -1.2          | -6.7        | -4.3        | -3.1             | -4.0        | -1.7        | -2.8        |
| 26         | -5.1        | -2.7          | -9.9        | -5.4        | -4.0             | -2.3        | -2.7        | -3.6        |
| 27         | -2.1        | -1.3          | -8.6        | -2.0        | -0.3             | -1.3        | -6.3        | -3.2        |
| 28         | +0.8        | +1.5          | -5.7        | -0.4        | +1.0             | -0.7        | +2.3        | +0.9        |
| 29         | 3.7         | 2.8           | +0.6        | -0.1        | 2.0              | +0.7        | 1.3         | 0.2         |
| 30         | 6.3         | 5.8           | 0.8         | +5.3        | 6.8              | 2.5         | 0.7         | 2.8         |
| 31         | -0.3        | 1.0           | -4.3        | -0.6        | 0.3              | -0.3        | 3.0         | 0.5         |
| Średnia    | +1.1        | +2.1          | -3.7        | +0.5        | +2.0             | +1.5        | +2.2        | +1.2        |
| Max.<br>d. | +12.8<br>11 | +14.0<br>11   | +11.1<br>12 | +13.8<br>12 | +15.2<br>11      | +13.0<br>11 | +13.0<br>10 | +15.0<br>11 |
| Min.<br>d. | -9.3<br>7   | -7.2<br>23    | -21.0<br>7  | -10.4<br>22 | -9.4<br>26       | -8.0<br>22  | -19.0<br>27 | -11.4<br>27 |



w stopniach Celsiusza  
dzienne.

| Du-<br>blany | Dela-<br>tyn | Oży-<br>dów | Krzy-<br>wo-<br>równia | Koło-<br>myja | Ober-<br>tyn | Tar-<br>nopol | Jagiel-<br>nica |
|--------------|--------------|-------------|------------------------|---------------|--------------|---------------|-----------------|
| 7. 2. 9      | 7. 2. 8      | 7. 2. 9     | 7. 2. 9                | 7. 12. 8      | 7. 2. 9      | 7. 2. 9       | 7. 2. 9         |
| 0            | 0            | 0           | 0                      | 0             | 0            | 0             | 0               |
| + 0.3        | 0.0          | - 0.1       | - 1.3                  | + 0.6         | + 0.4        | - 1.2         | - 1.0           |
| - 0.3        | - 0.2        | - 1.0       | - 1.5                  | - 0.4         | 0.4          | - 2.0         | - 3.2           |
| + 3.2        | + 3.5        | + 2.8       | + 2.5                  | + 3.9         | 3.8          | + 1.5         | + 1.9           |
| 5.3          | 5.7          | 4.3         | 3.1                    | 7.3           | 5.5          | 3.6           | 3.0             |
| - 0.9        | - 2.0        | - 1.1       | 3.1                    | - 0.5         | 2.8          | - 1.1         | - 0.5           |
| - 4.7        | - 8.2        | - 5.5       | - 8.8                  | - 6.3         | - 2.3        | - 6.7         | - 4.1           |
| 0.0          | - 6.0        | - 0.5       | - 13.7                 | - 4.9         | - 2.4        | - 2.7         | - 4.4           |
| + 1.2        | - 0.7        | + 1.1       | - 5.5                  | - 1.3         | + 0.5        | - 0.8         | - 1.7           |
| 4.3          | + 2.9        | 3.4         | + 0.1                  | + 1.2         | 1.9          | - 0.1         | + 0.2           |
| 5.5          | 3.7          | 4.5         | - 2.2                  | 2.1           | 3.5          | + 1.6         | 0.4             |
| 7.3          | 6.1          | 8.1         | 3.3                    | 2.9           | 4.6          | 3.5           | 1.8             |
| 6.8          | 6.1          | 6.8         | 3.4                    | 5.2           | 6.1          | 2.9           | 3.8             |
| 6.8          | 4.7          | 2.8         | 2.5                    | 6.5           | 6.7          | 4.3           | 4.9             |
| 4.4          | 2.8          | 3.7         | 1.4                    | 5.0           | 4.8          | 3.0           | 4.0             |
| 6.7          | 6.9          | 5.8         | 3.3                    | 7.3           | 6.1          | 4.4           | 4.4             |
| 7.2          | 8.4          | 6.9         | 6.2                    | 9.4           | 8.9          | 6.0           | 7.0             |
| 5.5          | 5.0          | 5.2         | 4.9                    | 6.2           | 6.9          | 4.4           | 5.1             |
| 7.6          | 7.1          | 6.8         | 2.0                    | 7.1           | 7.7          | 6.5           | 6.5             |
| - 1.6        | - 1.0        | 0.0         | 1.7                    | 0.7           | 2.9          | - 1.3         | 0.1             |
| - 1.2        | - 3.1        | - 0.1       | - 2.0                  | - 2.2         | - 0.7        | - 2.1         | - 1.9           |
| + 0.3        | 0.0          | + 1.1       | + 0.3                  | - 1.0         | + 1.7        | - 0.1         | - 0.6           |
| - 5.3        | - 6.3        | - 4.9       | - 6.3                  | - 4.4         | - 1.8        | - 6.0         | - 5.2           |
| - 1.7        | - 1.7        | - 1.6       | - 2.7                  | - 1.4         | - 0.9        | - 3.0         | - 2.8           |
| - 1.0        | - 0.7        | - 0.5       | + 0.5                  | - 0.1         | + 0.9        | - 0.8         | + 0.5           |
| - 2.6        | - 3.0        | - 1.5       | - 2.1                  | - 1.5         | - 0.1        | - 2.5         | - 0.9           |
| - 2.7        | - 4.3        | - 2.4       | - 2.9                  | - 3.3         | - 1.1        | - 4.3         | - 2.7           |
| - 2.7        | - 3.1        | - 1.5       | - 6.1                  | - 4.9         | - 5.1        | - 5.6         | - 5.3           |
| + 1.3        | + 0.7        | + 2.5       | - 1.8                  | 0.0           | + 0.3        | - 0.9         | - 1.3           |
| 0.4          | - 2.0        | 0.9         | - 2.3                  | - 2.3         | - 1.1        | - 3.3         | - 2.4           |
| 3.7          | + 1.0        | 2.4         | - 0.7                  | - 1.2         | - 1.8        | - 1.6         | - 2.3           |
| 1.3          | 0.1          | 1.3         | - 0.5                  | + 1.0         | + 1.7        | + 0.6         | + 0.8           |
| + 1.7        | + 0.7        | + 1.6       | - 0.6                  | + 1.0         | + 2.0        | - 0.1         | + 0.1           |
| + 15.2       | + 13.2       | + 14.0      | + 14.4                 | + 11.6        | + 10.4       | + 11.7        | + 9.6           |
| 11           | 18           | 11          | 16                     | 16            | 16           | 18            | 18              |
| - 11.0       | - 15.0       | - 9.0       | - 22.2                 | - 17.0        | - 12.1       | - 16.2        | - 12.4          |
| 27           | 7            | 6           | 7                      | 27            | 27           | 27            | 27              |

## Ciepłota powietrza Średnie

*Kwiecień 1899 roku.*

| Dzień      | Kami-<br>tzer<br>Platte<br>8. 2. 8 | Biel-<br>sko<br>8. 2. 8 | Ży-<br>wiec<br>7. 2. 9 | Wado-<br>wice<br>7. 1. 10 | Czer-<br>ni-<br>chów<br>7. 2. 7 | Zako-<br>pane<br>7. 2. 9. | Kra-<br>ków<br>6. 2. 10 |
|------------|------------------------------------|-------------------------|------------------------|---------------------------|---------------------------------|---------------------------|-------------------------|
| 1          | -5.7                               | + 0.7                   | - 0.3                  | - 1.2                     | + 2.3                           | - 4.7                     | + 1.2                   |
| 2          | + 0.3                              | 6.0                     | + 2.5                  | + 1.0                     | 3.6                             | + 1.0                     | 2.9                     |
| 3          | 1.8                                | 6.5                     | 6.6                    | 5.1                       | 7.1                             | 2.3                       | 5.5                     |
| 4          | 5.1                                | 8.3                     | 7.6                    | 4.8                       | 7.6                             | 3.5                       | 6.6                     |
| 5          | 4.5                                | 10.6                    | 9.3                    | 10.4                      | 10.3                            | 5.4                       | 9.1                     |
| 6          | 3.7                                | 8.6                     | 9.1                    | 10.1                      | 10.0                            | 4.6                       | 8.8                     |
| 7          | 6.0                                | 12.8                    | 12.7                   | 13.0                      | 12.9                            | 8.1                       | 11.2                    |
| 8          | 3.6                                | 8.5                     | 9.2                    | 10.1                      | 10.5                            | 8.2                       | 10.8                    |
| 9          | 2.1                                | 6.4                     | 6.7                    | 7.8                       | 8.0                             | 1.6                       | 6.6                     |
| 10         | 1.3                                | 6.5                     | 6.6                    | 7.1                       | 7.4                             | 1.7                       | 6.0                     |
| 11         | 2.4                                | 10.3                    | 9.6                    | 11.9                      | 11.3                            | 6.9                       | 9.0                     |
| 12         | 0.9                                | 2.4                     | 3.9                    | 5.0                       | 5.5                             | 2.2                       | 5.1                     |
| 13         | - 0.2                              | 5.5                     | 5.7                    | 6.8                       | 6.3                             | 1.2                       | 5.4                     |
| 14         | + 4.5                              | 10.3                    | 10.1                   | 10.8                      | 10.9                            | 6.7                       | 10.2                    |
| 15         | 7.0                                | 13.3                    | 13.3                   | 14.2                      | 13.5                            | 10.0                      | 12.3                    |
| 16         | 3.3                                | 8.9                     | 10.5                   | 10.4                      | 9.8                             | 7.5                       | 9.2                     |
| 17         | 3.9                                | 11.3                    | 11.1                   | 11.7                      | 11.7                            | 9.4                       | 9.7                     |
| 18         | 6.8                                | 12.4                    | 11.0                   | 12.6                      | 12.2                            | 9.7                       | 12.0                    |
| 19         | 9.9                                | 11.2                    | 11.3                   | 11.2                      | 11.1                            | 10.7                      | 11.6                    |
| 20         | 10.5                               | 9.7                     | 10.8                   | 10.7                      | 10.6                            | 12.4                      | 11.1                    |
| 21         | 5.5                                | 6.1                     | 6.9                    | 7.9                       | 8.6                             | 6.5                       | 7.8                     |
| 22         | 3.8                                | 5.7                     | 7.0                    | 8.1                       | 7.9                             | 7.4                       | 7.2                     |
| 23         | - 1.2                              | 5.2                     | 5.0                    | 5.4                       | 6.6                             | —                         | 6.2                     |
| 24         | + 2.2                              | 7.0                     | 5.9                    | 7.4                       | 7.3                             | —                         | 6.0                     |
| 25         | 7.4                                | 11.8                    | 12.2                   | 12.1                      | 11.2                            | 6.7                       | 9.5                     |
| 26         | 7.3                                | 12.6                    | 13.2                   | 14.4                      | 13.7                            | 8.9                       | 11.9                    |
| 27         | 8.2                                | 11.1                    | 11.1                   | 12.3                      | 12.4                            | 9.5                       | 13.3                    |
| 28         | 6.3                                | 10.4                    | 11.3                   | 11.8                      | 12.8                            | 8.4                       | 12.4                    |
| 29         | 7.9                                | 10.7                    | 9.9                    | 11.1                      | 11.9                            | 7.4                       | 11.6                    |
| 30         | 5.9                                | 12.1                    | 11.5                   | 11.7                      | 13.2                            | 8.1                       | 12.9                    |
| Średnia    | + 4.1                              | + 8.8                   | + 8.7                  | + 9.2                     | + 9.6                           | + 6.1                     | + 8.8                   |
| Max.<br>d. | + 12.7<br>20                       | + 17.6<br>17            | + 19.4<br>25           | + 17.6<br>17              | + 17.5<br>15                    | + 18.8<br>20              | + 19.2<br>26 i 27       |
| Min.<br>d. | - 8.7<br>1                         | - 2.8<br>2              | - 2.2<br>1             | - 3.6<br>1                | 0.0<br>1                        | - 6.8<br>1                | - 1.9<br>1              |

## w stopniach Celsiusza.

dzienne.

| Boch-<br>nia        | Szczaw-<br>nica     | Kry-<br>nica        | Tar-<br>nów         | Pilzno              | Iwo-<br>niez        | Rze-<br>szów        | Smol-<br>nik        |
|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 7. 1. 9             | 7. 1. 9             | 7. 2. 9             | 7. 1. 9             | 7. 1. 9             | 6. 2. 10            | 8. 2. 8             | 7. 1. 9             |
| + 0 <sup>0</sup> .8 | - 1 <sup>0</sup> .6 | - 2 <sup>0</sup> .2 | + 1 <sup>0</sup> .3 | + 0 <sup>0</sup> .8 | + 0 <sup>0</sup> .2 | + 2 <sup>0</sup> .9 | - 0 <sup>0</sup> .9 |
| 2.3                 | - 0.3               | + 2.2               | 4.0                 | 4.2                 | 1.2                 | 1.9                 | - 0.3               |
| 6.3                 | + 4.9               | 3.8                 | 0.4                 | 6.1                 | 1.6                 | 3.3                 | + 2.2               |
| 7.7                 | 6.7                 | 3.3                 | 8.9                 | 8.1                 | 4.0                 | 6.0                 | 3.6                 |
| 8.3                 | 7.8                 | 5.0                 | 11.4                | 9.6                 | 8.0                 | 8.8                 | 7.5                 |
| 8.3                 | 7.7                 | 5.2                 | 9.1                 | 7.9                 | 7.9                 | 11.5                | 4.7                 |
| 11.2                | 10.0                | 6.8                 | 11.4                | 10.3                | 9.5                 | 12.1                | 8.5                 |
| 10.8                | 11.5                | 8.5                 | 12.7                | 11.8                | 12.3                | 11.9                | 10.4                |
| 7.2                 | 4.8                 | 5.4                 | 7.7                 | 7.2                 | 8.8                 | 7.4                 | 8.1                 |
| 5.7                 | 4.5                 | 3.9                 | 7.2                 | 7.4                 | 5.1                 | 6.6                 | 3.8                 |
| 10.2                | 7.2                 | 6.2                 | 10.3                | 9.3                 | 7.3                 | 9.1                 | 6.6                 |
| 6.0                 | 6.4                 | 5.2                 | 7.5                 | 7.0                 | 7.5                 | 7.3                 | 5.5                 |
| 5.3                 | 2.8                 | 3.7                 | 6.0                 | 5.6                 | 4.0                 | 6.5                 | 3.4                 |
| 9.2                 | 9.2                 | 6.9                 | 10.7                | 10.7                | 8.7                 | 11.2                | 7.1                 |
| 12.3                | 12.6                | 9.8                 | 14.4                | 12.4                | 12.1                | 11.9                | 9.8                 |
| 9.8                 | 10.1                | 7.8                 | 10.3                | 11.4                | 12.3                | 12.1                | 9.3                 |
| 10.5                | 10.6                | 5.0                 | 11.9                | 11.3                | 9.9                 | 11.9                | 12.0                |
| 11.3                | 10.8                | 9.3                 | 12.3                | 13.2                | 13.2                | 13.9                | 13.8                |
| 11.3                | 13.7                | 12.4                | 12.6                | 12.5                | 16.3                | 13.9                | 16.3                |
| 10.3                | 14.7                | 12.9                | 12.9                | 12.6                | 16.3                | 15.4                | 16.5                |
| 8.5                 | 10.9                | 8.3                 | 9.0                 | 8.5                 | 10.8                | 8.2                 | 10.2                |
| 8.8                 | 8.5                 | 7.9                 | 9.6                 | 9.4                 | 9.3                 | 9.9                 | 7.9                 |
| 6.0                 | 5.9                 | 4.8                 | 6.3                 | 5.1                 | 6.9                 | 6.7                 | 5.1                 |
| 6.2                 | 5.8                 | 3.1                 | 5.9                 | 5.4                 | 6.1                 | 8.1                 | 4.3                 |
| 9.7                 | 10.2                | 6.1                 | 11.5                | 11.3                | 7.3                 | 11.3                | 8.4                 |
| 12.7                | 11.6                | 9.2                 | 14.0                | 13.8                | 12.3                | 14.5                | 1.1                 |
| 12.7                | 11.0                | 10.3                | 14.5                | 13.4                | 12.3                | 11.7                | 12.6                |
| 12.3                | 9.9                 | 10.1                | 13.0                | 12.5                | 13.1                | 13.5                | 11.9                |
| 11.5                | 11.8                | 10.8                | 13.5                | 12.8                | 11.0                | 12.6                | 11.4                |
| 12.5                | 11.6                | 10.2                | 14.8                | 13.1                | 11.3                | 13.3                | 11.6                |
| + 8.9               | + 8.4               | + 6.7               | + 10.0              | + 9.5               | + 8.9               | + 9.8               | + 8.1               |
| + 18.0              | + 21.2              | + 17.3              | + 20.0              | + 18.3              | + 20.6              | + 23.0              | + 24.1              |
| 26 i 27             | 20                  | 20                  | 27                  | 27                  | 20                  | 20                  | 20                  |
| - 1.5               | - 4.6               | - 2.6               | - 0.2               | - 1.2               | - 2.0               | - 1.0               | - 8.6               |
| 2                   | 2                   | 1                   | 1                   | 1                   | 2                   | 2                   | 2                   |

## Ciepłota powietrza Średnie

Kwiecień 1899 roku.

| Dzień      | Sanok                      | Prze-<br>myśl                   | Lom-<br>na                 | Chy-<br>rów                | Stare-<br>miasto           | Sam-<br>bor                | Dolina                        | Lwów                       |
|------------|----------------------------|---------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|-------------------------------|----------------------------|
|            | 7. 2. 9                    | 7. 1. 9                         | 7. 2. 9                    | 7. 2. 9                    | 7. 2. 9                    | 7. 1. 9                    | 6. 2. 9                       | 7. 2. 9                    |
| 1          | + 1 <sup>o</sup> .7        | + 1 <sup>o</sup> .4             | - 6 <sup>o</sup> .2        | - 0 <sup>o</sup> .8        | - 0 <sup>o</sup> .5        | - 1 <sup>o</sup> .0        | + 5 <sup>o</sup> .0           | - 0 <sup>o</sup> .5        |
| 2          | 4 <sup>o</sup> .4          | 4 <sup>o</sup> .2               | - 4 <sup>o</sup> .7        | + 1 <sup>o</sup> .0        | + 2 <sup>o</sup> .3        | + 2 <sup>o</sup> .0        | 4 <sup>o</sup> .3             | + 1 <sup>o</sup> .5        |
| 3          | 4 <sup>o</sup> .9          | 4 <sup>o</sup> .2               | - 1 <sup>o</sup> .0        | 1 <sup>o</sup> .5          | 3 <sup>o</sup> .7          | 4 <sup>o</sup> .3          | 5 <sup>o</sup> .3             | 4 <sup>o</sup> .1          |
| 4          | 5 <sup>o</sup> .8          | 4 <sup>o</sup> .9               | + 0 <sup>o</sup> .6        | 2 <sup>o</sup> .5          | 4 <sup>o</sup> .5          | 4 <sup>o</sup> .0          | 6 <sup>o</sup> .0             | 4 <sup>o</sup> .4          |
| 5          | 8 <sup>o</sup> .8          | 6 <sup>o</sup> .1               | 3 <sup>o</sup> .9          | 6 <sup>o</sup> .8          | 8 <sup>o</sup> .9          | 7 <sup>o</sup> .8          | 8 <sup>o</sup> .0             | 7 <sup>o</sup> .0          |
| 6          | 6 <sup>o</sup> .5          | 7 <sup>o</sup> .3               | 2 <sup>o</sup> .6          | 6 <sup>o</sup> .1          | 7 <sup>o</sup> .5          | 7 <sup>o</sup> .0          | 8 <sup>o</sup> .0             | 7 <sup>o</sup> .4          |
| 7          | 10 <sup>o</sup> .3         | 10 <sup>o</sup> .1              | 4 <sup>o</sup> .5          | 9 <sup>o</sup> .0          | 10 <sup>o</sup> .2         | 9 <sup>o</sup> .6          | 9 <sup>o</sup> .7             | 9 <sup>o</sup> .2          |
| 8          | 11 <sup>o</sup> .3         | 12 <sup>o</sup> .1              | 6 <sup>o</sup> .6          | 9 <sup>o</sup> .6          | 9 <sup>o</sup> .9          | 10 <sup>o</sup> .7         | 10 <sup>o</sup> .3            | 11 <sup>o</sup> .6         |
| 9          | 8 <sup>o</sup> .3          | 10 <sup>o</sup> .2              | 8 <sup>o</sup> .0          | 8 <sup>o</sup> .9          | 10 <sup>o</sup> .9         | 12 <sup>o</sup> .0         | 13 <sup>o</sup> .0            | 11 <sup>o</sup> .8         |
| 10         | 5 <sup>o</sup> .0          | 5 <sup>o</sup> .4               | 0 <sup>o</sup> .4          | 7 <sup>o</sup> .3          | 4 <sup>o</sup> .9          | 4 <sup>o</sup> .7          | 7 <sup>o</sup> .3             | 6 <sup>o</sup> .3          |
| 11         | 9 <sup>o</sup> .0          | 7 <sup>o</sup> .9               | 0 <sup>o</sup> .9          | 7 <sup>o</sup> .5          | 9 <sup>o</sup> .1          | 8 <sup>o</sup> .3          | 9 <sup>o</sup> .7             | 8 <sup>o</sup> .4          |
| 12         | 7 <sup>o</sup> .7          | 9 <sup>o</sup> .1               | 2 <sup>o</sup> .7          | 7 <sup>o</sup> .0          | 8 <sup>o</sup> .1          | 7 <sup>o</sup> .9          | 12 <sup>o</sup> .3            | 8 <sup>o</sup> .4          |
| 13         | 3 <sup>o</sup> .9          | 5 <sup>o</sup> .4               | 0 <sup>o</sup> .7          | 3 <sup>o</sup> .7          | 4 <sup>o</sup> .7          | 4 <sup>o</sup> .5          | 8 <sup>o</sup> .0             | 5 <sup>o</sup> .0          |
| 14         | 8 <sup>o</sup> .1          | 9 <sup>o</sup> .1               | 4 <sup>o</sup> .9          | 7 <sup>o</sup> .9          | 9 <sup>o</sup> .4          | 8 <sup>o</sup> .4          | 10 <sup>o</sup> .7            | 9 <sup>o</sup> .2          |
| 15         | 12 <sup>o</sup> .1         | 12 <sup>o</sup> .7              | 7 <sup>o</sup> .5          | 11 <sup>o</sup> .5         | 12 <sup>o</sup> .1         | 12 <sup>o</sup> .2         | 13 <sup>o</sup> .3            | 12 <sup>o</sup> .4         |
| 16         | 11 <sup>o</sup> .5         | 12 <sup>o</sup> .1              | 9 <sup>o</sup> .5          | 10 <sup>o</sup> .5         | 11 <sup>o</sup> .8         | 12 <sup>o</sup> .1         | 11 <sup>o</sup> .0            | 11 <sup>o</sup> .8         |
| 17         | 10 <sup>o</sup> .1         | 11 <sup>o</sup> .5              | 8 <sup>o</sup> .1          | 8 <sup>o</sup> .9          | 12 <sup>o</sup> .5         | 11 <sup>o</sup> .9         | 11 <sup>o</sup> .7            | 11 <sup>o</sup> .6         |
| 18         | 13 <sup>o</sup> .3         | 12 <sup>o</sup> .9              | 8 <sup>o</sup> .2          | 11 <sup>o</sup> .1         | 13 <sup>o</sup> .6         | 10 <sup>o</sup> .7         | 16 <sup>o</sup> .0            | 14 <sup>o</sup> .0         |
| 19         | 16 <sup>o</sup> .3         | 14 <sup>o</sup> .7              | 12 <sup>o</sup> .6         | 14 <sup>o</sup> .2         | 17 <sup>o</sup> .0         | 15 <sup>o</sup> .3         | 20 <sup>o</sup> .0            | 16 <sup>o</sup> .1         |
| 20         | 14 <sup>o</sup> .6         | 14 <sup>o</sup> .6              | 14 <sup>o</sup> .3         | 13 <sup>o</sup> .5         | 16 <sup>o</sup> .0         | 14 <sup>o</sup> .9         | 19 <sup>o</sup> .7            | 14 <sup>o</sup> .6         |
| 21         | 10 <sup>o</sup> .8         | 12 <sup>o</sup> .5              | 6 <sup>o</sup> .4          | 10 <sup>o</sup> .4         | 11 <sup>o</sup> .4         | 11 <sup>o</sup> .7         | 16 <sup>o</sup> .0            | 11 <sup>o</sup> .6         |
| 22         | 9 <sup>o</sup> .9          | 9 <sup>o</sup> .5               | 4 <sup>o</sup> .7          | 8 <sup>o</sup> .7          | 10 <sup>o</sup> .4         | 12 <sup>o</sup> .0         | 13 <sup>o</sup> .0            | 10 <sup>o</sup> .2         |
| 23         | 6 <sup>o</sup> .1          | 6 <sup>o</sup> .8               | 2 <sup>o</sup> .0          | 5 <sup>o</sup> .5          | 7 <sup>o</sup> .1          | 12 <sup>o</sup> .4         | 8 <sup>o</sup> .3             | 7 <sup>o</sup> .1          |
| 24         | 5 <sup>o</sup> .5          | 5 <sup>o</sup> .7               | 3 <sup>o</sup> .1          | 4 <sup>o</sup> .4          | 5 <sup>o</sup> .8          | 13 <sup>o</sup> .7         | 7 <sup>o</sup> .0             | 6 <sup>o</sup> .3          |
| 25         | 9 <sup>o</sup> .5          | 10 <sup>o</sup> .5              | 3 <sup>o</sup> .6          | 7 <sup>o</sup> .1          | 8 <sup>o</sup> .3          | 11 <sup>o</sup> .7         | 10 <sup>o</sup> .3            | 10 <sup>o</sup> .4         |
| 26         | 12 <sup>o</sup> .6         | 14 <sup>o</sup> .4              | 8 <sup>o</sup> .2          | 11 <sup>o</sup> .5         | 13 <sup>o</sup> .2         | 14 <sup>o</sup> .2         | 11 <sup>o</sup> .0            | 12 <sup>o</sup> .5         |
| 27         | 13 <sup>o</sup> .8         | 14 <sup>o</sup> .2              | 9 <sup>o</sup> .3          | 12 <sup>o</sup> .7         | 13 <sup>o</sup> .4         | 12 <sup>o</sup> .4         | 10 <sup>o</sup> .7            | 13 <sup>o</sup> .8         |
| 28         | 12 <sup>o</sup> .9         | 13 <sup>o</sup> .3              | 7 <sup>o</sup> .9          | 11 <sup>o</sup> .8         | 12 <sup>o</sup> .2         | 13 <sup>o</sup> .7         | 14 <sup>o</sup> .3            | 12 <sup>o</sup> .9         |
| 29         | 10 <sup>o</sup> .7         | 11 <sup>o</sup> .8              | 9 <sup>o</sup> .7          | 8 <sup>o</sup> .3          | 9 <sup>o</sup> .9          | 11 <sup>o</sup> .7         | 11 <sup>o</sup> .0            | 12 <sup>o</sup> .7         |
| 30         | 13 <sup>o</sup> .9         | 13 <sup>o</sup> .9              | 10 <sup>o</sup> .7         | 12 <sup>o</sup> .9         | 12 <sup>o</sup> .5         | 11 <sup>o</sup> .9         | 10 <sup>o</sup> .7            | 13 <sup>o</sup> .7         |
| Średnia    | + 9 <sup>o</sup> .3        | + 9 <sup>o</sup> .6             | + 5 <sup>o</sup> .0        | + 8 <sup>o</sup> .0        | + 9 <sup>o</sup> .4        | + 9 <sup>o</sup> .8        | + 10 <sup>o</sup> .7          | + 9 <sup>o</sup> .5        |
| Max.<br>d. | + 21 <sup>o</sup> .2<br>20 | + 21 <sup>o</sup> .0<br>19 i 26 | + 23 <sup>o</sup> .9<br>20 | + 20 <sup>o</sup> .4<br>19 | + 24 <sup>o</sup> .4<br>19 | + 21 <sup>o</sup> .0<br>19 | + 27 <sup>o</sup> .0<br>19    | + 22 <sup>o</sup> .0<br>19 |
| Min.<br>d. | - 1 <sup>o</sup> .0<br>1   | - 0 <sup>o</sup> .4<br>1        | - 11 <sup>o</sup> .2<br>1  | - 3 <sup>o</sup> .6<br>2   | - 2 <sup>o</sup> .0<br>2   | - 1 <sup>o</sup> .0<br>1   | + 1 <sup>o</sup> .0<br>8 i 26 | - 2 <sup>o</sup> .8<br>2   |

w stopniach Celsiusza.  
dzienne.

| Dubla-<br>ny         | Dela-<br>tyn         | Oży-<br>dów          | Krzy-<br>wo-<br>równia | Koło-<br>myja        | Ober-<br>tyn          | Tar-<br>nopol        | Jagiel-<br>nica      |
|----------------------|----------------------|----------------------|------------------------|----------------------|-----------------------|----------------------|----------------------|
| 7. 2. 9              | 7. 2. 8              | 7. 2. 9              | 7. 2. 9                | 7. 12. 8             | 7. 2. 9               | 7. 2. 9              | 7. 2. 9              |
| <sup>0</sup><br>-0·3 | <sup>0</sup><br>-1·3 | <sup>0</sup><br>-0·2 | <sup>0</sup><br>-2·5   | <sup>0</sup><br>-0·1 | <sup>0</sup><br>+ 0·7 | <sup>0</sup><br>-1·2 | <sup>0</sup><br>-1·3 |
| + 2·7                | + 1·7                | + 2·6                | + 1·3                  | + 1·1                | 2·5                   | + 0·6                | + 0·6                |
| 4·6                  | 4·1                  | 3·9                  | 3·4                    | 3·5                  | 4·6                   | 3·0                  | 4·0                  |
| 4·2                  | 1·8                  | 4·9                  | 1·8                    | 5·1                  | 4·4                   | 2·6                  | 1·9                  |
| 8·3                  | 4·9                  | 7·3                  | 2·5                    | 7·0                  | 5·4                   | 4·7                  | 3·9                  |
| 8·4                  | 6·3                  | 7·8                  | 3·3                    | 7·7                  | 7·2                   | 5·8                  | 8·3                  |
| 9·9                  | 8·4                  | 8·8                  | 3·9                    | 9·1                  | 7·8                   | 7·3                  | 6·5                  |
| 11·5                 | 10·3                 | 12·8                 | 5·6                    | 11·8                 | 9·9                   | 9·5                  | 7·9                  |
| 11·9                 | 10·7                 | 11·7                 | 6·9                    | 11·5                 | 11·4                  | 9·0                  | 8·4                  |
| 6·7                  | 7·0                  | 7·8                  | 5·9                    | 7·0                  | 8·1                   | 5·7                  | 6·2                  |
| 9·2                  | 8·7                  | 8·3                  | 6·4                    | 9·0                  | 8·5                   | 7·9                  | 8·4                  |
| 9·1                  | 10·9                 | 9·6                  | 7·7                    | 9·2                  | 9·8                   | 10·0                 | 9·9                  |
| 5·1                  | 7·0                  | 5·8                  | 6·9                    | 8·1                  | 8·0                   | 6·1                  | 7·1                  |
| 9·4                  | 9·9                  | 9·3                  | 8·1                    | 10·7                 | 10·8                  | 9·0                  | 9·2                  |
| 12·9                 | 14·9                 | 12·5                 | 13·5                   | 13·4                 | 12·8                  | 12·3                 | 12·1                 |
| 11·8                 | 13·7                 | 12·7                 | 11·2                   | 13·7                 | 13·0                  | 12·5                 | 13·2                 |
| 12·1                 | 12·0                 | 11·9                 | 10·6                   | 14·7                 | 11·2                  | 10·8                 | 11·2                 |
| 13·9                 | 12·2                 | 13·3                 | 12·2                   | 16·5                 | 12·2                  | 13·5                 | 12·5                 |
| 16·7                 | 15·8                 | 17·3                 | 15·5                   | 20·4                 | 16·8                  | 16·2                 | 15·1                 |
| 15·1                 | 18·9                 | 16·2                 | 15·7                   | 21·3                 | 15·5                  | 17·5                 | 17·5                 |
| 11·5                 | 16·4                 | 12·6                 | 12·3                   | 15·3                 | 16·1                  | 14·9                 | 15·6                 |
| 10·5                 | 11·7                 | 10·9                 | 10·7                   | 12·7                 | 12·9                  | 10·9                 | 10·4                 |
| 7·5                  | 5·5                  | 8·0                  | 4·7                    | 6·7                  | 8·7                   | 6·6                  | 7·8                  |
| 6·4                  | 3·9                  | 5·2                  | 3·8                    | 5·4                  | 7·2                   | 5·0                  | 6·1                  |
| 9·3                  | 8·8                  | 10·1                 | 5·7                    | 9·3                  | 8·2                   | 8·5                  | 7·2                  |
| 12·6                 | 11·5                 | 12·3                 | 9·5                    | 12·1                 | 11·4                  | 10·6                 | 9·6                  |
| 13·2                 | 11·7                 | 13·6                 | 10·4                   | 12·3                 | 11·5                  | 11·3                 | 10·2                 |
| 13·1                 | 10·4                 | 13·5                 | 9·5                    | 12·9                 | 11·3                  | 11·1                 | 11·3                 |
| 13·1                 | 12·0                 | 14·6                 | 10·0                   | 12·3                 | 13·2                  | 12·0                 | 10·9                 |
| 13·5                 | 11·8                 | 14·5                 | 8·3                    | 13·5                 | 12·9                  | 13·1                 | 11·5                 |
| + 9·8                | + 9·4                | + 10·0               | + 7·5                  | + 10·5               | + 9·8                 | + 8·9                | + 8·8                |
| + 23·5               | + 25·0               | + 24·1               | + 25·2                 | + 27·8               | + 22·0                | + 24·9               | + 23·0               |
| 19                   | 19 i 20              | 19                   | 20                     | 19                   | 19                    | 19                   | 20                   |
| -1·5                 | -3·0                 | -1·2                 | -3·6                   | -1·2                 | -0·1                  | -2·5                 | -2·2                 |
| 2, 4 i 25            | 1 i 2                | 1                    | 1                      | 1                    | 1                     | 4                    | 1                    |

## Ciepłota powietrza

### Średnie

*Maj 1899 roku.*

| Dzień      | Kami-<br>tzer<br>Platte<br>8. 2. 8 | Biel-<br>sko<br>8. 2. 8 | Ży-<br>wiec<br>7. 2. 9 | Wado-<br>wice<br>7. 1. 10 | Czer-<br>ni-<br>chów<br>7. 2. 7 | Zako-<br>pane<br>7. 2. 9 | Kra-<br>ków<br>6. 2. 10 |
|------------|------------------------------------|-------------------------|------------------------|---------------------------|---------------------------------|--------------------------|-------------------------|
| 1          | - 1.2                              | + 4.2                   | + 5.0                  | + 5.4                     | + 6.7                           | + 2.3                    | + 7.2                   |
| 2          | + 0.4                              | 6.6                     | 6.7                    | 7.7                       | 8.0                             | 3.4                      | 7.1                     |
| 3          | 3.7                                | 10.4                    | 11.0                   | 11.5                      | 10.2                            | 6.2                      | 10.0                    |
| 4          | 4.7                                | 9.3                     | 10.5                   | 10.2                      | 11.2                            | 6.9                      | 11.1                    |
| 5          | 1.8                                | 6.7                     | 7.4                    | 9.1                       | 8.8                             | 5.1                      | 10.2                    |
| 6          | 5.9                                | 11.2                    | 12.3                   | 10.8                      | 12.3                            | 8.9                      | 12.2                    |
| 7          | 6.2                                | 11.3                    | 12.9                   | 12.3                      | 12.0                            | 7.6                      | 11.6                    |
| 8          | 6.7                                | 10.8                    | 12.1                   | 12.8                      | 14.0                            | 9.3                      | 14.6                    |
| 9          | 11.5                               | 16.3                    | 16.7                   | 16.3                      | 16.8                            | 12.3                     | 16.7                    |
| 10         | 10.2                               | 13.8                    | 17.7                   | 15.5                      | 15.7                            | 12.3                     | 16.0                    |
| 11         | 9.9                                | 14.7                    | 15.1                   | 15.3                      | 15.2                            | 13.3                     | 14.7                    |
| 12         | 7.0                                | 12.5                    | 13.2                   | 14.5                      | 13.8                            | 12.0                     | 13.2                    |
| 13         | 7.7                                | 11.6                    | 11.3                   | 12.1                      | 13.8                            | 10.1                     | 14.0                    |
| 14         | 13.2                               | 17.4                    | 16.6                   | 18.6                      | 17.7                            | 13.3                     | 16.4                    |
| 15         | 16.4                               | 22.7                    | 22.3                   | 21.6                      | 21.7                            | 18.0                     | 18.5                    |
| 16         | 12.8                               | 18.1                    | 19.7                   | 19.9                      | 20.5                            | 16.5                     | 19.9                    |
| 17         | 9.1                                | 15.5                    | 15.5                   | 15.9                      | 15.6                            | 9.8                      | 14.8                    |
| 18         | 12.6                               | 17.2                    | 15.4                   | 17.0                      | 17.5                            | 11.5                     | 15.5                    |
| 19         | 14.5                               | 20.0                    | 17.7                   | 18.9                      | 19.0                            | 15.5                     | 16.9                    |
| 20         | 15.4                               | 20.4                    | 19.9                   | 20.9                      | 18.4                            | 17.3                     | 17.6                    |
| 21         | 10.4                               | 16.3                    | 17.9                   | 17.4                      | 17.5                            | 13.1                     | 17.9                    |
| 22         | 9.0                                | 12.9                    | 13.6                   | 14.3                      | 14.9                            | 10.7                     | 14.0                    |
| 23         | 8.7                                | 12.9                    | 12.6                   | 13.0                      | 12.8                            | 8.8                      | 11.6                    |
| 24         | 10.8                               | 16.1                    | 16.4                   | 17.3                      | 17.6                            | 13.8                     | 15.3                    |
| 25         | 11.3                               | 15.6                    | 16.4                   | 16.7                      | 17.3                            | 13.2                     | 16.7                    |
| 26         | 7.5                                | 12.3                    | 12.7                   | 14.0                      | 14.4                            | 10.7                     | 12.9                    |
| 27         | 3.9                                | 8.0                     | 10.5                   | 11.6                      | 10.7                            | 8.0                      | 9.5                     |
| 28         | 6.4                                | 12.1                    | 12.5                   | 13.7                      | 13.6                            | 9.4                      | 12.3                    |
| 29         | 2.9                                | 9.6                     | 9.1                    | 11.1                      | 11.4                            | 4.2                      | 10.0                    |
| 30         | 6.9                                | 12.5                    | 12.1                   | 12.3                      | 13.4                            | 6.5                      | 11.5                    |
| 31         | 9.9                                | 15.0                    | 13.3                   | 15.7                      | 15.7                            | 11.4                     | 14.0                    |
| Średnia    | + 8.3                              | + 13.3                  | + 13.7                 | + 14.3                    | + 14.5                          | + 10.4                   | + 13.7                  |
| Max.<br>d. | + 19.8<br>15                       | + 28.6<br>15            | + 26.8<br>15           | + 26.8<br>20              | + 26.4<br>15                    | + 20.6<br>20             | + 27.0<br>20            |
| Min.<br>d. | - 1.4<br>1                         | - 1.1<br>2              | + 3.6<br>2             | + 3.3<br>1                | + 4.9<br>2                      | 0.0<br>1                 | + 2.2<br>2              |

w stopniach Celsiusza.  
dzienne.

| Boch-<br>nia        | Szczaw-<br>nica     | Kry-<br>nica        | Tar-<br>nów         | Pilzno              | Iwo-<br>nicz        | Rze-<br>szów        | Smol-<br>nik        |
|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 7. 1. 9             | 7. 1. 9             | 7. 2. 9             | 7. 1. 9             | 7. 1. 9             | 6. 2. 10            | 8. 2. 8             | 7. 1. 9             |
| + 6 <sup>0</sup> .8 | + 4 <sup>0</sup> .5 | + 5 <sup>0</sup> .1 | + 7 <sup>0</sup> .2 | + 7 <sup>0</sup> .0 | + 7 <sup>0</sup> .1 | + 6 <sup>0</sup> .5 | + 6 <sup>0</sup> .0 |
| 6.3                 | 4.7                 | 5.5                 | 7.3                 | 6.4                 | 5.1                 | 7.0                 | 6.1                 |
| 10.3                | 10.6                | 8.4                 | 11.1                | 10.8                | 9.3                 | 10.5                | 8.8                 |
| 11.2                | 11.5                | 8.6                 | 11.5                | 11.4                | 9.9                 | 10.0                | 9.6                 |
| 8.5                 | 7.4                 | 8.2                 | 11.4                | 10.9                | 9.1                 | 9.0                 | 9.1                 |
| 11.5                | 10.6                | 8.9                 | 12.6                | 12.2                | 10.4                | 9.7                 | 9.7                 |
| 11.3                | 12.7                | 9.3                 | 14.0                | 14.4                | 14.0                | 11.5                | 11.4                |
| 13.7                | 11.9                | 11.7                | 15.3                | 14.6                | 13.9                | 12.1                | 12.2                |
| 16.7                | 14.5                | 12.8                | 17.6                | 16.7                | 15.9                | 16.5                | 14.0                |
| 15.3                | 14.6                | 12.8                | 16.5                | 14.8                | 14.5                | 17.3                | 12.3                |
| 15.0                | 15.4                | 14.0                | 15.7                | 13.8                | 16.5                | 13.4                | 13.0                |
| 12.3                | 14.3                | 13.2                | 13.5                | 12.7                | 14.7                | 14.7                | 14.2                |
| 13.2                | 13.2                | 12.4                | 14.7                | 14.0                | 14.8                | 15.6                | 14.5                |
| 15.5                | 15.9                | 12.7                | 17.7                | 17.2                | 17.6                | 17.9                | 16.3                |
| 19.8                | 20.2                | 16.8                | 21.6                | 19.8                | 19.5                | 19.0                | 18.8                |
| 18.7                | 19.5                | 17.6                | 20.3                | 19.6                | 19.4                | 18.0                | 19.0                |
| 13.7                | 13.3                | 12.4                | 16.1                | 14.0                | 15.3                | 16.9                | 11.7                |
| 15.3                | 14.9                | 12.5                | 17.3                | 15.5                | 15.9                | 18.9                | 14.8                |
| 17.2                | 16.4                | 13.8                | 18.0                | 17.6                | 15.7                | 18.7                | 17.8                |
| 18.5                | 18.4                | 14.7                | 20.5                | 19.7                | 20.1                | 15.3                | 18.9                |
| 17.5                | 15.8                | 13.5                | 18.7                | 16.9                | 18.3                | 14.1                | 14.3                |
| 13.7                | 13.6                | 12.8                | 18.3                | 13.0                | 15.8                | 15.0                | 12.1                |
| 11.3                | 11.9                | 10.8                | 14.1                | 10.7                | 10.5                | 15.3                | 11.1                |
| 16.0                | 15.7                | 14.7                | 15.5                | 15.4                | 15.8                | 19.3                | 14.5                |
| 16.2                | 16.5                | 14.7                | 17.1                | 16.4                | 16.5                | 16.5                | 15.0                |
| 12.7                | 13.0                | 14.5                | 16.1                | 14.8                | 16.1                | 13.2                | 13.9                |
| 9.2                 | 10.7                | 11.9                | 10.5                | 9.8                 | 11.5                | 10.1                | 10.6                |
| 11.8                | 12.3                | 12.2                | 13.5                | 12.9                | 12.3                | 11.7                | 13.5                |
| 8.7                 | 7.6                 | 7.4                 | 10.5                | 9.2                 | 7.5                 | 9.0                 | 6.0                 |
| 11.3                | 8.1                 | 8.4                 | 10.3                | 8.2                 | 8.7                 | 9.7                 | 6.6                 |
| 14.5                | 13.7                | 10.4                | 14.4                | 12.2                | 11.1                | 13.9                | 10.8                |
| + 13.3              | + 13.0              | + 11.7              | + 14.8              | + 13.6              | + 13.6              | + 13.8              | + 12.5              |
| + 25.0              | + 25.1              | + 20.0              | + 26.0              | + 24.8              | + 25.0              | + 26.2              | + 24.7              |
| 15 i 20             | 20                  | 16                  | 15 i 20             | 20                  | 16 i 20             | 15                  | 19                  |
| + 3.5               | - 2.1               | + 2.0               | + 3.2               | + 3.4               | + 0.8               | + 5.0               | + 3.1               |
| 2                   | 2                   | 2                   | 1                   | 1                   | 2                   | 1 i 2               | 1                   |

## Ciepłota powietrza Średnie

Maj 1899 roku.

| Dzień      | Sanok                              | Prze-<br>myśl                      | Łom-<br>na                         | Chy-<br>rów                        | Stare-<br>miasto                   | Sam-<br>bor                          | Doli-<br>na                        | Lwów                               |
|------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|
|            | 7. 2. 9                            | 7. 1. 9                            | 7. 2. 9                            | 7. 2. 9                            | 7. 2. 9                            | 7. 1. 9                              | 7. 2. 9                            | 7. 2. 9                            |
| 1          | + 7 <sup>0</sup><br>7 <sup>1</sup> | + 7 <sup>0</sup><br>7 <sup>3</sup> | + 3 <sup>0</sup><br>3 <sup>1</sup> | + 6 <sup>0</sup><br>6 <sup>1</sup> | + 7 <sup>0</sup><br>7 <sup>3</sup> | + 10 <sup>0</sup><br>10 <sup>2</sup> | + 9 <sup>0</sup><br>9 <sup>0</sup> | + 7 <sup>0</sup><br>7 <sup>6</sup> |
| 2          | 5 <sup>1</sup>                     | 6 <sup>4</sup>                     | 3 <sup>2</sup>                     | 4 <sup>9</sup>                     | 6 <sup>2</sup>                     | 13 <sup>0</sup>                      | 7 <sup>0</sup>                     | 6 <sup>8</sup>                     |
| 3          | 10 <sup>4</sup>                    | 10 <sup>7</sup>                    | 7 <sup>2</sup>                     | 8 <sup>5</sup>                     | 8 <sup>6</sup>                     | 12 <sup>0</sup>                      | 12 <sup>0</sup>                    | 10 <sup>5</sup>                    |
| 4          | 10 <sup>7</sup>                    | 11 <sup>4</sup>                    | 6 <sup>6</sup>                     | 9 <sup>8</sup>                     | 11 <sup>2</sup>                    | 14 <sup>2</sup>                      | 11 <sup>0</sup>                    | 11 <sup>4</sup>                    |
| 5          | 9 <sup>6</sup>                     | 11 <sup>2</sup>                    | 6 <sup>0</sup>                     | 9 <sup>6</sup>                     | 10 <sup>6</sup>                    | 12 <sup>6</sup>                      | 12 <sup>3</sup>                    | 12 <sup>5</sup>                    |
| 6          | 10 <sup>8</sup>                    | 10 <sup>5</sup>                    | 5 <sup>9</sup>                     | 9 <sup>4</sup>                     | 10 <sup>0</sup>                    | 14 <sup>5</sup>                      | 11 <sup>0</sup>                    | 14 <sup>4</sup>                    |
| 7          | 13 <sup>0</sup>                    | 12 <sup>5</sup>                    | 7 <sup>6</sup>                     | 10 <sup>6</sup>                    | 12 <sup>2</sup>                    | 12 <sup>6</sup>                      | 11 <sup>3</sup>                    | 11 <sup>7</sup>                    |
| 8          | 14 <sup>4</sup>                    | 14 <sup>3</sup>                    | 10 <sup>2</sup>                    | 12 <sup>9</sup>                    | 14 <sup>1</sup>                    | 12 <sup>2</sup>                      | 13 <sup>6</sup>                    | 14 <sup>4</sup>                    |
| 9          | 16 <sup>4</sup>                    | 15 <sup>8</sup>                    | 11 <sup>5</sup>                    | 13 <sup>8</sup>                    | 14 <sup>8</sup>                    | 13 <sup>4</sup>                      | 14 <sup>6</sup>                    | 14 <sup>9</sup>                    |
| 10         | 14 <sup>7</sup>                    | 16 <sup>4</sup>                    | 10 <sup>2</sup>                    | 14 <sup>3</sup>                    | 15 <sup>0</sup>                    | 12 <sup>3</sup>                      | 14 <sup>3</sup>                    | 14 <sup>6</sup>                    |
| 11         | 13 <sup>4</sup>                    | 13 <sup>9</sup>                    | 11 <sup>0</sup>                    | 12 <sup>9</sup>                    | 13 <sup>7</sup>                    | 14 <sup>2</sup>                      | 15 <sup>6</sup>                    | 12 <sup>8</sup>                    |
| 12         | 12 <sup>8</sup>                    | 12 <sup>9</sup>                    | 7 <sup>9</sup>                     | 12 <sup>7</sup>                    | 13 <sup>9</sup>                    | 15 <sup>6</sup>                      | 14 <sup>3</sup>                    | 12 <sup>4</sup>                    |
| 13         | 14 <sup>3</sup>                    | 13 <sup>1</sup>                    | 10 <sup>4</sup>                    | 12 <sup>2</sup>                    | 13 <sup>1</sup>                    | 16 <sup>4</sup>                      | 15 <sup>0</sup>                    | 14 <sup>0</sup>                    |
| 14         | 17 <sup>5</sup>                    | 16 <sup>6</sup>                    | 12 <sup>6</sup>                    | 14 <sup>3</sup>                    | 15 <sup>1</sup>                    | 17 <sup>7</sup>                      | 14 <sup>0</sup>                    | 16 <sup>6</sup>                    |
| 15         | 20 <sup>9</sup>                    | 20 <sup>5</sup>                    | 13 <sup>6</sup>                    | 19 <sup>9</sup>                    | 20 <sup>0</sup>                    | 21 <sup>6</sup>                      | 20 <sup>7</sup>                    | 19 <sup>3</sup>                    |
| 16         | 20 <sup>1</sup>                    | 22 <sup>2</sup>                    | 16 <sup>1</sup>                    | 20 <sup>8</sup>                    | 21 <sup>0</sup>                    | 22 <sup>3</sup>                      | 22 <sup>7</sup>                    | 20 <sup>6</sup>                    |
| 17         | 12 <sup>6</sup>                    | 13 <sup>8</sup>                    | 9 <sup>0</sup>                     | 12 <sup>2</sup>                    | 13 <sup>1</sup>                    | 18 <sup>3</sup>                      | 15 <sup>7</sup>                    | 13 <sup>7</sup>                    |
| 18         | 15 <sup>2</sup>                    | 15 <sup>3</sup>                    | 12 <sup>5</sup>                    | 13 <sup>3</sup>                    | 14 <sup>5</sup>                    | 22 <sup>8</sup>                      | 14 <sup>3</sup>                    | 13 <sup>5</sup>                    |
| 19         | 16 <sup>8</sup>                    | 15 <sup>9</sup>                    | 12 <sup>2</sup>                    | 14 <sup>8</sup>                    | 15 <sup>6</sup>                    | 20 <sup>1</sup>                      | 15 <sup>0</sup>                    | 17 <sup>9</sup>                    |
| 20         | 19 <sup>2</sup>                    | 19 <sup>6</sup>                    | 12 <sup>8</sup>                    | 16 <sup>9</sup>                    | 18 <sup>3</sup>                    | 21 <sup>5</sup>                      | 21 <sup>0</sup>                    | 19 <sup>0</sup>                    |
| 21         | 13 <sup>9</sup>                    | 17 <sup>1</sup>                    | 11 <sup>6</sup>                    | 15 <sup>6</sup>                    | 16 <sup>6</sup>                    | 18 <sup>7</sup>                      | 16 <sup>0</sup>                    | 17 <sup>3</sup>                    |
| 22         | 13 <sup>1</sup>                    | 13 <sup>8</sup>                    | 10 <sup>1</sup>                    | 12 <sup>5</sup>                    | 13 <sup>5</sup>                    | 17 <sup>0</sup>                      | 14 <sup>0</sup>                    | 13 <sup>7</sup>                    |
| 23         | 9 <sup>8</sup>                     | 11 <sup>6</sup>                    | 7 <sup>3</sup>                     | 9 <sup>5</sup>                     | 10 <sup>9</sup>                    | 13 <sup>3</sup>                      | 11 <sup>0</sup>                    | 10 <sup>0</sup>                    |
| 24         | 13 <sup>6</sup>                    | 15 <sup>2</sup>                    | 11 <sup>0</sup>                    | 12 <sup>9</sup>                    | 14 <sup>5</sup>                    | 15 <sup>0</sup>                      | 13 <sup>0</sup>                    | 15 <sup>4</sup>                    |
| 25         | 15 <sup>4</sup>                    | 16 <sup>8</sup>                    | 11 <sup>4</sup>                    | 16 <sup>0</sup>                    | 16 <sup>3</sup>                    | 16 <sup>0</sup>                      | 16 <sup>3</sup>                    | 17 <sup>5</sup>                    |
| 26         | 14 <sup>9</sup>                    | 17 <sup>8</sup>                    | 7 <sup>9</sup>                     | 14 <sup>7</sup>                    | 15 <sup>5</sup>                    | 14 <sup>4</sup>                      | 14 <sup>0</sup>                    | 16 <sup>5</sup>                    |
| 27         | 11 <sup>0</sup>                    | 11 <sup>6</sup>                    | 8 <sup>2</sup>                     | 11 <sup>7</sup>                    | 13 <sup>6</sup>                    | 13 <sup>5</sup>                      | 12 <sup>6</sup>                    | 11 <sup>4</sup>                    |
| 28         | 11 <sup>9</sup>                    | 13 <sup>8</sup>                    | 11 <sup>4</sup>                    | 13 <sup>1</sup>                    | 14 <sup>6</sup>                    | 13 <sup>0</sup>                      | 13 <sup>6</sup>                    | 14 <sup>4</sup>                    |
| 29         | 7 <sup>4</sup>                     | 8 <sup>5</sup>                     | 3 <sup>0</sup>                     | 6 <sup>5</sup>                     | 7 <sup>5</sup>                     | 6 <sup>6</sup>                       | 9 <sup>0</sup>                     | 7 <sup>5</sup>                     |
| 30         | 8 <sup>2</sup>                     | 9 <sup>2</sup>                     | 3 <sup>6</sup>                     | 7 <sup>1</sup>                     | 7 <sup>7</sup>                     | 7 <sup>3</sup>                       | 9 <sup>0</sup>                     | 8 <sup>6</sup>                     |
| 31         | 12 <sup>9</sup>                    | 13 <sup>1</sup>                    | 11 <sup>0</sup>                    | 12 <sup>4</sup>                    | 12 <sup>6</sup>                    | 14 <sup>0</sup>                      | 7 <sup>0</sup>                     | 14 <sup>5</sup>                    |
| Średnia    | + 13 <sup>1</sup>                  | + 13 <sup>8</sup>                  | + 9 <sup>2</sup>                   | + 12 <sup>3</sup>                  | + 13 <sup>3</sup>                  | + 15 <sup>0</sup>                    | + 13 <sup>6</sup>                  | + 13 <sup>7</sup>                  |
| Max.<br>d. | + 25 <sup>3</sup><br>19            | + 27 <sup>2</sup><br>20            | + 20 <sup>2</sup><br>19            | + 25 <sup>0</sup><br>16            | + 26 <sup>2</sup><br>15            | + 25 <sup>0</sup><br>15 i 20         | + 28 <sup>0</sup><br>16            | + 27 <sup>6</sup><br>19            |
| Min.<br>d. | + 2 <sup>6</sup><br>2              | + 4 <sup>1</sup><br>1 i 2          | - 0 <sup>3</sup><br>1              | + 1 <sup>7</sup><br>2              | + 2 <sup>9</sup><br>2              | + 5 <sup>4</sup><br>29               | + 2 <sup>0</sup><br>2              | - 0 <sup>2</sup><br>2              |



w stopniach Celsiusza  
dzienne.

| Du-<br>blany | Dela-<br>tyn | Oży-<br>dów | Krzy-<br>wo-<br>równia | Koło-<br>myja | Ober-<br>tyn | Tar-<br>nopol | Jagiel-<br>nica |
|--------------|--------------|-------------|------------------------|---------------|--------------|---------------|-----------------|
| 7. 2. 9      | 7. 2. 8      | 7. 2. 9     | 7. 2. 9                | 7. 12. 8      | 7. 2. 9      | 7. 2. 9       | 7. 2. 9         |
| 0            | 0            | 0           | 0                      | 0             | 0            | 0             | 0               |
| + 9'1        | + 9'0        | + 10'6      | + 8'3                  | + 10'0        | + 11'5       | + 10'2        | + 10'5          |
| 6'1          | 6'5          | 5'9         | 7'5                    | 7'8           | 8'4          | 6'1           | 7'2             |
| 9'9          | 8'9          | 9'5         | 8'4                    | 8'6           | 9'4          | 9'0           | 7'3             |
| 11'1         | 11'7         | 10'8        | 12'3                   | 13'7          | 12'1         | 12'0          | 10'2            |
| 13'3         | 12'1         | 13'3        | 11'9                   | 12'5          | 12'8         | 13'5          | 12'0            |
| 14'7         | 12'3         | 15'4        | 13'3                   | 13'8          | 14'6         | 16'5          | 14'8            |
| 12'3         | 12'3         | 12'9        | 13'2                   | 11'5          | 12'3         | 12'0          | 11'6            |
| 14'5         | 13'8         | 14'5        | 15'6                   | 13'4          | 12'9         | 12'4          | 12'0            |
| 15'4         | 13'6         | 15'6        | 16'0                   | 15'2          | 14'1         | 14'9          | 13'2            |
| 15'2         | 14'7         | 15'8        | 13'4                   | 16'4          | 14'5         | 15'1          | 14'9            |
| 13'2         | 15'9         | 14'0        | 16'1                   | 17'5          | 15'5         | 14'0          | 15'1            |
| 13'3         | 14'5         | 13'2        | 14'1                   | 15'7          | 14'8         | 14'1          | 15'3            |
| 13'2         | 13'1         | 12'9        | 13'3                   | 15'0          | 15'5         | 13'6          | 14'9            |
| 14'1         | 14'0         | 14'5        | 12'6                   | 13'3          | 14'6         | 12'5          | 14'5            |
| 20'6         | 17'5         | 19'5        | 15'5                   | 18'4          | 16'9         | 17'7          | 16'7            |
| 20'5         | 20'7         | 20'6        | 18'1                   | 22'7          | 19'6         | 20'6          | 19'5            |
| 14'2         | 16'3         | 15'2        | 16'0                   | 18'0          | 18'9         | 17'0          | 17'3            |
| 14'1         | 13'3         | 13'2        | 13'6                   | 13'5          | 14'8         | 12'7          | 15'4            |
| 17'6         | 14'7         | 16'2        | 14'7                   | 16'9          | 14'2         | 15'6          | 15'2            |
| 19'5         | 14'7         | 19'5        | 14'2                   | 17'7          | 17'1         | 18'9          | 18'1            |
| 17'0         | 16'4         | 16'8        | 12'5                   | 16'4          | 17'6         | 17'0          | 16'8            |
| 13'9         | 13'9         | 14'2        | 14'7                   | 15'2          | 10'5         | 13'7          | 15'7            |
| 9'3          | 11'3         | 10'1        | 11'9                   | 12'7          | 12'8         | 10'0          | 15'9            |
| 14'7         | 14'6         | 14'0        | 14'9                   | 15'7          | 14'9         | 14'5          | 14'7            |
| 17'9         | 16'3         | 17'8        | 15'2                   | 14'7          | 16'5         | 16'0          | 17'3            |
| 16'6         | 15'3         | 15'9        | 14'5                   | 14'9          | 15'8         | 14'9          | 15'2            |
| 11'5         | 12'8         | 13'5        | 11'8                   | 13'6          | 14'2         | 13'3          | 14'1            |
| 13'5         | 12'8         | 13'5        | 14'7                   | 15'2          | 14'3         | 13'9          | 14'6            |
| 8'1          | 9'1          | 8'2         | 11'1                   | 9'5           | 12'1         | 8'6           | 10'4            |
| 9'1          | 8'0          | 9'2         | 8'9                    | 10'5          | 10'1         | 8'7           | 9'8             |
| 14'2         | 12'7         | 12'8        | 14'0                   | 16'4          | 12'7         | 13'1          | 13'0            |
| + 13'8       | + 13'3       | + 13'8      | + 13'3                 | + 14'4        | + 14'3       | + 13'6        | + 14'0          |
| + 27'5       | + 27'0       | + 27'2      | + 26'4                 | + 29'2        | + 23'2       | + 27'7        | + 24'7          |
| 16           | 16           | 16          | 16                     | 16            | 16           | 16            | 16              |
| + 0'5        | + 4'0        | + 3'2       | + 4'4                  | + 5'2         | + 7'0        | + 1'3         | + 3'2           |
| 2            | 112          | 2           | 1                      | 2             | 2            | 2             | 4               |

## Ciepłota powietrza Średnie

Czerwiec 1899 roku.

| Dzień      | Kami-<br>tzer<br>Platte<br>8. 2. 8 | Biel-<br>sko<br>8. 2. 8        | Ży-<br>wiec<br>7. 2. 9     | Wado-<br>wice<br>7. 1. 10  | Czer-<br>ni-<br>chów<br>7. 2. 7 | Zako-<br>pane<br>7. 2. 9   | Kra-<br>ków<br>6. 2. 10    |
|------------|------------------------------------|--------------------------------|----------------------------|----------------------------|---------------------------------|----------------------------|----------------------------|
| 1          | + 12 <sup>0</sup> .9               | + 16 <sup>0</sup> .3           | + 14 <sup>0</sup> .7       | + 17 <sup>0</sup> .4       | + 16 <sup>0</sup> .6            | + 12 <sup>0</sup> .1       | + 14 <sup>0</sup> .9       |
| 2          | 11 <sup>0</sup> .0                 | 15 <sup>0</sup> .4             | 14 <sup>0</sup> .3         | 17 <sup>0</sup> .0         | 15 <sup>0</sup> .8              | 11 <sup>0</sup> .7         | 13 <sup>0</sup> .6         |
| 3          | 11 <sup>0</sup> .9                 | 16 <sup>0</sup> .8             | 15 <sup>0</sup> .9         | 18 <sup>0</sup> .7         | 17 <sup>0</sup> .6              | 13 <sup>0</sup> .2         | 14 <sup>0</sup> .6         |
| 4          | 13 <sup>0</sup> .6                 | 20 <sup>0</sup> .2             | 18 <sup>0</sup> .9         | 18 <sup>0</sup> .8         | 17 <sup>0</sup> .5              | 14 <sup>0</sup> .8         | 15 <sup>0</sup> .3         |
| 5          | 10 <sup>0</sup> .6                 | 15 <sup>0</sup> .4             | 14 <sup>0</sup> .8         | 15 <sup>0</sup> .7         | 16 <sup>0</sup> .6              | 12 <sup>0</sup> .7         | 15 <sup>0</sup> .1         |
| 6          | 14 <sup>0</sup> .7                 | 19 <sup>0</sup> .6             | 19 <sup>0</sup> .0         | 19 <sup>0</sup> .9         | 19 <sup>0</sup> .2              | 15 <sup>0</sup> .1         | 17 <sup>0</sup> .3         |
| 7          | 9 <sup>0</sup> .3                  | 14 <sup>0</sup> .5             | 14 <sup>0</sup> .1         | 18 <sup>0</sup> .5         | 15 <sup>0</sup> .7              | 12 <sup>0</sup> .2         | 15 <sup>0</sup> .9         |
| 8          | 10 <sup>0</sup> .7                 | 12 <sup>0</sup> .6             | 11 <sup>0</sup> .5         | 16 <sup>0</sup> .7         | 13 <sup>0</sup> .8              | 8 <sup>0</sup> .1          | 12 <sup>0</sup> .3         |
| 9          | 10 <sup>0</sup> .6                 | 15 <sup>0</sup> .2             | 14 <sup>0</sup> .0         | 16 <sup>0</sup> .2         | 15 <sup>0</sup> .9              | 10 <sup>0</sup> .5         | 14 <sup>0</sup> .1         |
| 10         | 4 <sup>0</sup> .6                  | 9 <sup>0</sup> .6              | 10 <sup>0</sup> .5         | 12 <sup>0</sup> .0         | 12 <sup>0</sup> .1              | 6 <sup>0</sup> .8          | 10 <sup>0</sup> .7         |
| 11         | 4 <sup>0</sup> .4                  | 9 <sup>0</sup> .9              | 8 <sup>0</sup> .7          | 10 <sup>0</sup> .4         | 11 <sup>0</sup> .7              | 4 <sup>0</sup> .7          | 10 <sup>0</sup> .1         |
| 12         | 6 <sup>0</sup> .7                  | 12 <sup>0</sup> .3             | 12 <sup>0</sup> .1         | 13 <sup>0</sup> .1         | 13 <sup>0</sup> .3              | 8 <sup>0</sup> .1          | 12 <sup>0</sup> .3         |
| 13         | 5 <sup>0</sup> .7                  | 9 <sup>0</sup> .5              | 9 <sup>0</sup> .9          | 12 <sup>0</sup> .6         | 11 <sup>0</sup> .5              | 8 <sup>0</sup> .1          | 10 <sup>0</sup> .1         |
| 14         | 5 <sup>0</sup> .3                  | 10 <sup>0</sup> .7             | 11 <sup>0</sup> .2         | 11 <sup>0</sup> .7         | 12 <sup>0</sup> .3              | 7 <sup>0</sup> .2          | 11 <sup>0</sup> .2         |
| 15         | 8 <sup>0</sup> .9                  | 13 <sup>0</sup> .8             | 12 <sup>0</sup> .9         | 14 <sup>0</sup> .1         | 14 <sup>0</sup> .9              | 9 <sup>0</sup> .7          | 13 <sup>0</sup> .3         |
| 16         | 11 <sup>0</sup> .6                 | 15 <sup>0</sup> .9             | 14 <sup>0</sup> .2         | 16 <sup>0</sup> .2         | 15 <sup>0</sup> .9              | 11 <sup>0</sup> .9         | 13 <sup>0</sup> .7         |
| 17         | 14 <sup>0</sup> .8                 | 18 <sup>0</sup> .3             | 17 <sup>0</sup> .2         | 18 <sup>0</sup> .2         | 18 <sup>0</sup> .5              | 14 <sup>0</sup> .4         | 16 <sup>0</sup> .7         |
| 18         | 12 <sup>0</sup> .4                 | 18 <sup>0</sup> .2             | 17 <sup>0</sup> .9         | 17 <sup>0</sup> .7         | 17 <sup>0</sup> .4              | 13 <sup>0</sup> .2         | 17 <sup>0</sup> .6         |
| 19         | 12 <sup>0</sup> .3                 | 18 <sup>0</sup> .0             | 17 <sup>0</sup> .9         | 17 <sup>0</sup> .9         | 18 <sup>0</sup> .5              | 15 <sup>0</sup> .6         | 17 <sup>0</sup> .2         |
| 20         | 14 <sup>0</sup> .8                 | 19 <sup>0</sup> .8             | 17 <sup>0</sup> .3         | 18 <sup>0</sup> .5         | 20 <sup>0</sup> .3              | 15 <sup>0</sup> .8         | 18 <sup>0</sup> .0         |
| 21         | 18 <sup>0</sup> .5                 | 21 <sup>0</sup> .5             | 17 <sup>0</sup> .8         | 19 <sup>0</sup> .8         | 20 <sup>0</sup> .8              | 16 <sup>0</sup> .0         | 19 <sup>0</sup> .5         |
| 22         | 16 <sup>0</sup> .4                 | 22 <sup>0</sup> .0             | 21 <sup>0</sup> .5         | 21 <sup>0</sup> .2         | 21 <sup>0</sup> .9              | 16 <sup>0</sup> .9         | 19 <sup>0</sup> .4         |
| 23         | 11 <sup>0</sup> .9                 | 15 <sup>0</sup> .6             | 16 <sup>0</sup> .0         | 17 <sup>0</sup> .0         | 17 <sup>0</sup> .8              | 14 <sup>0</sup> .2         | 17 <sup>0</sup> .3         |
| 24         | 6 <sup>0</sup> .2                  | 11 <sup>0</sup> .0             | 12 <sup>0</sup> .5         | 12 <sup>0</sup> .3         | 13 <sup>0</sup> .6              | 7 <sup>0</sup> .9          | 12 <sup>0</sup> .7         |
| 25         | 10 <sup>0</sup> .5                 | 15 <sup>0</sup> .3             | 15 <sup>0</sup> .7         | 20 <sup>0</sup> .3         | 16 <sup>0</sup> .9              | 10 <sup>0</sup> .6         | 14 <sup>0</sup> .7         |
| 26         | 9 <sup>0</sup> .0                  | 12 <sup>0</sup> .8             | 14 <sup>0</sup> .5         | 16 <sup>0</sup> .6         | 15 <sup>0</sup> .5              | 11 <sup>0</sup> .5         | 15 <sup>0</sup> .3         |
| 27         | 9 <sup>0</sup> .0                  | 13 <sup>0</sup> .8             | 14 <sup>0</sup> .0         | 15 <sup>0</sup> .3         | 15 <sup>0</sup> .5              | 9 <sup>0</sup> .3          | 15 <sup>0</sup> .0         |
| 28         | 8 <sup>0</sup> .1                  | 12 <sup>0</sup> .7             | 12 <sup>0</sup> .1         | 14 <sup>0</sup> .6         | 17 <sup>0</sup> .3              | 9 <sup>0</sup> .1          | 15 <sup>0</sup> .2         |
| 29         | 12 <sup>0</sup> .7                 | 16 <sup>0</sup> .8             | 16 <sup>0</sup> .2         | 16 <sup>0</sup> .6         | 18 <sup>0</sup> .5              | 12 <sup>0</sup> .8         | 16 <sup>0</sup> .9         |
| 30         | 17 <sup>0</sup> .0                 | 20 <sup>0</sup> .5             | 19 <sup>0</sup> .3         | 21 <sup>0</sup> .0         | 20 <sup>0</sup> .8              | 16 <sup>0</sup> .2         | 18 <sup>0</sup> .1         |
| Średnia    | + 10 <sup>0</sup> .9               | + 15 <sup>0</sup> .5           | + 14 <sup>0</sup> .9       | + 16 <sup>0</sup> .5       | + 16 <sup>0</sup> .5            | + 11 <sup>0</sup> .7       | + 14 <sup>0</sup> .9       |
| Max.<br>d. | + 20 <sup>0</sup> .7<br>22         | + 26 <sup>0</sup> .6<br>21     | + 26 <sup>0</sup> .2<br>22 | + 26 <sup>0</sup> .4<br>30 | + 25 <sup>0</sup> .1<br>21      | + 21 <sup>0</sup> .0<br>22 | + 26 <sup>0</sup> .0<br>22 |
| Min.<br>d. | + 0 <sup>0</sup> .6<br>14          | + 5 <sup>0</sup> .1<br>12 i 14 | + 6 <sup>0</sup> .8<br>11  | + 7 <sup>0</sup> .0<br>11  | + 8 <sup>0</sup> .9<br>13       | + 3 <sup>0</sup> .0<br>11  | + 6 <sup>0</sup> .6<br>16  |

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dziennie.

| Boch-<br>nia         | Suczaw-<br>nica      | Kry-<br>nica         | Tar-<br>nów          | Pilzno               | Iwo-<br>nicz         | Rze-<br>szów         | Smol-<br>nik         |
|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| 7. 1. 9              | 7. 1. 9              | 7. 2. 9              | 7. 1. 9              | 7. 1. 9              | 6. 2. 10             | 8. 2. 8              | 7. 1. 9              |
| + 15 <sup>0</sup> .8 | + 13 <sup>0</sup> .8 | + 10 <sup>0</sup> .8 | + 17 <sup>0</sup> .2 | + 16 <sup>0</sup> .1 | + 16 <sup>0</sup> .3 | + 14 <sup>0</sup> .9 | + 12 <sup>0</sup> .3 |
| 13.0                 | 11.1                 | 12.0                 | 15.5                 | 11.7                 | 13.2                 | 15.7                 | 11.6                 |
| 14.7                 | 14.7                 | 11.1                 | 16.1                 | 15.2                 | 12.8                 | 18.0                 | 11.5                 |
| 16.6                 | 17.9                 | 13.8                 | 18.4                 | 16.6                 | 17.0                 | 17.5                 | 16.6                 |
| 13.7                 | 15.0                 | 12.9                 | 15.8                 | 12.9                 | 14.3                 | 15.0                 | 12.3                 |
| 17.5                 | 16.2                 | 13.6                 | 19.3                 | 17.5                 | 16.7                 | 18.8                 | 14.1                 |
| 14.3                 | 14.1                 | 12.5                 | 16.1                 | 17.5                 | 16.7                 | 13.4                 | 14.0                 |
| 12.0                 | 10.1                 | 8.3                  | 12.3                 | 11.1                 | 11.5                 | 13.0                 | 9.2                  |
| 12.7                 | 12.4                 | 9.0                  | 15.3                 | 11.7                 | 11.7                 | 13.8                 | 11.3                 |
| 11.2                 | 10.8                 | 8.7                  | 14.5                 | 9.8                  | 11.7                 | 10.4                 | 11.6                 |
| 9.7                  | 8.4                  | 5.7                  | 11.5                 | 8.4                  | 9.3                  | 10.3                 | 6.3                  |
| 11.3                 | 9.7                  | 10.4                 | 12.5                 | 11.3                 | 12.0                 | 11.0                 | 9.1                  |
| 11.2                 | 10.2                 | 10.0                 | 10.8                 | 10.3                 | 10.1                 | 9.3                  | 8.6                  |
| 10.2                 | 9.5                  | 9.9                  | 11.9                 | 10.7                 | 10.2                 | 11.3                 | 9.1                  |
| 13.0                 | 9.7                  | 9.6                  | 13.9                 | 13.4                 | 11.3                 | 13.8                 | 10.5                 |
| 14.7                 | 13.6                 | 10.2                 | 16.4                 | 14.5                 | 14.6                 | 15.4                 | 15.0                 |
| 16.0                 | 16.3                 | 15.2                 | 18.7                 | 17.7                 | 10.7                 | 18.1                 | 16.8                 |
| 17.8                 | 15.1                 | 16.8                 | 20.7                 | 19.5                 | 19.3                 | 18.6                 | 17.3                 |
| 17.3                 | 16.8                 | 15.0                 | 20.7                 | 17.7                 | 18.6                 | 20.3                 | 15.8                 |
| 17.5                 | 17.1                 | 15.1                 | 19.8                 | 18.4                 | 17.7                 | 21.7                 | 16.9                 |
| 18.3                 | 17.3                 | 15.3                 | 20.3                 | 19.8                 | 18.8                 | 23.3                 | 18.5                 |
| 20.5                 | 19.1                 | 18.9                 | 21.5                 | 19.8                 | 19.5                 | 22.9                 | 17.8                 |
| 18.0                 | 17.2                 | 15.9                 | 20.3                 | 19.3                 | 17.5                 | 18.4                 | 18.4                 |
| 11.3                 | 10.5                 | 11.4                 | 11.9                 | 13.5                 | 12.6                 | 13.4                 | 11.1                 |
| 14.7                 | 12.3                 | 11.7                 | 17.1                 | 13.5                 | 13.5                 | 16.3                 | 12.2                 |
| 14.7                 | 13.4                 | 12.0                 | 16.9                 | 13.5                 | 14.3                 | 16.3                 | 13.0                 |
| 14.3                 | 12.1                 | 13.0                 | 15.2                 | 14.1                 | 13.5                 | 13.7                 | 12.7                 |
| 14.8                 | 12.4                 | 11.1                 | 15.2                 | 14.9                 | 14.1                 | 14.9                 | 10.1                 |
| 17.0                 | 14.3                 | 13.9                 | 19.1                 | 16.3                 | 16.8                 | 18.7                 | 14.4                 |
| 18.3                 | 17.9                 | 14.0                 | 20.1                 | 19.3                 | 19.1                 | 19.4                 | 16.5                 |
| + 14.7               | + 13.6               | + 12.3               | + 16.5               | + 14.9               | + 14.7               | + 15.9               | + 13.2               |
| + 25.0               | + 25.2               | + 21.0               | + 26.2               | + 25.0               | + 24.6               | + 27.0               | + 24.5               |
| 21                   | 4                    | 22                   | 22                   | 21                   | 30                   | 19                   | 18                   |
| + 7.0                | + 6.4                | + 4.1                | + 6.3                | + 6.0                | + 6.4                | + 7.8                | + 2.8                |
| 11.3                 | 12                   | 11                   | 13                   | 8                    | 9                    | 13                   | 11                   |

# Ciepłota powietrza

## Średnie

Czerwiec 1899 roku.

| Dzień      | Sanok                | Prze-<br>myśl        | Łom-<br>na           | Chy-<br>rów          | Stare-<br>miasto     | Sam-<br>bor          | Dolina               | Lwów                 |
|------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|            | 7. 2. 9              | 7. 1. 9              | 7. 2. 9              | 7. 2. 9              | 7. 2. 9              | 7. 1. 9              | 6. 2. 9              | 7. 2. 9              |
| 1          | + 14 <sup>0</sup> ·2 | + 14 <sup>0</sup> ·7 | + 11 <sup>0</sup> ·6 | + 13 <sup>0</sup> ·6 | + 14 <sup>0</sup> ·6 | + 15 <sup>0</sup> ·0 | + 10 <sup>0</sup> ·0 | + 16 <sup>0</sup> ·7 |
| 2          | 12·7                 | 14·1                 | 9·0                  | 11·9                 | 12·3                 | 13·0                 | 11·0                 | 14·5                 |
| 3          | 12·8                 | 12·1                 | 8·3                  | 12·4                 | 13·4                 | 12·0                 | 12·3                 | 15·6                 |
| 4          | 15·7                 | 16·5                 | 12·8                 | 11·9                 | 16·6                 | 16·1                 | 13·7                 | 17·6                 |
| 5          | 13·4                 | 14·7                 | 11·1                 | 13·4                 | 14·8                 | 13·3                 | 16·0                 | 14·8                 |
| 6          | 16·4                 | 14·9                 | 9·5                  | 16·2                 | 14·8                 | 15·9                 | 13·7                 | 16·7                 |
| 7          | 15·2                 | 11·9                 | 8·7                  | 13·7                 | 14·3                 | 13·7                 | 14·3                 | 15·4                 |
| 8          | 11·0                 | 10·6                 | 5·3                  | 11·0                 | 11·4                 | 10·0                 | 11·3                 | 10·8                 |
| 9          | 12·3                 | 11·4                 | 7·9                  | 11·3                 | 12·5                 | 11·8                 | 8·0                  | 13·0                 |
| 10         | 10·4                 | 12·9                 | 8·4                  | 13·4                 | 11·5                 | 10·4                 | 10·3                 | 10·3                 |
| 11         | 8·0                  | 10·6                 | 5·8                  | 7·8                  | 8·9                  | 9·7                  | 8·0                  | 9·4                  |
| 12         | 10·5                 | 12·3                 | 6·9                  | 10·2                 | 10·6                 | 10·7                 | 10·3                 | 11·1                 |
| 13         | 9·4                  | 11·4                 | 5·5                  | 10·5                 | 10·9                 | 9·3                  | 11·0                 | 10·6                 |
| 14         | 12·2                 | 12·1                 | 7·5                  | 9·6                  | 10·6                 | 10·4                 | 10·7                 | 10·8                 |
| 15         | 11·4                 | 13·9                 | 7·1                  | 11·8                 | 12·6                 | 12·3                 | 13·7                 | 14·8                 |
| 16         | 14·7                 | 14·8                 | 11·3                 | 13·2                 | 13·9                 | 14·7                 | 15·7                 | 15·5                 |
| 17         | 16·9                 | 18·2                 | 14·2                 | 17·8                 | 18·4                 | 17·7                 | 22·7                 | 19·5                 |
| 18         | 18·3                 | 20·7                 | 14·0                 | 18·0                 | 19·5                 | 18·6                 | 19·0                 | 20·0                 |
| 19         | 17·3                 | 19·2                 | 12·7                 | 16·6                 | 16·5                 | 17·2                 | 18·3                 | 19·4                 |
| 20         | 17·9                 | 18·6                 | 13·4                 | 16·2                 | 18·7                 | 17·1                 | 18·3                 | 19·5                 |
| 21         | 20·5                 | 18·1                 | 16·7                 | 19·0                 | 19·3                 | 18·9                 | 20·0                 | 21·8                 |
| 22         | 19·4                 | 21·9                 | 13·5                 | 18·8                 | 19·3                 | 18·7                 | 18·0                 | 21·1                 |
| 23         | 19·2                 | 20·6                 | 14·3                 | 18·6                 | 19·8                 | 18·1                 | 17·0                 | 21·7                 |
| 24         | 12·1                 | 13·1                 | 7·5                  | 11·6                 | 12·0                 | 11·7                 | 13·3                 | 12·9                 |
| 25         | 13·3                 | 13·9                 | 9·7                  | 13·3                 | 14·3                 | 14·7                 | 13·3                 | 14·6                 |
| 26         | 14·7                 | 14·6                 | 8·6                  | 13·6                 | 14·6                 | 14·9                 | 17·0                 | 16·1                 |
| 27         | 12·9                 | 15·5                 | 8·5                  | 13·8                 | 14·7                 | 14·9                 | 14·7                 | 14·9                 |
| 28         | 11·3                 | 14·2                 | 7·3                  | 11·6                 | 11·9                 | 13·0                 | 12·3                 | 13·9                 |
| 29         | 11·9                 | 16·2                 | 11·9                 | 14·6                 | 15·6                 | 16·4                 | 15·7                 | 16·0                 |
| 30         | 17·7                 | 17·5                 | 13·7                 | 16·8                 | 17·3                 | 17·7                 | 17·7                 | 19·2                 |
| Średnia    | + 14·1               | + 15·0               | + 10·1               | + 13·7               | + 14·5               | + 14·1               | + 14·2               | + 15·6               |
| Max.<br>d. | + 25·8<br>21         | + 27·0<br>21         | + 24·0<br>21         | + 24·0<br>21         | + 26·2<br>18         | + 25·0<br>4          | + 27·0<br>17         | + 28·4<br>23         |
| Min.<br>d. | + 6·1<br>11          | + 7·3<br>9           | + 1·9<br>7           | + 5·4<br>11          | + 6·7<br>11          | + 6·0<br>13          | + 5·0<br>4           | + 2·8<br>8           |

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dzienne.

| Dubla-<br>ny        | Dela-<br>tyn        | Oży-<br>dów         | Krzy-<br>wo-<br>równia | Koło-<br>myja       | Ober-<br>tyn        | Tar-<br>nopol       | Jagiel-<br>nica     |
|---------------------|---------------------|---------------------|------------------------|---------------------|---------------------|---------------------|---------------------|
| 7. 2. 9             | 7. 2. 8             | 7. 2. 9             | 7. 2. 9                | 7. 2. 9             | 7. 2. 9             | 7. 2. 9             | 7. 2. 9             |
| +16 <sup>0</sup> .1 | +13 <sup>0</sup> .3 | +14 <sup>0</sup> .3 | +13 <sup>0</sup> .4    | +15 <sup>0</sup> .2 | +14 <sup>0</sup> .4 | +14 <sup>0</sup> .7 | +16 <sup>0</sup> .9 |
| 14.0                | 13.5                | 14.4                | 12.3                   | 16.9                | 14.2                | 13.8                | 14.4                |
| 15.8                | 13.0                | 12.6                | 14.0                   | 15.9                | 14.2                | 13.3                | 13.2                |
| 17.5                | 15.0                | 16.3                | 15.1                   | 18.7                | 15.7                | 15.8                | 16.5                |
| 15.1                | 14.1                | 14.5                | 14.7                   | 16.9                | 16.0                | 14.6                | 14.5                |
| 17.5                | 15.0                | 15.5                | 15.5                   | 17.8                | 15.5                | 15.0                | 15.5                |
| 15.2                | 14.7                | 14.7                | 15.8                   | 16.3                | 15.6                | 13.7                | 14.8                |
| 11.7                | 12.0                | 10.2                | 11.2                   | 13.9                | 12.3                | 9.6                 | 11.0                |
| 12.2                | 11.7                | 11.5                | 9.9                    | 14.6                | 11.9                | 11.2                | 11.7                |
| 10.6                | 12.0                | 10.2                | 11.6                   | 12.5                | 12.2                | 10.7                | 12.6                |
| 8.9                 | 8.0                 | 9.5                 | 6.8                    | 9.0                 | 9.5                 | 7.7                 | 9.6                 |
| 11.5                | 10.3                | 10.0                | 7.6                    | 9.7                 | 9.4                 | 9.1                 | 7.7                 |
| 11.0                | 14.0                | 10.3                | 8.9                    | 11.7                | 11.5                | 11.1                | 11.3                |
| 11.5                | 12.0                | 10.9                | 13.5                   | 13.6                | 12.4                | 11.2                | 12.5                |
| 14.9                | 15.3                | 14.3                | 15.8                   | 16.7                | 15.5                | 15.8                | 15.9                |
| 15.3                | 15.5                | 16.4                | 15.9                   | 17.4                | 16.8                | 16.1                | 17.1                |
| 19.7                | 17.7                | 18.8                | 18.6                   | 19.5                | 18.4                | 18.3                | 19.3                |
| 20.1                | 16.3                | 19.9                | 16.6                   | 17.5                | 18.3                | 18.1                | 19.4                |
| 17.6                | 15.1                | 8.5                 | 16.0                   | 17.5                | 17.7                | 18.5                | 18.1                |
| 19.8                | 16.4                | 19.3                | 14.6                   | 18.7                | 18.1                | 19.1                | 18.0                |
| 21.5                | 17.5                | 19.8                | 16.4                   | 22.3                | 19.5                | 19.5                | 18.6                |
| 21.0                | 18.6                | 19.3                | 17.0                   | 20.4                | 19.8                | 20.2                | 17.0                |
| 21.6                | 20.0                | 20.6                | 19.7                   | 21.0                | 19.7                | 18.8                | 20.3                |
| 13.5                | 13.6                | 12.3                | 15.3                   | 14.3                | 14.6                | 12.4                | 11.3                |
| 14.7                | 14.8                | 13.9                | 14.1                   | 15.3                | 13.9                | 13.6                | 12.3                |
| 16.0                | 15.8                | 16.2                | 18.5                   | 17.3                | 15.9                | 16.0                | 15.7                |
| 15.3                | 15.4                | 15.1                | 15.8                   | 18.2                | 16.8                | 15.8                | 16.0                |
| 14.1                | 12.7                | 12.3                | 12.2                   | 14.8                | 15.2                | 13.6                | 10.7                |
| 16.9                | 14.5                | 15.2                | 14.1                   | 14.8                | 14.9                | 15.3                | 12.7                |
| 17.9                | 17.0                | 16.2                | 15.1                   | 17.5                | 15.9                | 16.5                | 16.3                |
| +15.6               | +14.5               | +14.8               | +14.2                  | +16.2               | +15.2               | +14.6               | +14.7               |
| +28.5               | +24.0               | +26.1               | +25.4                  | +27.6               | +22.4               | +26.2               | +24.0               |
| 23                  | 22 i 23             | 23                  | 23                     | 21                  | 23                  | 23                  | 23                  |
| +5.0                | +5.0                | +7.2                | +3.2                   | +7.0                | +8.1                | +2.9                | +7.6                |
| 3, 12 15            | 11                  | 8                   | 12 i 13                | 11                  | 12                  | 12                  | 11 i 12             |

Ciepłota powietrza  
Średnie

*Lipiec 1899 roku.*

| Dzień      | Kami-<br>tzer<br>Platte<br>8. 2. 8 | Biel-<br>sko<br>8. 2. 8      | Ży-<br>wiec<br>7. 2. 9        | Wado-<br>wice<br>7. 1. 10 | Czer-<br>ni-<br>chów<br>7. 2. 7 | Zako-<br>pane<br>7. 2. 9. | Kra-<br>ków<br>6. 2. 10   |
|------------|------------------------------------|------------------------------|-------------------------------|---------------------------|---------------------------------|---------------------------|---------------------------|
| 1          | + 13 <sup>•</sup> 1                | + 17 <sup>•</sup> 8          | + 18 <sup>•</sup> 7           | + 18 <sup>•</sup> 8       | + 18 <sup>•</sup> 8             | + 15 <sup>•</sup> 7       | + 18 <sup>•</sup> 9       |
| 2          | 15 <sup>•</sup> 8                  | 19 <sup>•</sup> 9            | 20 <sup>•</sup> 8             | 20 <sup>•</sup> 0         | 21 <sup>•</sup> 3               | 17 <sup>•</sup> 4         | 19 <sup>•</sup> 8         |
| 3          | 8 <sup>•</sup> 0                   | 13 <sup>•</sup> 4            | 14 <sup>•</sup> 9             | 17 <sup>•</sup> 2         | 15 <sup>•</sup> 5               | 11 <sup>•</sup> 7         | 14 <sup>•</sup> 2         |
| 4          | 9 <sup>•</sup> 6                   | 15 <sup>•</sup> 9            | 15 <sup>•</sup> 4             | 16 <sup>•</sup> 5         | 16 <sup>•</sup> 5               | 12 <sup>•</sup> 9         | 15 <sup>•</sup> 0         |
| 5          | 11 <sup>•</sup> 3                  | 14 <sup>•</sup> 4            | 14 <sup>•</sup> 3             | 14 <sup>•</sup> 2         | 15 <sup>•</sup> 0               | —                         | 14 <sup>•</sup> 3         |
| 6          | 9 <sup>•</sup> 1                   | 14 <sup>•</sup> 8            | 15 <sup>•</sup> 5             | 16 <sup>•</sup> 1         | 15 <sup>•</sup> 4               | —                         | 15 <sup>•</sup> 1         |
| 7          | 10 <sup>•</sup> 2                  | 14 <sup>•</sup> 6            | 14 <sup>•</sup> 9             | 16 <sup>•</sup> 6         | 16 <sup>•</sup> 6               | 11 <sup>•</sup> 7         | 15 <sup>•</sup> 1         |
| 8          | 10 <sup>•</sup> 5                  | 14 <sup>•</sup> 7            | 14 <sup>•</sup> 2             | 15 <sup>•</sup> 3         | 16 <sup>•</sup> 5               | 11 <sup>•</sup> 7         | 15 <sup>•</sup> 7         |
| 9          | 10 <sup>•</sup> 5                  | 14 <sup>•</sup> 2            | 14 <sup>•</sup> 4             | 15 <sup>•</sup> 6         | 15 <sup>•</sup> 2               | 13 <sup>•</sup> 2         | 14 <sup>•</sup> 7         |
| 10         | 13 <sup>•</sup> 1                  | 18 <sup>•</sup> 6            | 17 <sup>•</sup> 7             | 18 <sup>•</sup> 7         | 17 <sup>•</sup> 9               | 13 <sup>•</sup> 0         | 17 <sup>•</sup> 7         |
| 11         | 13 <sup>•</sup> 5                  | 20 <sup>•</sup> 5            | 18 <sup>•</sup> 8             | 18 <sup>•</sup> 8         | 20 <sup>•</sup> 1               | 15 <sup>•</sup> 1         | 19 <sup>•</sup> 0         |
| 12         | 15 <sup>•</sup> 2                  | 20 <sup>•</sup> 4            | 17 <sup>•</sup> 9             | 18 <sup>•</sup> 8         | 20 <sup>•</sup> 0               | 16 <sup>•</sup> 7         | 18 <sup>•</sup> 6         |
| 13         | 17 <sup>•</sup> 7                  | 21 <sup>•</sup> 6            | 19 <sup>•</sup> 2             | 19 <sup>•</sup> 3         | 20 <sup>•</sup> 2               | 16 <sup>•</sup> 2         | 18 <sup>•</sup> 6         |
| 14         | 17 <sup>•</sup> 2                  | 21 <sup>•</sup> 5            | 19 <sup>•</sup> 3             | 19 <sup>•</sup> 6         | 21 <sup>•</sup> 7               | 16 <sup>•</sup> 9         | 19 <sup>•</sup> 8         |
| 15         | 15 <sup>•</sup> 8                  | 19 <sup>•</sup> 3            | 17 <sup>•</sup> 9             | 20 <sup>•</sup> 4         | 22 <sup>•</sup> 1               | 16 <sup>•</sup> 3         | 20 <sup>•</sup> 5         |
| 16         | 15 <sup>•</sup> 3                  | 19 <sup>•</sup> 6            | 18 <sup>•</sup> 5             | 20 <sup>•</sup> 5         | 20 <sup>•</sup> 1               | 15 <sup>•</sup> 7         | 17 <sup>•</sup> 7         |
| 17         | 15 <sup>•</sup> 5                  | 19 <sup>•</sup> 4            | 16 <sup>•</sup> 6             | 20 <sup>•</sup> 5         | 19 <sup>•</sup> 4               | 14 <sup>•</sup> 3         | 16 <sup>•</sup> 9         |
| 18         | 14 <sup>•</sup> 3                  | 17 <sup>•</sup> 5            | 18 <sup>•</sup> 6             | 19 <sup>•</sup> 8         | 18 <sup>•</sup> 9               | —                         | 18 <sup>•</sup> 6         |
| 19         | 14 <sup>•</sup> 0                  | 17 <sup>•</sup> 8            | 19 <sup>•</sup> 1             | 20 <sup>•</sup> 1         | 20 <sup>•</sup> 2               | 15 <sup>•</sup> 5         | 15 <sup>•</sup> 5         |
| 20         | 15 <sup>•</sup> 6                  | 18 <sup>•</sup> 5            | 19 <sup>•</sup> 5             | 21 <sup>•</sup> 5         | 20 <sup>•</sup> 3               | 16 <sup>•</sup> 9         | 18 <sup>•</sup> 7         |
| 21         | 17 <sup>•</sup> 1                  | 21 <sup>•</sup> 8            | 21 <sup>•</sup> 1             | 21 <sup>•</sup> 8         | 22 <sup>•</sup> 2               | 17 <sup>•</sup> 1         | 20 <sup>•</sup> 3         |
| 22         | 18 <sup>•</sup> 1                  | 22 <sup>•</sup> 6            | 21 <sup>•</sup> 9             | 23 <sup>•</sup> 1         | 22 <sup>•</sup> 9               | 18 <sup>•</sup> 1         | 21 <sup>•</sup> 1         |
| 23         | 20 <sup>•</sup> 2                  | 22 <sup>•</sup> 9            | 23 <sup>•</sup> 1             | 22 <sup>•</sup> 6         | 23 <sup>•</sup> 7               | 19 <sup>•</sup> 9         | 23 <sup>•</sup> 2         |
| 24         | 17 <sup>•</sup> 1                  | 19 <sup>•</sup> 3            | 20 <sup>•</sup> 2             | 20 <sup>•</sup> 5         | 20 <sup>•</sup> 2               | 17 <sup>•</sup> 6         | 19 <sup>•</sup> 3         |
| 25         | 13 <sup>•</sup> 6                  | 18 <sup>•</sup> 4            | 18 <sup>•</sup> 5             | 20 <sup>•</sup> 9         | 20 <sup>•</sup> 2               | 15 <sup>•</sup> 2         | 19 <sup>•</sup> 8         |
| 26         | 14 <sup>•</sup> 5                  | 20 <sup>•</sup> 4            | 19 <sup>•</sup> 9             | 22 <sup>•</sup> 1         | 21 <sup>•</sup> 0               | 16 <sup>•</sup> 6         | 20 <sup>•</sup> 3         |
| 27         | 14 <sup>•</sup> 2                  | 19 <sup>•</sup> 8            | 20 <sup>•</sup> 9             | 21 <sup>•</sup> 7         | 19 <sup>•</sup> 9               | 16 <sup>•</sup> 7         | 17 <sup>•</sup> 8         |
| 28         | 9 <sup>•</sup> 5                   | 15 <sup>•</sup> 4            | 15 <sup>•</sup> 4             | 21 <sup>•</sup> 2         | 17 <sup>•</sup> 2               | 11 <sup>•</sup> 8         | 15 <sup>•</sup> 9         |
| 29         | 8 <sup>•</sup> 8                   | 15 <sup>•</sup> 1            | 15 <sup>•</sup> 7             | 19 <sup>•</sup> 8         | 16 <sup>•</sup> 8               | 12 <sup>•</sup> 4         | 15 <sup>•</sup> 2         |
| 30         | 11 <sup>•</sup> 3                  | 16 <sup>•</sup> 0            | 16 <sup>•</sup> 6             | 20 <sup>•</sup> 3         | 16 <sup>•</sup> 4               | 13 <sup>•</sup> 5         | 16 <sup>•</sup> 4         |
| 31         | 13 <sup>•</sup> 2                  | 16 <sup>•</sup> 5            | 17 <sup>•</sup> 7             | 19 <sup>•</sup> 5         | 18 <sup>•</sup> 0               | 14 <sup>•</sup> 0         | 17 <sup>•</sup> 1         |
| Średnia    | + 13 <sup>•</sup> 6                | + 18 <sup>•</sup> 1          | + 18 <sup>•</sup> 0           | + 19 <sup>•</sup> 4       | + 19 <sup>•</sup> 0             | + 15 <sup>•</sup> 1       | + 17 <sup>•</sup> 8       |
| Max.<br>d. | + 23 <sup>•</sup> 7<br>12          | + 29 <sup>•</sup> 5<br>23    | + 30 <sup>•</sup> 6<br>23     | + 29 <sup>•</sup> 9<br>23 | + 26 <sup>•</sup> 3<br>22       | + 25 <sup>•</sup> 0<br>23 | + 30 <sup>•</sup> 9<br>23 |
| Min.<br>d. | + 5 <sup>•</sup> 5<br>4            | + 10 <sup>•</sup> 4<br>3 i 4 | + 13 <sup>•</sup> 2<br>7 i 19 | + 11 <sup>•</sup> 8<br>5  | + 13 <sup>•</sup> 3<br>4        | + 8 <sup>•</sup> 1<br>3   | + 11 <sup>•</sup> 3<br>4  |

w stopniach Celsiusza.  
dzienne.

| Boch-<br>nia                | Szczaw-<br>nica<br>7. 1. 9 | Kry-<br>nica<br>7. 2. 9 | Tar-<br>nów<br>7. 1. 9 | Pilzno<br>7. 1. 9   | Iwo-<br>nicz<br>6. 2. 10 | Rze-<br>szów<br>8. 2. 8 | Smol-<br>nik<br>7. 1. 9 |
|-----------------------------|----------------------------|-------------------------|------------------------|---------------------|--------------------------|-------------------------|-------------------------|
| Nie zapisywano spostrzeżeń. | + 17 <sup>0</sup> 9        | + 17 <sup>0</sup> 3     | + 21 <sup>0</sup> 3    | + 19 <sup>0</sup> 5 | + 21 <sup>0</sup> 4      | + 25 <sup>0</sup> 2     | + 18 <sup>0</sup> 8     |
|                             | 19 <sup>0</sup> 7          | 17 <sup>0</sup> 1       | 22 <sup>0</sup> 4      | 21 <sup>0</sup> 8   | 21 <sup>0</sup> 9        | 23 <sup>0</sup> 2       | 19 <sup>0</sup> 6       |
|                             | 14 <sup>0</sup> 6          | 15 <sup>0</sup> 4       | 14 <sup>0</sup> 7      | 15 <sup>0</sup> 7   | 17 <sup>0</sup> 4        | 18 <sup>0</sup> 5       | 14 <sup>0</sup> 8       |
|                             | 13 <sup>0</sup> 8          | 11 <sup>0</sup> 4       | 17 <sup>0</sup> 1      | 17 <sup>0</sup> 0   | 15 <sup>0</sup> 3        | 14 <sup>0</sup> 7       | 13 <sup>0</sup> 7       |
|                             | 12 <sup>0</sup> 9          | 12 <sup>0</sup> 0       | 15 <sup>0</sup> 7      | 14 <sup>0</sup> 6   | 14 <sup>0</sup> 7        | 13 <sup>0</sup> 7       | 15 <sup>0</sup> 3       |
|                             | 14 <sup>0</sup> 0          | 14 <sup>0</sup> 0       | 14 <sup>0</sup> 9      | 14 <sup>0</sup> 5   | 14 <sup>0</sup> 7        | 13 <sup>0</sup> 7       | 14 <sup>0</sup> 0       |
|                             | 14 <sup>0</sup> 6          | 12 <sup>0</sup> 4       | 15 <sup>0</sup> 2      | 15 <sup>0</sup> 7   | 16 <sup>0</sup> 5        | 17 <sup>0</sup> 2       | 14 <sup>0</sup> 5       |
|                             | 14 <sup>0</sup> 5          | 13 <sup>0</sup> 4       | 15 <sup>0</sup> 8      | 15 <sup>0</sup> 7   | 15 <sup>0</sup> 7        | 15 <sup>0</sup> 4       | 13 <sup>0</sup> 3       |
|                             | 15 <sup>0</sup> 7          | 13 <sup>0</sup> 9       | 17 <sup>0</sup> 1      | 16 <sup>0</sup> 3   | 16 <sup>0</sup> 7        | 18 <sup>0</sup> 1       | 15 <sup>0</sup> 9       |
|                             | 15 <sup>0</sup> 8          | 15 <sup>0</sup> 2       | 17 <sup>0</sup> 5      | 16 <sup>0</sup> 8   | 17 <sup>0</sup> 8        | 15 <sup>0</sup> 9       | 16 <sup>0</sup> 1       |
|                             | 16 <sup>0</sup> 0          | 16 <sup>0</sup> 8       | 20 <sup>0</sup> 2      | 19 <sup>0</sup> 1   | 18 <sup>0</sup> 6        | 19 <sup>0</sup> 6       | 17 <sup>0</sup> 4       |
|                             | 16 <sup>0</sup> 2          | 15 <sup>0</sup> 7       | 19 <sup>0</sup> 3      | 18 <sup>0</sup> 7   | 18 <sup>0</sup> 0        | 20 <sup>0</sup> 9       | 18 <sup>0</sup> 9       |
|                             | 17 <sup>0</sup> 4          | 14 <sup>0</sup> 8       | 20 <sup>0</sup> 4      | 19 <sup>0</sup> 3   | 19 <sup>0</sup> 4        | 21 <sup>0</sup> 0       | 18 <sup>0</sup> 7       |
|                             | 17 <sup>0</sup> 7          | 15 <sup>0</sup> 7       | 21 <sup>0</sup> 4      | 19 <sup>0</sup> 6   | 19 <sup>0</sup> 3        | 22 <sup>0</sup> 7       | 18 <sup>0</sup> 9       |
|                             | 17 <sup>0</sup> 2          | 15 <sup>0</sup> 6       | 21 <sup>0</sup> 0      | 19 <sup>0</sup> 4   | 17 <sup>0</sup> 6        | 23 <sup>0</sup> 0       | 19 <sup>0</sup> 1       |
|                             | 17 <sup>0</sup> 1          | 15 <sup>0</sup> 1       | 20 <sup>0</sup> 9      | 17 <sup>0</sup> 2   | 17 <sup>0</sup> 3        | 22 <sup>0</sup> 2       | 17 <sup>0</sup> 5       |
|                             | 15 <sup>0</sup> 1          | 16 <sup>0</sup> 0       | 19 <sup>0</sup> 7      | 18 <sup>0</sup> 0   | 17 <sup>0</sup> 9        | 19 <sup>0</sup> 3       | 16 <sup>0</sup> 9       |
|                             | 16 <sup>0</sup> 8          | 16 <sup>0</sup> 1       | 18 <sup>0</sup> 3      | 17 <sup>0</sup> 7   | 17 <sup>0</sup> 5        | 20 <sup>0</sup> 7       | 15 <sup>0</sup> 9       |
|                             | 17 <sup>0</sup> 0          | 16 <sup>0</sup> 1       | 19 <sup>0</sup> 8      | 19 <sup>0</sup> 3   | 18 <sup>0</sup> 7        | 20 <sup>0</sup> 8       | 18 <sup>0</sup> 1       |
|                             | 18 <sup>0</sup> 0          | 17 <sup>0</sup> 7       | 19 <sup>0</sup> 8      | 19 <sup>0</sup> 2   | 19 <sup>0</sup> 7        | 21 <sup>0</sup> 3       | 18 <sup>0</sup> 4       |
|                             | 18 <sup>0</sup> 9          | 16 <sup>0</sup> 6       | 21 <sup>0</sup> 6      | 20 <sup>0</sup> 5   | 19 <sup>0</sup> 5        | 23 <sup>0</sup> 2       | 17 <sup>0</sup> 8       |
|                             | 19 <sup>0</sup> 2          | 17 <sup>0</sup> 1       | 22 <sup>0</sup> 2      | 21 <sup>0</sup> 1   | 20 <sup>0</sup> 7        | 23 <sup>0</sup> 5       | 18 <sup>0</sup> 9       |
|                             | 20 <sup>0</sup> 6          | 18 <sup>0</sup> 8       | 23 <sup>0</sup> 7      | 22 <sup>0</sup> 5   | 22 <sup>0</sup> 1        | 21 <sup>0</sup> 5       | 21 <sup>0</sup> 5       |
|                             | 19 <sup>0</sup> 2          | 18 <sup>0</sup> 6       | 20 <sup>0</sup> 8      | 21 <sup>0</sup> 7   | 20 <sup>0</sup> 6        | 21 <sup>0</sup> 1       | 19 <sup>0</sup> 9       |
|                             | 18 <sup>0</sup> 2          | 17 <sup>0</sup> 9       | 20 <sup>0</sup> 2      | 18 <sup>0</sup> 1   | 20 <sup>0</sup> 3        | 20 <sup>0</sup> 1       | 18 <sup>0</sup> 3       |
|                             | 19 <sup>0</sup> 2          | 17 <sup>0</sup> 7       | 21 <sup>0</sup> 7      | 19 <sup>0</sup> 0   | 20 <sup>0</sup> 1        | 20 <sup>0</sup> 7       | 17 <sup>0</sup> 2       |
|                             | 19 <sup>0</sup> 0          | 18 <sup>0</sup> 4       | 20 <sup>0</sup> 2      | 20 <sup>0</sup> 1   | 20 <sup>0</sup> 2        | 20 <sup>0</sup> 5       | 16 <sup>0</sup> 8       |
|                             | 16 <sup>0</sup> 4          | 14 <sup>0</sup> 2       | 17 <sup>0</sup> 1      | 16 <sup>0</sup> 1   | 16 <sup>0</sup> 6        | 17 <sup>0</sup> 5       | 12 <sup>0</sup> 6       |
|                             | 13 <sup>0</sup> 9          | 12 <sup>0</sup> 6       | 15 <sup>0</sup> 7      | 16 <sup>0</sup> 3   | 16 <sup>0</sup> 9        | 15 <sup>0</sup> 7       | 12 <sup>0</sup> 4       |
|                             | 15 <sup>0</sup> 5          | 14 <sup>0</sup> 4       | 17 <sup>0</sup> 6      | 16 <sup>0</sup> 1   | 17 <sup>0</sup> 2        | 16 <sup>0</sup> 2       | 16 <sup>0</sup> 2       |
|                             | 16 <sup>0</sup> 3          | 15 <sup>0</sup> 7       | 18 <sup>0</sup> 3      | 17 <sup>0</sup> 5   | 18 <sup>0</sup> 2        | 15 <sup>0</sup> 9       | 15 <sup>0</sup> 6       |
|                             | + 16 <sup>0</sup> 7        | + 15 <sup>0</sup> 6     | + 19 <sup>0</sup> 1    | + 18 <sup>0</sup> 2 | + 18 <sup>0</sup> 3      | + 19 <sup>0</sup> 5     | + 17 <sup>0</sup> 0     |
|                             | + 26 <sup>0</sup> 6        | + 23 <sup>0</sup> 8     | + 29 <sup>0</sup> 0    | + 27 <sup>0</sup> 6 | + 27 <sup>0</sup> 0      | + 28 <sup>0</sup> 8     | + 28 <sup>0</sup> 0     |
|                             | 23                         | 23                      | 23                     | 23                  | 24                       | 14 i 22                 | 23                      |
|                             | + 10 <sup>0</sup> 6        | + 8 <sup>0</sup> 4      | + 11 <sup>0</sup> 4    | + 11 <sup>0</sup> 4 | + 11 <sup>0</sup> 8      | + 12 <sup>0</sup> 2     | + 10 <sup>0</sup> 0     |
|                             | 5                          | 4                       | 3                      | 3                   | 29                       | 4 i 5                   | 3                       |

## Ciepłota powietrza

Średnie

Lipiec 1899 roku.

| Dzień      | Sanok                | Prze-<br>myśl        | Łom-<br>na           | Chy-<br>rów          | Stare-<br>miasto     | Sam-<br>bor          | Doli-<br>na          | Łwów                 |
|------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|            | 7. 2. 9              | 7. 1. 9              | 7. 2. 9              | 7. 2. 9              | 7. 2. 9              | 7. 1. 9              | 6. 2. 9              | 7. 2. 9              |
| 1          | + 19 <sup>0</sup> .3 | + 20 <sup>0</sup> .8 | + 14 <sup>0</sup> .3 | + 19 <sup>0</sup> .0 | + 19 <sup>0</sup> .4 | + 20 <sup>0</sup> .2 | + 22 <sup>0</sup> .7 | + 22 <sup>0</sup> .6 |
| 2          | 21.5                 | 22.4                 | 16.0                 | 18.0                 | 18.2                 | 16.0                 | 19.3                 | 22.5                 |
| 3          | 15.5                 | 18.9                 | 12.8                 | 15.8                 | 16.3                 | 15.9                 | 17.3                 | 19.8                 |
| 4          | 15.3                 | 16.5                 | 12.3                 | 14.8                 | 15.8                 | 15.8                 | 15.0                 | 16.5                 |
| 5          | 14.1                 | 16.2                 | 11.1                 | 15.6                 | 17.3                 | 17.2                 | 17.0                 | 18.0                 |
| 6          | 13.7                 | 14.9                 | 13.1                 | 12.9                 | 14.6                 | 15.3                 | 15.0                 | 16.1                 |
| 7          | 14.4                 | 16.5                 | 11.5                 | 13.4                 | 14.4                 | 15.1                 | 13.7                 | 15.7                 |
| 8          | 15.4                 | 17.4                 | 12.7                 | 16.7                 | 16.8                 | 15.3                 | 16.3                 | 17.5                 |
| 9          | 16.3                 | 19.2                 | 13.9                 | 16.2                 | 18.0                 | 16.6                 | 17.3                 | 18.9                 |
| 10         | 16.6                 | 17.5                 | 13.9                 | 16.4                 | 17.7                 | 17.6                 | 17.3                 | 17.6                 |
| 11         | 17.9                 | 19.1                 | 14.6                 | 17.1                 | 17.1                 | 14.8                 | 17.7                 | 19.0                 |
| 12         | 17.9                 | 20.4                 | 15.3                 | 16.3                 | 16.8                 | 18.1                 | 17.0                 | 19.2                 |
| 13         | 19.3                 | 18.6                 | 15.5                 | 17.5                 | 19.4                 | 17.6                 | 18.0                 | 21.2                 |
| 14         | 19.7                 | 20.1                 | 17.4                 | 17.9                 | 20.3                 | 17.6                 | 18.3                 | 20.1                 |
| 15         | 18.3                 | 19.6                 | 18.0                 | 18.2                 | 19.3                 | 19.1                 | 17.7                 | 20.6                 |
| 16         | 16.2                 | 19.2                 | 16.7                 | 16.0                 | 17.3                 | 19.6                 | 17.3                 | 20.3                 |
| 17         | 16.6                 | 18.3                 | 16.5                 | 13.7                 | 16.7                 | 19.6                 | 15.3                 | 15.9                 |
| 18         | 16.6                 | 19.2                 | 13.7                 | 16.9                 | 17.1                 | 18.6                 | 16.3                 | 17.6                 |
| 19         | 17.5                 | 19.5                 | 17.5                 | 17.6                 | 20.0                 | 18.6                 | 17.7                 | 19.8                 |
| 20         | 18.7                 | 21.2                 | 17.2                 | 19.2                 | 20.3                 | 19.0                 | 19.3                 | 23.4                 |
| 21         | 19.6                 | 23.0                 | 17.6                 | 19.7                 | 21.2                 | 21.2                 | 19.7                 | 22.8                 |
| 22         | 19.4                 | 21.8                 | 18.0                 | 19.9                 | 20.3                 | 21.3                 | 19.7                 | 22.4                 |
| 23         | 20.7                 | 22.5                 | 19.0                 | 20.9                 | 21.5                 | 21.9                 | 21.0                 | 22.6                 |
| 24         | 20.8                 | 23.5                 | 17.7                 | 21.3                 | 22.4                 | 20.0                 | 21.3                 | 20.5                 |
| 25         | 18.2                 | 20.4                 | 17.3                 | 19.3                 | 19.5                 | 16.4                 | 19.7                 | 20.5                 |
| 26         | 18.9                 | 20.1                 | 17.0                 | 18.2                 | 18.0                 | 16.5                 | 20.3                 | 20.1                 |
| 27         | 18.8                 | 20.4                 | 16.4                 | 19.4                 | 19.2                 | 20.5                 | 19.3                 | 19.7                 |
| 28         | 14.8                 | 16.3                 | 12.1                 | 15.0                 | 15.9                 | 17.3                 | 17.0                 | 16.2                 |
| 29         | 14.3                 | 16.0                 | 11.7                 | 14.0                 | 15.4                 | 15.4                 | 17.0                 | 15.7                 |
| 30         | 15.8                 | 17.6                 | 14.4                 | 15.1                 | 16.0                 | 16.6                 | 16.3                 | 16.6                 |
| 31         | 16.6                 | 18.4                 | 15.4                 | 16.8                 | 17.6                 | 15.6                 | 17.7                 | 18.2                 |
| Średnia    | + 17.4               | + 19.2               | + 15.2               | + 17.1               | + 18.1               | + 18.0               | + 17.9               | + 19.2               |
| Max.<br>d. | + 26.8<br>23         | + 27.3<br>24         | + 25.9<br>22         | + 26.8<br>23         | + 29.7<br>23         | + 28.4<br>23         | + 28.0<br>1          | + 29.9<br>2          |
| Min.<br>d. | + 11.2<br>3          | + 13.0<br>8          | + 7.2<br>28          | + 11.5<br>3          | + 11.2<br>28         | + 11.0<br>3          | + 12.0<br>4 i 5      | + 10.6<br>4 i 29     |



W stopniach Celsiusza  
dzienne.

| Du-<br>blany         | Delatyn              | Oży-<br>dów          | Krzy-<br>wo-<br>równia | Koło-<br>myja        | Ober-<br>tyn         | Tar-<br>nopol        | Jagiel-<br>nica      |
|----------------------|----------------------|----------------------|------------------------|----------------------|----------------------|----------------------|----------------------|
| 7. 2. 9              | 7. 2. 8              | 7. 2. 9              | 7. 2. 9                | 7. 2. 9              | 7. 2. 9              | 7. 2. 9              | 7. 2. 9              |
| + 21 <sup>0</sup> ·9 | + 18 <sup>0</sup> ·1 | + 19 <sup>0</sup> ·4 | + 17 <sup>0</sup> ·1   | + 20 <sup>0</sup> ·1 | + 17 <sup>0</sup> ·7 | + 18 <sup>0</sup> ·1 | + 17 <sup>0</sup> ·8 |
| 22·6                 | 20·2                 | 22·5                 | 16·5                   | 20·0                 | 19·8                 | 21·2                 | 20·0                 |
| 20·1                 | 18·3                 | 21·8                 | 17·2                   | 20·3                 | 19·6                 | 21·5                 | 20·0                 |
| 16·3                 | 15·1                 | 17·8                 | 15·6                   | 18·9                 | 17·4                 | 16·5                 | 17·3                 |
| 17·5                 | 16·6                 | 16·8                 | 14·4                   | 18·3                 | 17·3                 | 15·9                 | 14·6                 |
| 15·9                 | 15·5                 | 16·3                 | 15·5                   | 17·7                 | 16·3                 | 15·6                 | 15·5                 |
| 15·8                 | 15·4                 | 15·3                 | 15·7                   | 16·9                 | 16·9                 | 15·7                 | 16·2                 |
| 19·0                 | 14·7                 | 16·2                 | 16·7                   | 16·5                 | 17·2                 | 17·7                 | 16·2                 |
| 18·4                 | 16·0                 | 18·3                 | 17·3                   | 18·2                 | 17·4                 | 17·1                 | 15·9                 |
| 18·2                 | 19·8                 | 18·5                 | 17·4                   | 18·3                 | 18·5                 | 17·5                 | 15·5                 |
| 19·2                 | 17·1                 | 17·5                 | 17·1                   | 19·9                 | 17·8                 | 17·3                 | 16·3                 |
| 18·5                 | 16·5                 | 18·2                 | 16·3                   | 18·3                 | 17·3                 | 18·8                 | 20·1                 |
| 19·5                 | 17·3                 | 17·6                 | 16·6                   | 20·6                 | 17·9                 | 18·1                 | 17·5                 |
| 19·9                 | 16·9                 | 18·7                 | 14·1                   | 19·5                 | 18·5                 | 18·9                 | 18·8                 |
| 19·4                 | 17·0                 | 18·4                 | 17·0                   | 19·0                 | 19·1                 | 18·3                 | 19·7                 |
| 18·9                 | 16·7                 | 18·7                 | 17·3                   | 18·3                 | 18·8                 | 19·0                 | 20·4                 |
| 17·5                 | 17·0                 | 15·9                 | 17·1                   | 19·6                 | 18·8                 | 17·8                 | 17·8                 |
| 17·9                 | 16·7                 | 18·4                 | 16·7                   | 17·9                 | 18·1                 | 18·6                 | 19·3                 |
| 20·1                 | 17·7                 | 19·9                 | 16·5                   | 21·1                 | 19·7                 | 20·1                 | 19·8                 |
| 21·5                 | 18·5                 | 20·4                 | 17·5                   | 21·7                 | 20·2                 | 20·5                 | 19·3                 |
| 21·3                 | 20·1                 | 21·6                 | 18·3                   | 19·4                 | 20·5                 | 21·4                 | 20·5                 |
| 21·3                 | 18·0                 | 20·9                 | 18·3                   | 19·1                 | 19·5                 | 20·1                 | 19·9                 |
| 22·7                 | 19·7                 | 18·6                 | 19·3                   | 22·7                 | 20·6                 | 21·2                 | 20·5                 |
| 20·3                 | 21·6                 | 20·3                 | 19·8                   | 22·4                 | 21·8                 | 22·2                 | 22·1                 |
| 21·1                 | 21·1                 | 20·7                 | 18·6                   | 22·8                 | 21·2                 | 22·0                 | 21·3                 |
| 19·9                 | 18·7                 | 19·5                 | 18·3                   | 20·5                 | 19·9                 | 18·8                 | 19·3                 |
| 20·5                 | 19·0                 | 19·9                 | 19·9                   | 22·7                 | 20·5                 | 19·8                 | 19·9                 |
| 15·9                 | 15·8                 | 16·1                 | 14·9                   | 17·1                 | 18·2                 | 17·2                 | 18·3                 |
| 16·2                 | 14·4                 | 16·2                 | 16·3                   | 18·0                 | 16·8                 | 15·9                 | 17·9                 |
| 17·1                 | 15·3                 | 17·1                 | 18·5                   | 19·3                 | 18·0                 | 17·8                 | 20·3                 |
| 18·7                 | 17·1                 | 17·8                 | 15·2                   | 18·1                 | 18·3                 | 17·9                 | 19·3                 |
| + 19·1               | + 17·5               | + 18·6               | + 17·0                 | + 19·4               | + 18·7               | + 18·7               | + 18·6               |
| + 28·5               | + 30·4               | + 29·0               | + 28·4                 | + 28·6               | + 24·3               | + 27·4               | + 25·4               |
| 2                    | 10                   | 2                    | 24                     | 27                   | 25                   | 24                   | 24                   |
| + 9·5                | + 12·0               | + 13·0               | + 10·4                 | + 12·2               | + 15·0               | + 9·0                | + 12·8               |
| 1                    | 819                  | 28                   | 28                     | 5                    | 9                    | 29                   | 9                    |

## Ciepłota powietrza Średnie

*Sierpień 1899 roku.*

| Dzień      | Kami-<br>tzer<br>Platte<br>8. 2. 8 | Biel-<br>sko<br>8. 2. 8 | Ży-<br>wiec<br>7. 2. 9 | Wado-<br>wice<br>7. 1. 10 | Czer-<br>ni-<br>chów<br>7. 2. 7 | Zako-<br>pane<br>7. 2. 9 | Kra-<br>ków<br>6. 2. 10 |
|------------|------------------------------------|-------------------------|------------------------|---------------------------|---------------------------------|--------------------------|-------------------------|
| 1          | + 13 <sup>0</sup> .9               | + 18 <sup>0</sup> .7    | + 18 <sup>0</sup> .6   | + 19 <sup>0</sup> .1      | + 19 <sup>0</sup> .3            | + 14 <sup>0</sup> .4     | + 17 <sup>0</sup> .7    |
| 2          | 14.9                               | 19.3                    | 18.6                   | 19.9                      | 20.3                            | 16.8                     | 19.0                    |
| 3          | 17.9                               | 21.3                    | 20.2                   | 19.9                      | 22.0                            | 18.6                     | 20.3                    |
| 4          | 18.7                               | 22.0                    | 21.9                   | 20.7                      | 22.4                            | 18.2                     | 21.4                    |
| 5          | 20.5                               | 21.4                    | 21.9                   | 20.9                      | 22.1                            | 18.1                     | 20.4                    |
| 6          | 21.0                               | 21.2                    | 21.5                   | 19.4                      | 21.9                            | 17.3                     | 20.8                    |
| 7          | 19.6                               | 22.8                    | 22.4                   | 19.9                      | 22.3                            | 19.6                     | 21.0                    |
| 8          | 13.2                               | 18.4                    | 17.7                   | 17.5                      | 18.6                            | 15.6                     | 18.1                    |
| 9          | 8.4                                | 9.8                     | 10.6                   | 8.7                       | 10.3                            | 11.4                     | 10.6                    |
| 10         | 7.9                                | 13.2                    | 12.4                   | 11.6                      | 13.8                            | 8.7                      | 13.8                    |
| 11         | 11.9                               | 16.2                    | 14.9                   | 11.8                      | 15.8                            | 11.9                     | 15.2                    |
| 12         | 9.3                                | 14.5                    | 14.1                   | 14.2                      | 15.9                            | 11.1                     | 14.1                    |
| 13         | 10.3                               | 14.4                    | 15.1                   | 13.9                      | 15.7                            | 10.7                     | 15.5                    |
| 14         | 13.5                               | 17.4                    | 16.7                   | 11.4                      | 17.5                            | 13.7                     | 16.9                    |
| 15         | 16.4                               | 18.4                    | 18.2                   | 17.9                      | 19.6                            | 14.8                     | 17.8                    |
| 16         | 15.9                               | 21.0                    | 19.7                   | 15.6                      | 20.5                            | 17.7                     | 19.6                    |
| 17         | 17.3                               | 19.4                    | 21.5                   | 16.2                      | 21.1                            | —                        | 20.4                    |
| 18         | 9.8                                | 15.3                    | 15.3                   | 15.0                      | 16.5                            | 11.9                     | 15.0                    |
| 19         | 7.8                                | 12.6                    | 13.2                   | 13.5                      | 15.0                            | 8.3                      | 13.1                    |
| 20         | 5.8                                | 10.5                    | 12.5                   | 12.1                      | 12.8                            | 8.5                      | 11.9                    |
| 21         | 7.9                                | 12.6                    | 13.4                   | 13.3                      | 14.4                            | 10.6                     | 14.2                    |
| 22         | 8.7                                | 13.5                    | 12.9                   | 13.3                      | 13.5                            | 10.5                     | 14.6                    |
| 23         | 11.3                               | 15.4                    | 15.0                   | 12.7                      | 16.3                            | 11.4                     | 15.7                    |
| 24         | 10.0                               | 14.9                    | 15.0                   | 13.3                      | 15.8                            | 11.9                     | 16.2                    |
| 25         | 8.8                                | 13.9                    | 13.9                   | 12.7                      | 14.6                            | 10.6                     | 12.8                    |
| 26         | 5.6                                | 10.4                    | 10.3                   | 12.1                      | 12.6                            | 7.6                      | 11.4                    |
| 27         | 6.7                                | 11.0                    | 11.3                   | 12.5                      | 12.1                            | 8.3                      | 10.8                    |
| 28         | 9.9                                | 12.9                    | 11.8                   | 12.9                      | 13.5                            | 9.6                      | 12.1                    |
| 29         | 12.5                               | 16.1                    | 16.1                   | 22.5                      | 14.5                            | 13.1                     | 13.8                    |
| 30         | 12.8                               | 16.9                    | 16.7                   | 14.0                      | 16.7                            | 13.0                     | 16.3                    |
| 31         | 15.0                               | 17.1                    | 15.7                   | 17.0                      | 17.6                            | 14.0                     | 17.2                    |
| Średnia    | + 12.4                             | + 16.2                  | + 16.1                 | + 15.0                    | + 16.9                          | + 12.9                   | + 16.1                  |
| Max.<br>d. | + 23.9<br>5                        | + 28.9<br>5             | + 30.0<br>7            | + 27.5<br>4               | + 26.8<br>4                     | + 24.4<br>7              | + 30.2<br>5             |
| Min.<br>d. | + 2.5<br>26                        | + 5.2<br>28             | + 7.4<br>23            | + 7.5<br>14, 23, 28       | + 9.5<br>29                     | + 5.8<br>27              | + 6.3<br>27             |

w stopniach Celsiusza.  
dzienne.

| Boch-<br>nia                | Szczaw-<br>nica      | Kry-<br>nica         | Tar-<br>nów          | Pilzno               | Iwo-<br>nicz         | Rze-<br>szów         | Smol-<br>nik         |
|-----------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|                             | 7. 1. 9              | 7. 2. 9              | 7. 1. 9              | 7. 1. 9              | 6. 2. 10             | 8. 2. 8              | 7. 1. 9              |
| Nie zapisywano spostrzeżeń. | + 15 <sup>0</sup> .6 | + 15 <sup>0</sup> .2 | + 18 <sup>0</sup> .6 | + 17 <sup>0</sup> .0 | + 17 <sup>0</sup> .3 | + 18 <sup>0</sup> .1 | + 16 <sup>0</sup> .4 |
|                             | 17.6                 | 15.2                 | 20.1                 | 18.2                 | 17.3                 | 20.3                 | 16.1                 |
|                             | 19.9                 | 17.1                 | 20.8                 | 19.8                 | 20.0                 | 21.1                 | 17.2                 |
|                             | 21.1                 | 19.2                 | 22.9                 | 20.9                 | 22.3                 | 24.7                 | 20.1                 |
|                             | 19.2                 | 18.8                 | 24.9                 | 22.9                 | 24.1                 | 25.9                 | 21.3                 |
|                             | 18.7                 | 18.2                 | 23.7                 | 23.2                 | 22.2                 | 22.4                 | 20.8                 |
|                             | 20.9                 | 18.7                 | 23.4                 | 22.5                 | 20.9                 | 21.5                 | 21.2                 |
|                             | 17.6                 | 16.5                 | 19.5                 | 17.7                 | 17.7                 | 20.9                 | 17.6                 |
|                             | 14.6                 | 13.8                 | 12.0                 | 11.7                 | 14.3                 | 11.0                 | 15.7                 |
|                             | 10.5                 | 10.7                 | 13.0                 | 11.5                 | 11.5                 | 11.5                 | 10.0                 |
|                             | 14.2                 | 13.2                 | 16.9                 | 15.5                 | 14.6                 | 14.9                 | 13.3                 |
|                             | 14.5                 | 12.7                 | 15.0                 | 15.7                 | 15.3                 | 15.5                 | 14.5                 |
|                             | 13.7                 | 13.9                 | 16.4                 | 16.3                 | 15.1                 | 17.4                 | 14.8                 |
|                             | 15.5                 | 14.5                 | 18.2                 | 16.7                 | 15.4                 | 18.9                 | 14.3                 |
|                             | 16.3                 | 15.7                 | 19.7                 | 17.7                 | 17.3                 | 18.6                 | 14.3                 |
|                             | 18.4                 | 17.1                 | 21.6                 | 19.7                 | 19.2                 | 18.9                 | 17.5                 |
|                             | 20.2                 | 18.8                 | 22.1                 | 21.0                 | 20.5                 | 18.0                 | 19.3                 |
|                             | 14.2                 | 13.6                 | 16.3                 | 14.7                 | 15.4                 | 16.5                 | 13.8                 |
|                             | 11.5                 | 12.4                 | 12.9                 | 12.7                 | 13.1                 | 13.9                 | 9.6                  |
|                             | 11.2                 | 11.1                 | 12.4                 | 11.8                 | 13.7                 | 14.5                 | 10.2                 |
|                             | 12.3                 | 11.7                 | 13.6                 | 12.7                 | 13.7                 | 12.9                 | 10.6                 |
|                             | 12.3                 | 12.9                 | 14.9                 | 14.3                 | 13.0                 | 13.5                 | 12.4                 |
|                             | 13.7                 | 11.9                 | 16.1                 | 15.5                 | 12.9                 | 13.6                 | 12.6                 |
|                             | 14.1                 | 14.1                 | 15.6                 | 16.1                 | 14.3                 | 14.7                 | 11.7                 |
|                             | 12.7                 | 11.7                 | 11.2                 | 12.1                 | 11.0                 | 14.7                 | 9.8                  |
|                             | 11.1                 | 9.1                  | 11.8                 | 11.2                 | 10.6                 | 10.3                 | 7.6                  |
|                             | 10.5                 | 9.1                  | 12.4                 | 10.2                 | 10.5                 | 10.2                 | 6.7                  |
|                             | 11.4                 | 9.6                  | 12.2                 | 10.2                 | 11.5                 | 10.7                 | 7.8                  |
|                             | 13.1                 | 10.9                 | 14.9                 | 11.3                 | 13.3                 | 12.1                 | 7.6                  |
|                             | 15.0                 | 13.1                 | 18.5                 | 15.6                 | 14.8                 | 14.4                 | 12.5                 |
|                             | 16.1                 | 13.9                 | 19.1                 | 17.7                 | 16.9                 | 15.6                 | 12.6                 |
|                             | + 15.1               | + 14.0               | + 17.1               | + 15.9               | + 15.8               | + 16.4               | + 13.9               |
|                             | + 28.5               | + 24.3               | + 30.6               | + 28.6               | + 28.2               | + 32.4               | + 31.1               |
|                             | 4                    | 7                    | 6                    | 6                    | 5                    | 5                    | 4                    |
|                             | + 6.3                | + 6.3                | + 10.0               | + 6.2                | + 7.0                | + 7.4                | + 1.5                |
|                             | 27                   | 27 i 28              | 27 i 28              | 27 i 28              | 28                   | 27                   | 29                   |

## Ciepłota powietrza

### Średnie

*Sierpień 1899 roku.*

| Dzień      | Sanok                | Prze-<br>myśl        | Łom-<br>na           | Chy-<br>rów          | Stare-<br>miasto     | Sam-<br>bor          | Dolina               | Lwów                 |
|------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|            | 7. 2. 9              | 7. 1. 9              | 7. 2. 9              | 7. 2. 9              | 7. 2. 9              | 7. 1. 9              | 7. 2. 9              | 7. 2. 9              |
| 1          | + 16 <sup>0</sup> .3 | + 18 <sup>0</sup> .1 | + 13 <sup>0</sup> .3 | + 15 <sup>0</sup> .9 | + 16 <sup>0</sup> .6 | + 17 <sup>0</sup> .0 | + 16 <sup>0</sup> .7 | + 17 <sup>0</sup> .5 |
| 2          | 18.0                 | 17.9                 | 16.4                 | 17.5                 | 17.9                 | 22.3                 | 17.7                 | 19.9                 |
| 3          | 18.9                 | 19.6                 | 16.5                 | 18.9                 | 19.8                 | 23.5                 | 17.0                 | 21.5                 |
| 4          | 19.9                 | 20.2                 | 18.5                 | 19.9                 | 21.4                 | 20.8                 | 18.3                 | 23.9                 |
| 5          | 23.0                 | 23.5                 | 19.6                 | 21.5                 | 23.1                 | 22.2                 | 19.0                 | 24.4                 |
| 6          | 21.3                 | 22.7                 | 20.2                 | 20.7                 | 19.2                 | 23.4                 | 18.3                 | 22.4                 |
| 7          | 20.6                 | 21.5                 | 12.7                 | 20.5                 | 22.0                 | 20.6                 | 21.0                 | 21.9                 |
| 8          | 19.4                 | 18.4                 | 10.8                 | 17.1                 | 19.2                 | 17.4                 | 20.0                 | 17.5                 |
| 9          | 15.5                 | 12.5                 | 10.1                 | 11.4                 | 12.7                 | 10.5                 | 12.7                 | 11.6                 |
| 10         | 12.3                 | 11.6                 | 9.1                  | 10.7                 | 11.6                 | 11.8                 | 14.0                 | 11.9                 |
| 11         | 14.7                 | 15.6                 | 10.2                 | 13.6                 | 13.9                 | 12.7                 | 13.0                 | 13.6                 |
| 12         | 14.4                 | 15.3                 | 9.9                  | 14.0                 | 15.8                 | 16.6                 | 14.3                 | 15.2                 |
| 13         | 15.3                 | 16.3                 | 12.3                 | 14.4                 | 13.9                 | 15.5                 | 14.0                 | 15.1                 |
| 14         | 16.4                 | 16.3                 | 15.0                 | 15.4                 | 16.8                 | 17.5                 | 15.0                 | 15.9                 |
| 15         | 17.4                 | 17.8                 | 13.1                 | 16.1                 | 17.1                 | 18.8                 | 17.0                 | 17.2                 |
| 16         | 19.6                 | 19.1                 | 15.0                 | 17.9                 | 18.8                 | 17.9                 | 17.7                 | 18.9                 |
| 17         | 20.3                 | 19.7                 | 15.0                 | 19.2                 | 20.0                 | 20.5                 | 19.3                 | 19.8                 |
| 18         | 14.7                 | 14.7                 | 11.8                 | 13.4                 | 14.0                 | 14.5                 | 15.7                 | 14.6                 |
| 19         | 12.0                 | 12.9                 | 8.5                  | 11.7                 | 12.7                 | 12.7                 | 12.0                 | 12.2                 |
| 20         | 11.2                 | 12.9                 | 7.5                  | 10.9                 | 12.3                 | 12.2                 | 11.0                 | 11.8                 |
| 21         | 12.5                 | 13.4                 | 9.5                  | 12.0                 | 12.9                 | 11.5                 | 12.0                 | 12.0                 |
| 22         | 13.3                 | 14.6                 | 12.1                 | 13.0                 | 13.3                 | 13.2                 | 12.7                 | 12.5                 |
| 23         | 13.4                 | 14.2                 | 14.0                 | 13.1                 | 15.0                 | 13.6                 | 14.0                 | 16.0                 |
| 24         | 13.6                 | 15.2                 | 10.0                 | 12.9                 | 14.6                 | 13.2                 | 15.0                 | 16.2                 |
| 25         | 10.2                 | 11.0                 | 10.0                 | 9.9                  | 10.6                 | 10.4                 | 12.7                 | 11.7                 |
| 26         | 10.0                 | 10.8                 | 11.1                 | 9.1                  | 9.9                  | 9.2                  | 10.7                 | 8.7                  |
| 27         | 10.4                 | 9.9                  | 9.8                  | 8.4                  | 9.2                  | 10.1                 | 19.7                 | 9.4                  |
| 28         | 11.2                 | 11.6                 | 7.5                  | 10.0                 | 11.0                 | 13.2                 | 10.3                 | 11.3                 |
| 29         | 10.8                 | 12.8                 | 9.6                  | 11.0                 | 12.1                 | 12.5                 | 10.0                 | 12.9                 |
| 30         | 15.0                 | 13.1                 | 10.3                 | 13.1                 | 15.8                 | 15.9                 | 14.0                 | 15.0                 |
| 31         | 17.5                 | 15.6                 | 12.8                 | 18.0                 | 18.5                 | 18.0                 | 15.0                 | 17.4                 |
| Średnia    | + 15.5               | + 15.8               | + 12.3               | + 14.6               | + 15.5               | + 15.8               | + 14.8               | + 15.8               |
| Max.<br>d. | + 28.6<br>5          | + 31.2<br>5          | + 26.8<br>6          | + 27.2<br>5          | + 32.0<br>5          | + 28.4<br>2, 3 i 6   | + 27.0<br>5 i 7      | + 30.5<br>4          |
| Min.<br>d. | + 6.2<br>29          | + 8.0<br>27 i 29     | + 5.0<br>20          | + 6.3<br>29          | + 6.3<br>29          | + 7.5<br>26          | + 2.0<br>29          | + 3.9<br>29          |

w stopniach Celsiusza.  
dzienne.

| Dąbla-<br>ny        | Dela-<br>tyn        | Oży-<br>dów         | Krzy-<br>wo-<br>równia | Koło-<br>myja       | Ober-<br>tyn        | Tar-<br>nopol       | Jagiel-<br>nica     |
|---------------------|---------------------|---------------------|------------------------|---------------------|---------------------|---------------------|---------------------|
| 7.2.9               | 7.2.8               | 7.2.9               | 7.2.9                  | 7.2.9               | 7.2.9               | 7.2.9               | 7.2.9               |
| +18 <sup>0</sup> .1 | +15 <sup>0</sup> .9 | +17 <sup>0</sup> .6 | +17 <sup>0</sup> .0    | +18 <sup>0</sup> .1 | +18 <sup>0</sup> .2 | +17 <sup>0</sup> .6 | +18 <sup>0</sup> .8 |
| 19.9                | 18.7                | 18.6                | 17.1                   | 21.3                | 19.5                | 18.6                | 20.1                |
| 21.4                | 19.7                | 20.5                | 18.4                   | 22.2                | 19.9                | 20.0                | 22.8                |
| 22.2                | 22.0                | 21.1                | 17.6                   | 23.0                | 21.4                | 21.2                | 22.1                |
| 23.6                | 20.7                | 23.2                | 18.9                   | 23.3                | 22.6                | 22.9                | 22.8                |
| 22.5                | 18.7                | 22.8                | 18.9                   | 23.1                | 21.3                | 22.1                | 23.5                |
| 22.5                | 21.3                | 20.8                | 17.6                   | 20.1                | 22.1                | 21.2                | 22.8                |
| 17.1                | 18.0                | 16.9                | 16.7                   | 19.5                | 21.3                | 17.7                | 18.8                |
| 11.7                | 14.3                | 12.0                | 15.4                   | 12.4                | 13.1                | 11.5                | 13.1                |
| 12.6                | 14.3                | 13.4                | 14.3                   | 13.7                | 15.5                | 12.9                | 15.7                |
| 14.0                | 12.3                | 14.5                | 13.1                   | 12.9                | 14.3                | 12.9                | 13.3                |
| 15.4                | 13.8                | 15.5                | 14.3                   | 16.1                | 15.4                | 14.1                | 16.8                |
| 16.2                | 14.1                | 14.5                | 12.2                   | 15.6                | 15.7                | 14.9                | 16.7                |
| 16.9                | 14.7                | 15.1                | 13.7                   | 17.1                | 15.8                | 16.0                | 18.3                |
| 17.0                | 14.1                | 16.0                | 11.9                   | 16.8                | 16.2                | 16.0                | 18.0                |
| 19.7                | 15.5                | 18.1                | 15.4                   | 17.5                | 17.9                | 17.0                | 20.4                |
| 20.3                | 18.7                | 19.4                | 15.5                   | 18.0                | 18.9                | 19.3                | 21.7                |
| 14.7                | 14.3                | 14.0                | 12.7                   | 16.2                | 16.0                | 15.6                | 17.3                |
| 12.8                | 12.3                | 12.7                | 11.7                   | 13.6                | 13.9                | 12.8                | 13.8                |
| 12.3                | 10.4                | 11.3                | 9.9                    | 12.5                | 13.1                | 10.9                | 14.4                |
| 13.0                | 13.1                | 11.6                | 12.1                   | 14.1                | 14.0                | 12.3                | 13.7                |
| 14.3                | 10.7                | 12.9                | 8.9                    | 13.6                | 13.3                | 12.9                | 16.3                |
| 15.9                | 14.5                | 13.7                | 13.9                   | 15.5                | 14.4                | 14.6                | 16.2                |
| 16.6                | 13.9                | 16.1                | 15.3                   | 16.3                | 15.9                | 15.3                | 18.2                |
| 12.2                | 14.0                | 11.6                | 12.3                   | 13.2                | 13.8                | 11.4                | 16.4                |
| 9.3                 | 10.7                | 9.1                 | 8.8                    | 12.9                | 10.7                | 7.5                 | 10.0                |
| 9.8                 | 11.5                | 9.1                 | 9.9                    | 12.5                | 11.4                | 9.1                 | 10.9                |
| 12.1                | 10.4                | 10.8                | 9.3                    | 11.3                | 11.2                | 10.8                | 11.0                |
| 13.5                | 8.7                 | 13.0                | 12.7                   | 12.8                | 12.1                | 13.0                | 13.3                |
| 15.7                | 14.3                | 14.9                | 12.9                   | 15.5                | 15.0                | 14.9                | 16.0                |
| 17.8                | 17.0                | 16.6                | 13.5                   | 16.8                | 16.7                | 15.5                | 17.3                |
| +16.2               | +14.9               | +15.4               | +13.9                  | +16.4               | +16.2               | +15.2               | +17.1               |
| +31.5               | +30.0               | +30.3               | +28.8                  | +28.8               | +26.0               | +29.5               | +26.2               |
| 5                   | 4                   | 5                   | 5                      | 5                   | 5                   | 5                   | 6                   |
| +6.0                | +6.0                | +6.0                | +4.6                   | +6.8                | +7.3                | +5.2                | +7.8                |
| 28 i 29             | 29                  | 26                  | 29                     | 28                  | 28                  | 29                  | 26                  |

## Ciepłota powietrza

### Średnie

Wrzesień 1899 roku.

| Dzień      | Kami-<br>tzer<br>Platte<br>8. 2. 8 | Biel-<br>sko<br>8. 2. 8 | Ży-<br>wiec<br>7. 2. 9 | Wado-<br>wice<br>7. 1. 10 | Czer-<br>ni-<br>chów<br>7. 2. 7 | Zako-<br>pane<br>7. 2. 9. | Kra-<br>ków<br>6. 2. 10 |
|------------|------------------------------------|-------------------------|------------------------|---------------------------|---------------------------------|---------------------------|-------------------------|
| 1          | + 15 <sup>0</sup> .1               | + 18 <sup>0</sup> .8    | + 17 <sup>0</sup> .8   | + 18 <sup>0</sup> .5      | + 18 <sup>0</sup> .1            | + 14 <sup>0</sup> .3      | + 17 <sup>0</sup> .5    |
| 2          | 15.5                               | 20.2                    | 19.2                   | 20.7                      | 17.8                            | 17.3                      | 17.7                    |
| 3          | 9.9                                | 13.9                    | 14.7                   | 18.4                      | 15.3                            | 12.8                      | 14.8                    |
| 4          | 8.5                                | 15.3                    | 14.6                   | 15.1                      | 15.4                            | 11.3                      | 15.3                    |
| 5          | 11.7                               | 17.1                    | 16.5                   | 18.4                      | 16.9                            | 14.1                      | 16.7                    |
| 6          | 15.6                               | 20.4                    | 19.1                   | 20.7                      | 18.7                            | —                         | 18.4                    |
| 7          | 17.1                               | 21.5                    | 20.1                   | 22.0                      | 19.7                            | 17.8                      | 20.4                    |
| 8          | 15.5                               | 19.2                    | 17.9                   | 19.9                      | 18.8                            | 16.7                      | 18.3                    |
| 9          | 10.3                               | 14.2                    | 13.5                   | 15.3                      | 15.9                            | 11.6                      | 16.3                    |
| 10         | 7.1                                | 11.6                    | 11.8                   | 13.0                      | 13.9                            | 9.4                       | 13.3                    |
| 11         | 3.0                                | 7.4                     | 7.2                    | 9.6                       | 9.6                             | 3.9                       | 8.8                     |
| 12         | 5.4                                | 10.1                    | 9.7                    | 10.9                      | 11.1                            | 6.5                       | 10.3                    |
| 13         | 5.8                                | 11.0                    | 12.0                   | 12.4                      | 11.6                            | 7.3                       | 11.1                    |
| 14         | 6.6                                | 9.7                     | 10.3                   | 12.4                      | 12.3                            | 6.1                       | 11.6                    |
| 15         | 8.7                                | 13.4                    | 12.9                   | 14.6                      | 13.5                            | 9.1                       | 14.0                    |
| 16         | 9.3                                | 14.0                    | 13.4                   | 15.6                      | 14.1                            | —                         | 14.0                    |
| 17         | 9.9                                | 13.4                    | 11.5                   | 14.6                      | 12.6                            | 10.4                      | 12.4                    |
| 18         | 8.4                                | 13.8                    | 13.3                   | 15.8                      | 13.2                            | 10.0                      | 13.5                    |
| 19         | 8.7                                | 14.5                    | 13.5                   | 15.4                      | 14.4                            | 11.9                      | 14.0                    |
| 20         | 11.0                               | 16.6                    | 16.0                   | 17.9                      | 16.1                            | 14.7                      | 16.2                    |
| 21         | 6.2                                | 10.8                    | 11.5                   | 12.5                      | 11.3                            | 7.5                       | 11.6                    |
| 22         | 8.2                                | 13.8                    | 12.3                   | 14.5                      | 12.0                            | 6.9                       | 12.1                    |
| 23         | 8.6                                | 12.8                    | 12.5                   | 13.9                      | 13.6                            | 9.2                       | 12.6                    |
| 24         | 6.0                                | 10.5                    | 9.3                    | 12.1                      | 11.0                            | 6.9                       | 10.9                    |
| 25         | 5.8                                | 10.9                    | 11.3                   | 12.6                      | 11.1                            | 8.1                       | 10.7                    |
| 26         | 7.0                                | 13.0                    | 12.0                   | 14.2                      | 12.5                            | 8.4                       | 12.5                    |
| 27         | 11.6                               | 16.5                    | 14.5                   | 19.1                      | 14.7                            | 12.1                      | 14.7                    |
| 28         | 13.1                               | 17.5                    | 14.3                   | 16.1                      | 14.4                            | 13.2                      | 13.5                    |
| 29         | 9.5                                | 15.1                    | 14.5                   | 16.1                      | 14.2                            | 13.8                      | 14.1                    |
| 30         | 12.3                               | 17.0                    | 15.9                   | 17.5                      | 16.1                            | 15.0                      | 15.8                    |
| Średnia    | + 9.7                              | + 14.5                  | + 13.8                 | + 15.7                    | + 14.3                          | + 10.9                    | + 14.1                  |
| Max.<br>d. | + 20.5<br>7                        | + 26.1<br>7             | + 25.8<br>7            | + 30.5<br>27              | + 24.1<br>7                     | + 23.2<br>7               | + 27.0<br>7             |
| Min.<br>d. | + 1.8<br>11 i 25                   | + 4.7<br>14             | + 6.0<br>24            | + 9.0<br>11               | + 8.1<br>22                     | + 1.2<br>22               | + 5.1<br>22             |

w stopniach Celsiusza.  
dzienne.

| Boch-<br>nia         | Szczaw-<br>nica      | Kry-<br>nica         | Tar-<br>nów          | Pilzno               | Iwo-<br>nicz         | Rze-<br>szów         | Smol-<br>nik         |
|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| 7. 1. 9              | 7. 1. 9              | 7. 2. 9              | 7. 1. 9              | 7. 1. 9              | 6. 2. 10             | 8. 2. 8              | 7. 1. 9              |
| + 17 <sup>0</sup> ·3 | + 16 <sup>0</sup> ·0 | + 15 <sup>0</sup> ·3 | + 18 <sup>0</sup> ·1 | + 17 <sup>0</sup> ·0 | + 18 <sup>0</sup> ·2 | + 16 <sup>0</sup> ·9 | + 17 <sup>0</sup> ·7 |
| 18·7                 | 17·2                 | 15·8                 | 19·6                 | 19·9                 | 18·9                 | 18·7                 | 15·5                 |
| 15·5                 | 14·6                 | 12·9                 | 15·8                 | 17·0                 | 16·5                 | 16·3                 | 13·8                 |
| 13·7                 | 13·0                 | 12·5                 | 15·8                 | 14·5                 | 15·7                 | 17·5                 | 12·6                 |
| 16·7                 | 15·1                 | 14·3                 | 16·8                 | 15·4                 | 16·8                 | 17·3                 | 13·4                 |
| 18·0                 | 16·2                 | 13·6                 | 19·3                 | 17·4                 | 18·2                 | 18·0                 | 15·6                 |
| 20·3                 | 19·4                 | 16·7                 | 21·6                 | 19·5                 | 19·5                 | 18·2                 | 19·6                 |
| 17·3                 | 18·5                 | 17·6                 | 19·7                 | 19·5                 | 18·1                 | 18·8                 | 15·7                 |
| 15·0                 | 15·1                 | 12·5                 | 16·3                 | 15·7                 | 16·0                 | 16·3                 | 13·8                 |
| 13·5                 | 11·3                 | 10·9                 | 13·8                 | 14·5                 | 13·2                 | 13·1                 | 12·8                 |
| 9·3                  | 6·8                  | 7·1                  | 9·8                  | 11·2                 | 9·7                  | 11·7                 | 9·2                  |
| 10·2                 | 8·6                  | 7·8                  | 11·9                 | 10·6                 | 9·4                  | 12·2                 | 8·8                  |
| 11·7                 | 9·2                  | 8·3                  | 11·5                 | 11·5                 | 10·8                 | 13·1                 | 10·0                 |
| 11·8                 | 9·2                  | 8·6                  | 12·8                 | 11·8                 | 10·1                 | 13·3                 | 9·3                  |
| 14·7                 | 11·6                 | 9·5                  | 13·8                 | 15·1                 | 12·5                 | 13·5                 | 9·3                  |
| 13·2                 | 12·1                 | 10·8                 | 15·2                 | 13·2                 | 15·1                 | 14·5                 | 11·3                 |
| 13·7                 | 13·4                 | 11·0                 | 15·6                 | 13·7                 | 15·7                 | 15·7                 | 13·6                 |
| 13·5                 | 12·7                 | 12·3                 | 14·7                 | 14·1                 | 13·5                 | 16·9                 | 11·4                 |
| 14·5                 | 13·4                 | 11·8                 | 15·8                 | 14·3                 | 13·9                 | 17·8                 | 13·8                 |
| 16·0                 | 15·0                 | 13·1                 | 17·5                 | 15·9                 | 15·3                 | 17·9                 | 14·8                 |
| 10·5                 | 10·1                 | 10·6                 | 12·3                 | 11·4                 | 11·6                 | 11·2                 | 12·0                 |
| 11·0                 | 10·2                 | 9·2                  | 13·4                 | 12·9                 | 10·9                 | 12·5                 | 11·3                 |
| 12·7                 | 10·6                 | 9·9                  | 14·8                 | 13·8                 | 11·3                 | 12·6                 | 12·3                 |
| 10·2                 | 8·3                  | 8·3                  | 13·0                 | 9·7                  | 10·8                 | 9·7                  | 10·1                 |
| 11·0                 | 9·0                  | 6·5                  | 12·1                 | 9·3                  | 10·4                 | 12·5                 | 8·5                  |
| 12·3                 | 10·5                 | 8·7                  | 13·2                 | 9·9                  | 12·4                 | 13·5                 | 10·8                 |
| 15·3                 | 13·6                 | 9·4                  | 16·5                 | 14·2                 | 14·4                 | 13·6                 | 13·5                 |
| 14·5                 | 15·6                 | 12·0                 | 16·2                 | 15·7                 | 14·7                 | 14·3                 | 11·6                 |
| 15·7                 | 16·0                 | 11·9                 | 16·1                 | 17·2                 | 16·8                 | 15·3                 | 16·4                 |
| 15·5                 | 16·8                 | 14·2                 | 17·9                 | 15·9                 | 17·7                 | 15·7                 | 16·9                 |
| + 14·1               | + 13·0               | + 11·4               | + 15·4               | + 14·4               | + 14·3               | + 15·0               | + 12·8               |
| + 24·5               | + 24·8               | + 20·9               | + 27·8               | + 27·6               | + 21·0               | + 25·2               | + 26·5               |
| 7                    | 7                    | 7                    | 7                    | 2                    | 217                  | 8                    | 1                    |
| + 7·0                | + 4·2                | + 2·2                | + 8·7                | + 6·2                | + 6·6                | + 8·4                | + 1·6                |
| 21 1 25              | 22                   | 22                   | 25                   | 25                   | 25                   | 21                   | 25                   |

## Ciepłota powietrza Średnie

Wrzesień 1899 roku.

| Dzień      | Sanok                | Prze-<br>myśl        | Łom-<br>na           | Chy-<br>rów          | Stare-<br>miasto     | Sam-<br>bor          | Doli-<br>na          | Lwów                 |
|------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|            | 7. 2. 9              | 7. 1. 9              | 7. 2. 9              | 7. 2. 9              | 7. 2. 9              | 7. 1. 9              | 7. 2. 9              | 7. 2. 9              |
| 1          | + 16 <sup>0</sup> .9 | + 16 <sup>0</sup> .3 | + 12 <sup>0</sup> .9 | + 16 <sup>0</sup> .4 | + 17 <sup>0</sup> .3 | + 17 <sup>0</sup> .6 | + 16 <sup>0</sup> .7 | + 17 <sup>0</sup> .5 |
| 2          | 18.4                 | 18.0                 | 15.1                 | 17.5                 | 19.1                 | 18.6                 | 17.3                 | 19.1                 |
| 3          | 15.5                 | 15.8                 | 15.5                 | 14.2                 | 14.5                 | 14.7                 | 15.7                 | 15.3                 |
| 4          | 14.5                 | 14.2                 | 15.2                 | 15.7                 | 13.6                 | 13.2                 | 14.0                 | 13.3                 |
| 5          | 14.7                 | 15.3                 | 14.0                 | 14.3                 | 15.0                 | 13.7                 | 15.0                 | 15.1                 |
| 6          | 17.1                 | 15.9                 | 16.0                 | 15.9                 | 16.9                 | 17.7                 | 17.3                 | 17.1                 |
| 7          | 18.7                 | 19.7                 | 16.4                 | 19.2                 | 19.9                 | 19.7                 | 21.0                 | 19.4                 |
| 8          | 16.2                 | 19.6                 | 13.0                 | 15.9                 | 16.8                 | 18.1                 | 16.3                 | 15.7                 |
| 9          | 13.4                 | 14.1                 | 9.5                  | 12.8                 | 13.3                 | 14.3                 | 13.7                 | 12.6                 |
| 10         | 12.7                 | 12.9                 | 8.6                  | 12.7                 | 13.3                 | 13.4                 | 14.0                 | 13.2                 |
| 11         | 10.2                 | 11.3                 | 7.3                  | 9.8                  | 10.0                 | 10.9                 | 13.7                 | 12.9                 |
| 12         | 9.6                  | 11.5                 | 6.5                  | 9.1                  | 10.3                 | 10.9                 | 11.0                 | 12.0                 |
| 13         | 10.6                 | 12.0                 | 6.6                  | 10.1                 | 11.1                 | 11.1                 | 10.3                 | 12.6                 |
| 14         | 9.5                  | 10.5                 | 7.0                  | 9.6                  | 11.2                 | 10.5                 | 10.7                 | 11.5                 |
| 15         | 11.0                 | 11.2                 | 8.1                  | 11.8                 | 12.6                 | 11.3                 | 13.0                 | 12.9                 |
| 16         | 11.6                 | 12.1                 | 8.9                  | 10.9                 | 12.3                 | 11.3                 | 11.7                 | 11.4                 |
| 17         | 14.2                 | 15.9                 | 12.9                 | 14.2                 | 15.7                 | 16.2                 | 11.7                 | 14.6                 |
| 18         | 12.0                 | 13.2                 | 12.4                 | 12.1                 | 12.7                 | 11.7                 | 14.0                 | 13.7                 |
| 19         | 13.8                 | 14.5                 | 12.7                 | 13.5                 | 14.5                 | 14.1                 | 14.0                 | 14.3                 |
| 20         | 15.2                 | 14.5                 | 12.1                 | 14.3                 | 14.8                 | 14.7                 | 13.3                 | 14.5                 |
| 21         | 11.6                 | 12.6                 | 7.2                  | 11.2                 | 11.8                 | 12.3                 | 11.0                 | 12.2                 |
| 22         | 10.1                 | 10.1                 | 8.2                  | 10.3                 | 10.7                 | 10.6                 | 9.0                  | 10.1                 |
| 23         | 12.4                 | 14.0                 | 12.8                 | 12.8                 | 13.1                 | 13.3                 | 11.0                 | 13.6                 |
| 24         | 10.6                 | 11.0                 | 8.6                  | 9.6                  | 10.9                 | 10.7                 | 12.0                 | 11.5                 |
| 25         | 10.3                 | 9.6                  | 8.0                  | 8.9                  | 9.4                  | 10.2                 | 9.7                  | 10.0                 |
| 26         | 12.4                 | 12.2                 | 10.4                 | 11.1                 | 12.3                 | 12.8                 | 9.7                  | 11.1                 |
| 27         | 13.1                 | 13.0                 | 9.5                  | 13.4                 | 15.0                 | 14.9                 | 11.0                 | 13.5                 |
| 28         | 15.0                 | 13.1                 | 9.6                  | 12.8                 | 14.0                 | 13.0                 | 10.0                 | 13.5                 |
| 29         | 16.6                 | 16.7                 | 11.9                 | 15.8                 | 15.6                 | 17.0                 | 12.0                 | 16.3                 |
| 30         | 17.1                 | 17.8                 | 12.1                 | 17.3                 | 18.1                 | 16.6                 | 14.3                 | 16.1                 |
| Średnia    | + 13.5               | + 14.0               | + 11.0               | + 13.0               | + 13.9               | + 13.9               | + 13.1               | + 13.9               |
| Max.<br>d. | + 25.0<br>7          | + 30.2<br>8          | + 22.1<br>7          | + 24.6<br>7          | + 26.0<br>7          | + 25.4<br>8          | + 21.0<br>7          | + 25.6<br>7          |
| Min.<br>d. | + 5.4<br>22          | + 6.0<br>28          | + 1.1<br>28          | + 6.3<br>22          | + 6.0<br>25          | + 8.0<br>22 i 28     | + 3.0<br>28          | + 4.8<br>22          |



w stopniach Celsiusza  
dzienne.

| Du-<br>blany         | Dela-<br>tyn         | Oży-<br>dów          | Krzy-<br>wo-<br>równia | Koło-<br>myja        | Ober-<br>tyn | Tar-<br>nopol        | Jagiel-<br>nica      |
|----------------------|----------------------|----------------------|------------------------|----------------------|--------------|----------------------|----------------------|
| 7. 2. 9              | 7. 2. 8              | 7. 2. 9              | 7. 2. 9                | 7. 2. 9              |              | 7. 2. 9              | 7. 2. 9              |
| + 18 <sup>0</sup> .4 | + 17 <sup>0</sup> .7 | + 16 <sup>0</sup> .0 | + 14 <sup>0</sup> .9   | + 18 <sup>0</sup> .7 |              | + 17 <sup>0</sup> .2 | + 18 <sup>0</sup> .0 |
| 19.5                 | 18.3                 | 18.2                 | 16.0                   | 19.3                 |              | 18.0                 | 18.9                 |
| 15.7                 | 18.0                 | 16.5                 | 16.4                   | 17.3                 |              | 16.4                 | 18.1                 |
| 13.6                 | 12.7                 | 13.0                 | 12.0                   | 14.0                 |              | 13.3                 | 16.5                 |
| 15.7                 | 15.0                 | 14.5                 | 13.7                   | 15.5                 |              | 14.5                 | 14.5                 |
| 17.5                 | 16.3                 | 17.8                 | 15.9                   | 18.9                 |              | 16.1                 | 17.5                 |
| 19.9                 | 19.7                 | 18.9                 | 16.6                   | 19.6                 |              | 18.1                 | 18.5                 |
| 15.3                 | 16.3                 | 14.4                 | 16.5                   | 17.1                 |              | 16.6                 | 18.7                 |
| 13.0                 | 13.3                 | 13.3                 | 15.3                   | 13.7                 |              | 12.5                 | 13.4                 |
| 13.3                 | 13.0                 | 12.7                 | 15.9                   | 13.1                 |              | 13.6                 | 13.4                 |
| 13.6                 | 13.7                 | 13.2                 | 15.3                   | 14.7                 |              | 14.3                 | 14.6                 |
| 12.8                 | 11.7                 | 14.9                 | 11.7                   | 12.0                 |              | 15.7                 | 15.7                 |
| 12.7                 | 10.3                 | 13.5                 | 9.3                    | 12.3                 |              | 12.7                 | 16.3                 |
| 12.2                 | 11.7                 | 13.0                 | 10.5                   | 11.8                 |              | 13.0                 | 15.0                 |
| 14.2                 | 12.0                 | 13.2                 | 12.8                   | 12.5                 |              | 13.6                 | 15.8                 |
| 11.7                 | 12.3                 | 12.2                 | 11.7                   | 14.1                 |              | 12.7                 | 14.4                 |
| 14.9                 | 13.3                 | 15.9                 | 10.7                   | 13.3                 |              | 14.0                 | 15.5                 |
| 14.5                 | 13.3                 | 15.5                 | 10.9                   | 14.3                 |              | 14.4                 | 15.5                 |
| 15.3                 | 14.0                 | 15.4                 | 14.3                   | 13.7                 |              | 14.9                 | 15.6                 |
| 15.5                 | 13.7                 | 15.2                 | 11.4                   | 14.4                 |              | 13.6                 | 13.4                 |
| 12.6                 | 13.0                 | 12.8                 | 14.9                   | 15.6                 |              | 13.9                 | 13.7                 |
| 11.3                 | 9.7                  | 10.2                 | 9.8                    | 11.2                 |              | 10.4                 | 11.3                 |
| 14.7                 | 12.7                 | 14.5                 | 11.0                   | 11.7                 |              | 11.3                 | 11.3                 |
| 12.4                 | 13.3                 | 13.2                 | 13.7                   | 13.9                 |              | 13.9                 | 11.0                 |
| 10.9                 | 10.3                 | 10.8                 | 11.5                   | 11.5                 |              | 10.1                 | 11.7                 |
| 12.1                 | 9.7                  | 11.8                 | 10.2                   | 10.5                 |              | 10.6                 | 11.7                 |
| 14.8                 | 11.3                 | 15.2                 | 10.3                   | 11.1                 |              | 11.8                 | 10.7                 |
| 13.9                 | 11.3                 | 14.6                 | 10.1                   | 12.4                 |              | 13.1                 | 11.3                 |
| 15.7                 | 15.7                 | 18.4                 | 12.5                   | 15.7                 |              | 16.5                 | 13.2                 |
| 16.3                 | 15.7                 | 17.9                 | 13.8                   | 14.2                 |              | 16.1                 | 13.3                 |
| + 14.5               | + 13.6               | + 14.6               | + 13.0                 | + 14.3               |              | + 14.1               | + 14.6               |
| + 26.0               | + 24.0               | + 25.3               | + 23.4                 | + 26.4               |              | + 24.7               | + 22.8               |
| 7                    | 7                    | 7                    | 2                      | 7                    |              | 7                    | 2                    |
| + 5.0                | + 5.0                | + 6.4                | + 4.0                  | + 6.0                |              | + 5.1                | + 6.0                |
| 22                   | 27                   | 22                   | 27                     | 26                   |              | 23                   | 28                   |

Nie zapisywano spostrzeżeń.

## Ciepłota powietrza

Średnie

*Październik 1899 roku.*

| Dzień      | Kami-<br>tzer<br>Platte<br>8. 2. 8 | Biel-<br>sko<br>8. 2. 8 | Ży-<br>wiec<br>7. 2. 9 | Wado-<br>wice<br>7. 1. 10 | Czer-<br>ni-<br>chów<br>7. 2. 7 | Zako-<br>pane<br>7. 2. 9 | Kra-<br>ków<br>6. 2. 10 |
|------------|------------------------------------|-------------------------|------------------------|---------------------------|---------------------------------|--------------------------|-------------------------|
| 1          | + 13 <sup>0</sup> .8               | + 18 <sup>0</sup> .1    | + 17 <sup>0</sup> .0   | + 17 <sup>0</sup> .0      | + 16 <sup>0</sup> .0            | + 15 <sup>0</sup> .7     | + 16 <sup>0</sup> .1    |
| 2          | 15.3                               | 20.0                    | 16.7                   | 18.0                      | 17.0                            | 17.4                     | 17.0                    |
| 3          | 9.9                                | 13.5                    | 15.5                   | 12.6                      | 10.7                            | 10.2                     | 12.7                    |
| 4          | 8.7                                | 12.1                    | 10.6                   | 12.4                      | 15.7                            | 8.0                      | 10.9                    |
| 5          | 9.7                                | 14.6                    | 12.5                   | 14.7                      | 12.3                            | 8.6                      | 12.2                    |
| 6          | 6.0                                | 9.9                     | 10.0                   | 11.4                      | 11.2                            | 7.6                      | 10.9                    |
| 7          | 4.9                                | 9.6                     | 9.4                    | 10.3                      | 10.1                            | 6.1                      | 10.4                    |
| 8          | -0.4                               | 4.1                     | 4.2                    | 5.5                       | 6.0                             | 0.8                      | 5.6                     |
| 9          | -1.6                               | 3.0                     | 2.5                    | 4.5                       | 3.7                             | -0.2                     | 3.7                     |
| 10         | + 4.1                              | 7.1                     | 5.3                    | 7.1                       | 4.5                             | + 2.0                    | 4.9                     |
| 11         | 5.8                                | 8.0                     | 6.8                    | 7.6                       | 6.5                             | 4.5                      | 6.9                     |
| 12         | 7.0                                | 12.0                    | 8.1                    | 10.4                      | 8.2                             | 3.8                      | 7.4                     |
| 13         | 8.8                                | 14.1                    | 12.2                   | 14.6                      | 10.4                            | 5.7                      | 11.2                    |
| 14         | 0.0                                | 4.4                     | 3.9                    | 7.0                       | 6.6                             | 0.3                      | 6.5                     |
| 15         | 0.3                                | 5.2                     | 4.7                    | 5.6                       | 5.4                             | 0.0                      | 5.0                     |
| 16         | 0.4                                | 4.4                     | 2.6                    | 4.5                       | 3.9                             | -0.8                     | 4.7                     |
| 17         | -0.2                               | 4.7                     | 4.2                    | 5.7                       | 5.2                             | -0.5                     | 5.0                     |
| 18         | -1.0                               | 3.3                     | 2.9                    | 4.7                       | 4.7                             | -0.1                     | 4.3                     |
| 19         | -1.7                               | 3.1                     | 3.1                    | 4.7                       | 4.5                             | -1.5                     | 3.8                     |
| 20         | + 4.1                              | 8.2                     | 6.5                    | 5.5                       | 7.3                             | + 2.4                    | 8.2                     |
| 21         | 9.2                                | 9.1                     | 6.4                    | 8.6                       | 7.6                             | 5.4                      | 9.5                     |
| 22         | 1.8                                | 5.3                     | 3.1                    | 5.4                       | 5.5                             | 1.6                      | 5.1                     |
| 23         | 8.6                                | 9.8                     | 7.6                    | 6.8                       | 5.4                             | 3.2                      | 5.9                     |
| 24         | 6.7                                | 11.3                    | 10.2                   | 9.5                       | 8.6                             | 6.4                      | 8.3                     |
| 25         | -1.1                               | 4.4                     | 3.9                    | 5.1                       | 4.7                             | 0.3                      | 4.7                     |
| 26         | -2.5                               | 2.3                     | 1.5                    | 2.7                       | 2.5                             | -1.8                     | 2.7                     |
| 27         | + 4.6                              | 6.5                     | 4.3                    | 5.5                       | 3.5                             | + 0.1                    | 3.3                     |
| 28         | 9.5                                | 14.4                    | 11.2                   | 11.3                      | 9.2                             | 6.8                      | 10.6                    |
| 29         | 10.0                               | 14.4                    | 12.2                   | 11.7                      | 10.9                            | 10.0                     | 11.7                    |
| 30         | 9.8                                | 16.0                    | 13.7                   | 16.7                      | 11.9                            | 8.6                      | 13.0                    |
| 31         | 8.9                                | 14.0                    | 12.3                   | 17.0                      | 11.4                            | 10.6                     | 11.7                    |
| Średnia    | + 5.1                              | + 9.2                   | + 7.9                  | + 9.2                     | + 8.1                           | + 4.6                    | + 8.2                   |
| Max.<br>d. | + 16.6<br>2                        | + 23.8<br>2             | + 23.2<br>2            | + 23.4<br>2               | + 22.2<br>2                     | + 20.3<br>2              | + 26.0<br>2             |
| Min.<br>d. | -4.6<br>27                         | -0.8<br>21              | -2.6<br>27             | -0.2<br>26                | -1.4<br>27                      | -5.4<br>26               | + 2.6<br>27             |

w stopniach Celsiusza.  
dzienne.

| Bochnia | Szczawnica | Krynica | Tarnów  | Pilzno  | Iwonicz  | Rzeszów | Smolnik |
|---------|------------|---------|---------|---------|----------|---------|---------|
| 7. 1. 9 | 7. 1. 9    | 7. 2. 9 | 7. 1. 9 | 7. 1. 9 | 6. 2. 10 | 8. 2. 8 | 7. 1. 9 |
| + 16.0  | + 17.2     | + 14.4  | + 17.8  | + 16.7  | + 18.8   | + 20.1  | + 16.6  |
| 16.5    | 18.6       | 15.5    | 18.9    | 17.6    | 19.0     | 19.3    | 17.7    |
| 15.0    | 13.2       | 12.7    | 16.6    | 17.7    | 15.3     | 12.6    | 15.0    |
| 10.5    | 11.1       | 9.7     | 16.1    | 11.2    | 13.5     | 11.9    | 12.3    |
| 12.7    | 10.9       | 10.6    | 15.3    | 14.3    | 12.4     | 14.4    | 12.6    |
| 10.5    | 10.0       | 9.7     | 12.3    | 12.4    | 10.3     | 11.2    | 11.5    |
| 9.7     | 10.1       | 8.6     | 10.0    | 10.0    | 9.0      | 7.8     | 10.4    |
| 5.2     | 4.0        | 3.2     | 5.7     | 4.7     | 4.9      | 5.2     | 3.2     |
| 3.7     | 2.7        | 1.5     | 4.7     | 3.6     | 3.4      | 3.9     | 0.7     |
| 5.2     | 3.8        | 3.1     | 5.3     | 5.9     | 4.0      | 1.3     | 2.8     |
| 7.2     | 6.2        | 3.5     | 7.3     | 6.8     | 6.1      | 5.3     | 4.5     |
| 8.2     | 8.5        | 5.6     | 8.5     | 8.5     | 9.3      | 7.1     | 5.8     |
| 10.8    | 10.7       | 8.1     | 12.4    | 12.8    | 10.7     | 10.5    | 4.4     |
| 7.2     | 4.4        | 2.5     | 7.1     | 5.7     | 6.4      | 6.6     | 2.1     |
| 5.7     | 4.4        | 3.0     | 5.5     | 5.8     | 4.5      | 5.2     | 2.8     |
| 4.2     | 2.5        | 1.6     | 5.1     | 5.3     | 4.3      | 4.9     | 3.1     |
| 5.5     | 3.4        | 2.8     | 5.7     | 5.7     | 2.5      | 4.0     | 2.6     |
| 4.7     | 2.7        | 1.8     | 5.0     | 5.0     | 4.0      | 4.3     | 2.1     |
| 3.0     | 2.9        | 1.4     | 3.7     | 3.9     | 4.6      | 4.3     | 2.8     |
| 7.0     | 6.6        | 5.8     | 8.1     | 8.0     | 7.1      | 4.4     | 4.0     |
| 8.5     | 7.4        | 6.8     | 9.6     | 9.0     | 10.2     | 6.8     | 7.7     |
| 5.8     | 3.5        | 3.7     | 5.5     | 6.0     | 7.5      | 6.5     | 4.3     |
| 5.0     | 4.5        | 1.9     | 7.1     | 6.2     | 6.8      | 8.6     | 3.2     |
| 9.5     | 8.0        | 5.2     | 7.9     | 8.4     | 5.7      | 8.7     | 7.5     |
| 4.5     | 3.9        | 2.4     | 4.9     | 5.0     | 3.5      | 5.7     | 2.7     |
| 2.3     | 1.7        | 0.8     | 3.0     | 3.5     | 3.1      | 2.2     | -0.8    |
| 4.5     | 2.4        | 2.7     | 5.2     | 3.5     | 3.8      | 5.7     | +0.1    |
| 12.3    | 6.6        | 4.2     | 10.2    | 8.5     | 6.2      | 7.9     | 5.1     |
| 12.5    | 10.9       | 6.4     | 13.1    | 10.5    | 9.2      | 9.7     | 8.7     |
| 14.0    | 11.0       | 6.6     | 13.5    | 11.3    | 12.3     | 10.9    | 11.0    |
| 14.2    | 12.3       | 9.3     | 12.5    | 11.3    | 11.4     | 10.5    | 11.8    |
| + 8.4   | + 7.3      | + 5.6   | + 9.1   | + 8.5   | + 8.1    | + 8.0   | + 6.4   |
| + 23.0  | + 23.2     | + 19.1  | + 24.3  | + 22.9  | + 22.4   | + 28.2  | + 22.1  |
| 2       | 2          | 2       | 2       | 2       | 2 13     | 1       | 2       |
| -0.5    | -4.2       | -2.1    | + 0.7   | + 1.0   | -0.8     | -0.2    | -6.1    |
| 27      | 27         | 23      | 26      | 10      | 27       | 10      | 27      |

## Ciepłota powietrza Średnie

*Październik 1899 roku.*

| Dzień      | Sanok                | Prze-<br>myśl        | Łom-<br>na           | Chy-<br>rów          | Stare-<br>miasto     | Sam-<br>bor          | Dolina               | Lwów                 |
|------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|            | 7. 2. 9              | 7. 1. 9              | 7. 2. 9              | 7. 2. 9              | 7. 2. 9              | 7. 1. 9              | 7. 2. 9              | 7. 2. 9              |
| 1          | + 13 <sup>0</sup> .5 | + 18 <sup>0</sup> .3 | + 13 <sup>0</sup> .1 | + 16 <sup>0</sup> .0 | + 16 <sup>0</sup> .4 | + 17 <sup>0</sup> .5 | + 13 <sup>0</sup> .3 | + 18 <sup>0</sup> .1 |
| 2          | 16.7                 | 15.9                 | 13.4                 | 15.9                 | 17.9                 | 16.7                 | 12.3                 | 17.1                 |
| 3          | 15.1                 | 16.5                 | 11.4                 | 14.8                 | 15.4                 | 17.0                 | 14.7                 | 16.2                 |
| 4          | 13.0                 | 14.1                 | 9.9                  | 12.2                 | 13.6                 | 13.1                 | 13.0                 | 13.6                 |
| 5          | 13.1                 | 12.1                 | 9.6                  | 11.9                 | 13.8                 | 13.7                 | 12.0                 | 13.7                 |
| 6          | 12.1                 | 12.4                 | 7.9                  | 11.3                 | 12.3                 | 12.0                 | 12.7                 | 10.5                 |
| 7          | 9.6                  | 10.6                 | 7.0                  | 7.9                  | 9.0                  | 9.1                  | 9.3                  | 8.4                  |
| 8          | 5.5                  | 6.1                  | 2.4                  | 4.3                  | 5.3                  | 9.1                  | 6.3                  | 6.0                  |
| 9          | 2.8                  | 4.7                  | -0.3                 | 3.1                  | 4.1                  | 7.5                  | 4.3                  | 4.8                  |
| 10         | 4.8                  | 4.5                  | -0.2                 | 3.7                  | 6.0                  | 8.3                  | 5.7                  | 4.5                  |
| 11         | 8.3                  | 6.8                  | + 2.3                | 6.5                  | 7.4                  | 8.7                  | 7.0                  | 6.6                  |
| 12         | 7.3                  | 6.1                  | 2.5                  | 6.4                  | 8.7                  | 8.5                  | 5.7                  | 8.6                  |
| 13         | 11.0                 | 8.4                  | 6.5                  | 8.4                  | 10.9                 | 9.9                  | 6.3                  | 8.6                  |
| 14         | 8.5                  | 5.5                  | 1.5                  | 4.2                  | 5.4                  | 4.8                  | 4.0                  | 5.4                  |
| 15         | 4.4                  | 6.2                  | 2.6                  | 3.7                  | 5.7                  | 5.4                  | 4.7                  | 4.0                  |
| 16         | 3.5                  | 3.9                  | -1.7                 | 3.3                  | 4.6                  | 5.8                  | 4.3                  | 2.6                  |
| 17         | 4.1                  | 4.8                  | -0.4                 | 3.8                  | 4.6                  | 4.1                  | 4.7                  | 3.0                  |
| 18         | 4.0                  | 4.6                  | -0.5                 | 2.7                  | 3.5                  | 3.7                  | 3.3                  | 3.6                  |
| 19         | 3.5                  | 5.1                  | + 3.0                | 3.2                  | 4.1                  | 4.6                  | 4.0                  | 3.1                  |
| 20         | 6.6                  | 7.1                  | 1.7                  | 5.7                  | 7.2                  | 6.6                  | 7.0                  | 5.5                  |
| 21         | 9.4                  | 11.8                 | 5.4                  | 9.3                  | 11.8                 | 9.3                  | 10.7                 | 9.3                  |
| 22         | 4.3                  | 4.6                  | 1.7                  | 4.0                  | 6.2                  | 5.5                  | 7.3                  | 4.5                  |
| 23         | 5.7                  | 5.7                  | 0.0                  | 5.2                  | 7.6                  | 6.4                  | 2.7                  | 4.6                  |
| 24         | 8.4                  | 9.3                  | 1.4                  | 8.6                  | 9.4                  | 8.1                  | 8.7                  | 8.6                  |
| 25         | 3.1                  | 3.9                  | -1.6                 | 2.4                  | 2.8                  | 3.2                  | 4.3                  | 2.8                  |
| 26         | 1.5                  | 2.0                  | -1.6                 | 0.9                  | 1.0                  | 2.1                  | 2.0                  | 2.1                  |
| 27         | 2.7                  | 3.1                  | -1.7                 | 2.9                  | 4.8                  | 3.5                  | 5.2                  | 2.3                  |
| 28         | 7.2                  | 9.2                  | + 2.3                | 8.1                  | 8.4                  | 8.7                  | 9.3                  | 7.5                  |
| 29         | 11.2                 | 12.0                 | 5.4                  | 11.6                 | 11.9                 | 11.2                 | 12.3                 | 11.4                 |
| 30         | 12.6                 | 12.5                 | 6.2                  | 12.1                 | 13.3                 | 12.3                 | 13.0                 | 11.5                 |
| 31         | 12.9                 | 14.5                 | 7.1                  | 13.4                 | 14.5                 | 12.4                 | 12.3                 | 13.2                 |
| Średnia    | + 7.9                | + 8.5                | + 3.7                | + 7.3                | + 8.6                | + 8.7                | + 7.8                | + 7.8                |
| Max.<br>d. | + 22.4<br>2          | + 23.3<br>2          | + 21.5<br>2          | + 23.4<br>2          | + 26.6<br>2          | + 22.4<br>3          | + 25.0<br>3          | + 23.5<br>3          |
| Min.<br>d. | -3.0<br>27           | -3.0<br>27           | -8.2<br>27           | -3.1<br>27           | -1.6<br>27           | + 0.2<br>27          | -1.0<br>13           | -2.5<br>27           |

w stopniach Celsiusza.  
dzienne.

| Dubla-<br>ny | Dela-<br>tyn | Oży-<br>dów | Krzy-<br>wo-<br>równia | Koło-<br>myja | Ober-<br>tyn | Tar-<br>nopol | Jagiel-<br>nica |
|--------------|--------------|-------------|------------------------|---------------|--------------|---------------|-----------------|
| 7.2.9        | 7.2.8        | 7.2.9       | 7.2.9                  | 7.2.9         | 7.2.9        | 7.2.9         | 7.2.9           |
| 0            | 0            | 0           | 0                      | 0             |              | 0             | 0               |
| +17.7        | +16.0        | +19.1       | +14.2                  | +15.7         |              | +15.4         | +16.2           |
| 16.6         | 15.3         | 18.8        | 14.8                   | 15.5          |              | 15.7          | 16.9            |
| 16.1         | 16.0         | 18.1        | 14.1                   | 16.1          |              | 16.0          | 14.3            |
| 13.9         | 12.7         | 14.6        | 13.4                   | 12.3          |              | 13.4          | 13.0            |
| 14.4         | 12.3         | 14.0        | 13.7                   | 14.5          |              | 12.9          | 15.7            |
| 10.8         | 11.3         | 12.3        | 11.9                   | 12.8          |              | 12.2          | 13.7            |
| 8.4          | 9.7          | 9.6         | 10.9                   | 9.3           |              | 9.3           | 13.7            |
| 6.3          | 5.0          | 6.6         | 5.3                    | 6.5           |              | 6.5           | 10.0            |
| 4.7          | 4.3          | 5.5         | 3.8                    | 4.3           |              | 4.3           | 12.3            |
| 5.3          | 4.7          | 4.6         | 4.3                    | 4.2           |              | 4.2           | 7.0             |
| 6.8          | 5.7          | 7.1         | 3.7                    | 4.9           |              | 5.7           | 7.3             |
| 7.9          | 7.0          | 9.9         | 5.3                    | 5.4           |              | 6.4           | 6.2             |
| 9.4          | 7.3          | 9.9         | 5.1                    | 4.9           |              | 7.4           | 7.5             |
| 5.7          | 5.0          | 6.0         | 6.8                    | 4.5           |              | 5.5           | 6.5             |
| 5.1          | 4.3          | 5.0         | 3.1                    | 4.6           |              | 4.1           | 5.2             |
| 3.3          | 3.7          | 2.5         | 1.3                    | 4.9           |              | 2.7           | 4.9             |
| 3.9          | 3.0          | 4.0         | 1.2                    | 3.7           |              | 3.0           | 5.8             |
| 4.1          | 2.7          | 5.2         | 2.3                    | 3.8           |              | 3.9           | 5.8             |
| 3.5          | 2.7          | 3.2         | 2.7                    | 4.3           |              | 2.9           | 4.3             |
| 6.1          | 6.7          | 5.5         | 5.8                    | 6.5           |              | 4.8           | 7.1             |
| 10.5         | 9.3          | 8.6         | 7.9                    | 9.9           |              | 8.6           | 2.9             |
| 4.6          | 4.7          | 5.9         | 1.7                    | 6.3           |              | 4.0           | 2.7             |
| 5.0          | 4.3          | 5.4         | 3.1                    | 3.1           |              | 2.5           | 3.0             |
| 9.6          | 8.0          | 9.1         | 5.7                    | 5.5           |              | 7.5           | 3.0             |
| 3.0          | 5.0          | 3.8         | 3.6                    | 4.4           |              | 2.9           | 5.3             |
| 2.7          | 1.7          | 2.5         | 5.5                    | 3.0           |              | 1.7           | 5.0             |
| 3.1          | 1.7          | 3.2         | -1.1                   | 2.8           |              | 2.0           | 8.0             |
| 8.1          | 10.0         | 7.8         | +4.4                   | 3.1           |              | 5.6           | 6.7             |
| 12.7         | 11.3         | 11.2        | 10.3                   | 12.3          |              | 11.7          | 5.3             |
| 12.2         | 13.0         | 11.9        | 10.7                   | 13.6          |              | 11.2          | 8.0             |
| 14.1         | 14.7         | 13.6        | 7.9                    | 17.0          |              | 12.0          | 10.3            |
| +8.2         | +7.7         | +8.5        | +6.4                   | +7.7          |              | +7.3          | +8.2            |
| +25.0        | +22.0        | +25.2       | +21.2                  | +22.8         |              | +22.2         | +21.8           |
| 1,213        | 3            | 1           | 112                    | 2             |              | 3             | 2               |
| -2.0         | -2.0         | -1.0        | -5.4                   | -2.0          |              | -1.7          | -1.0            |
| 23           | 27           | 23          | 28                     | 23            |              | 23            | 10              |

Nie zapisywano spostrzeżeń.

# Ciepłota powietrza

Średnie

*Listopad 1899 roku.*

| Dzień      | Kami-<br>tzer<br>Platte<br>8. 2. 8 | Biel-<br>sko<br>8. 2. 8 | Ży-<br>wiec<br>7. 2. 9 | Wado-<br>wice<br>7. 1. 10 | Czer-<br>ni-<br>chów<br>7. 2. 7 | Zako-<br>pane<br>7. 2. 9. | Kra-<br>ków<br>6. 2. 10 |
|------------|------------------------------------|-------------------------|------------------------|---------------------------|---------------------------------|---------------------------|-------------------------|
| 1          | + 2.2                              | + 5.3                   | + 9.5                  | + 8.0                     | + 5.3                           | + 2.1                     | + 5.1                   |
| 2          | 9.1                                | 10.9                    | 9.7                    | 7.7                       | 6.0                             | 3.6                       | 5.6                     |
| 3          | 8.1                                | 11.6                    | 11.8                   | 9.3                       | 7.0                             | 4.5                       | 6.5                     |
| 4          | 11.9                               | 14.4                    | 12.7                   | 9.2                       | 7.6                             | 7.3                       | 8.1                     |
| 5          | 13.0                               | 12.6                    | 12.1                   | 10.5                      | 9.2                             | 6.3                       | 10.6                    |
| 6          | 10.3                               | 10.6                    | 8.5                    | 9.6                       | 7.1                             | 6.2                       | 8.0                     |
| 7          | 7.3                                | 8.5                     | 7.5                    | 8.1                       | 8.6                             | 3.1                       | 7.4                     |
| 8          | 8.7                                | 9.9                     | 9.7                    | 7.5                       | 5.9                             | 3.8                       | 6.0                     |
| 9          | 4.1                                | 9.7                     | 10.3                   | 8.7                       | 6.5                             | 5.4                       | 6.8                     |
| 10         | 1.1                                | 6.2                     | 6.7                    | 7.7                       | 6.6                             | 2.4                       | 6.5                     |
| 11         | 3.8                                | 8.0                     | 6.6                    | 8.2                       | 7.4                             | 5.5                       | 7.3                     |
| 12         | -0.6                               | 5.6                     | 4.0                    | 5.9                       | 5.7                             | 1.3                       | 4.9                     |
| 13         | -1.2                               | 3.3                     | 4.3                    | 4.5                       | 4.6                             | 0.8                       | 4.7                     |
| 14         | -0.8                               | 2.8                     | 2.6                    | 3.7                       | 3.5                             | 0.3                       | 3.4                     |
| 15         | -1.6                               | 5.3                     | 4.7                    | 5.3                       | 5.7                             | 1.8                       | 4.9                     |
| 16         | -4.6                               | 0.4                     | 0.3                    | 1.5                       | 1.9                             | -1.4                      | 1.6                     |
| 17         | -3.9                               | 1.3                     | 0.0                    | 2.1                       | 1.7                             | -2.9                      | 1.5                     |
| 18         | -1.2                               | 2.2                     | 1.0                    | 2.8                       | 3.4                             | + 0.1                     | 3.3                     |
| 19         | -3.3                               | 1.4                     | 1.2                    | 2.1                       | 2.0                             | -5.2                      | 2.1                     |
| 20         | -2.3                               | 0.1                     | 0.1                    | 1.1                       | 0.1                             | -4.8                      | 0.3                     |
| 21         | -6.4                               | -0.4                    | -1.7                   | -0.4                      | -0.3                            | -6.8                      | 0.1                     |
| 22         | -5.7                               | + 0.5                   | -0.8                   | + 1.0                     | + 0.2                           | -4.3                      | -0.2                    |
| 23         | -1.9                               | 3.9                     | + 3.1                  | 4.5                       | 3.4                             | + 0.3                     | + 3.6                   |
| 24         | + 0.3                              | 6.0                     | 4.3                    | 6.7                       | 6.4                             | 2.6                       | 6.4                     |
| 25         | -0.6                               | 4.1                     | 3.9                    | 5.6                       | 4.5                             | 1.9                       | 4.8                     |
| 26         | -3.8                               | 1.4                     | 3.4                    | 2.0                       | 0.7                             | -1.3                      | 1.0                     |
| 27         | -2.8                               | 4.3                     | 4.1                    | 5.0                       | 3.4                             | -0.8                      | 3.6                     |
| 28         | + 3.0                              | 7.2                     | 8.2                    | 7.7                       | 7.7                             | + 5.0                     | 7.8                     |
| 29         | 2.9                                | 7.0                     | 7.6                    | 7.9                       | 7.7                             | 5.0                       | 7.7                     |
| 30         | 2.8                                | 6.1                     | 7.4                    | 7.5                       | 7.1                             | 4.7                       | 7.1                     |
| Średnia    | + 1.6                              | + 5.7                   | + 5.4                  | + 5.7                     | + 4.9                           | + 1.6                     | + 4.9                   |
| Max.<br>d. | + 14.0<br>4                        | + 17.5<br>4             | + 18.4<br>5            | + 17.0<br>5               | + 14.1<br>5                     | + 13.4<br>5               | + 16.7<br>5             |
| Min.<br>d. | -9.9<br>23                         | -4.2<br>22              | -5.8<br>21             | -3.2<br>20                | -3.3<br>22                      | -13.3<br>22               | -3.3<br>22              |

w stopniach Celsiusza.  
dzienne.

| Bochnia | Szczawnica | Krynica | Tarnów | Pilzno | Iwonicz | Rzeszów | Smolnik |
|---------|------------|---------|--------|--------|---------|---------|---------|
| 7.1.9   | 7.1.9      | 7.2.9   | 7.1.9  | 7.1.9  | 6.2.10  | 8.2.8   | 7.1.9   |
| + 4.8   | + 5.2      | + 3.0   | + 5.6  | + 4.7  | + 6.7   | + 10.7  | + 3.3   |
| 6.8     | 5.7        | 4.0     | 7.5    | 9.7    | 8.5     | 12.2    | 6.4     |
| 9.0     | 8.5        | 6.5     | 10.6   | 9.7    | 10.4    | 12.7    | 8.5     |
| 10.0    | 8.5        | 6.2     | 13.1   | 11.6   | 12.1    | 15.0    | 12.2    |
| 10.8    | 0.3        | 6.2     | 12.4   | 11.9   | 13.8    | 15.5    | 10.0    |
| 7.0     | 8.8        | 6.3     | 10.7   | 11.7   | 11.2    | 12.0    | 7.1     |
| 7.8     | 7.4        | 5.2     | 9.9    | 9.8    | 10.5    | 11.2    | 6.4     |
| 6.7     | 6.7        | 3.3     | 8.2    | 5.9    | 10.1    | 6.3     | 7.8     |
| 8.0     | 7.4        | 6.5     | 8.9    | 7.8    | 8.8     | 7.1     | 7.3     |
| 6.5     | 5.4        | 4.1     | 6.8    | 6.1    | 6.7     | 8.4     | 4.0     |
| 7.2     | 5.9        | 5.0     | 7.5    | 6.7    | 6.5     | 7.1     | 4.7     |
| 5.3     | 2.4        | 3.0     | 5.8    | 6.3    | 3.7     | 6.1     | 2.5     |
| 4.2     | 2.4        | 2.2     | 4.5    | 4.7    | 3.4     | 4.1     | 0.9     |
| 3.0     | 1.6        | 0.4     | 3.2    | 4.3    | 2.1     | 5.4     | 0.5     |
| 5.2     | 3.2        | 2.1     | 3.8    | 4.5    | 0.7     | 0.9     | 0.2     |
| 1.3     | 0.8        | -0.3    | 1.8    | 1.2    | -0.6    | 0.5     | -1.0    |
| 0.8     | -1.1       | -2.4    | 1.7    | 0.9    | 0.0     | 0.5     | -3.2    |
| 3.0     | + 0.1      | -0.9    | 3.2    | 2.3    | 0.0     | 1.8     | -1.2    |
| 1.8     | -1.3       | -2.3    | 2.7    | 1.5    | + 0.5   | 0.9     | -2.4    |
| 0.4     | -3.1       | -4.7    | 1.9    | 1.8    | -3.9    | 0.3     | -1.8    |
| -0.3    | -3.3       | -4.5    | 0.0    | -0.1   | -4.9    | -0.8    | -4.1    |
| + 0.3   | -4.9       | -4.2    | 0.3    | + 0.1  | -0.9    | -2.5    | -5.0    |
| 3.5     | + 1.7      | + 0.7   | 3.8    | 3.3    | + 1.1   | + 3.0   | + 0.3   |
| 6.2     | 4.7        | 2.5     | 7.0    | 5.6    | 2.0     | 5.4     | 2.0     |
| 4.7     | 3.7        | 2.1     | 5.2    | 4.8    | 1.9     | 4.4     | 1.6     |
| 0.8     | 0.7        | -0.3    | 1.2    | 1.8    | -0.1    | 0.7     | -3.6    |
| 2.3     | 1.0        | + 0.1   | 3.8    | 3.9    | + 0.7   | 1.6     | -0.5    |
| 7.5     | 7.0        | 6.6     | 7.9    | 8.1    | 6.1     | 5.7     | + 5.7   |
| 7.5     | 7.0        | 6.2     | 5.8    | 8.1    | 7.4     | 6.9     | 6.2     |
| 7.3     | 7.1        | 6.2     | 7.7    | 7.6    | 7.8     | 5.7     | 6.2     |
| + 5.0   | + 3.6      | + 2.3   | + 5.7  | + 5.5  | + 4.4   | + 5.6   | + 2.7   |
| + 15.0  | + 16.4     | + 9.4   | + 16.9 | + 16.8 | + 16.2  | + 20.0  | + 16.4  |
| 4.5     | 6          | 5.7     | 4      | 5      | 5       | 5       | 4       |
| -2.5    | -14.4      | -10.0   | -2.4   | -3.0   | -7.2    | -3.4    | -10.0   |
| 22      | 22         | 22      | 22     | 22     | 21      | 22      | 21      |

## Ciepłota powietrza Średnie

*Listopad 1899 roku.*

| Dzień      | Sanok                     | Prze-<br>myśl             | Łow-<br>na                | Chy-<br>rów               | Stare-<br>miasto          | Sam-<br>bor                  | Doli-<br>na                  | Lwów                      |
|------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|------------------------------|------------------------------|---------------------------|
|            | 7. 2. 9                   | 7. 1. 9                   | 7. 2. 9                   | 7. 2. 9                   | 7. 2. 9                   | 7. 1. 9                      | 7. 2. 9                      | 7. 2. 9                   |
| 1          | + 4 <sup>0</sup> .9       | + 5 <sup>0</sup> .8       | + 2 <sup>0</sup> .6       | + 4 <sup>0</sup> .7       | + 5 <sup>0</sup> .5       | + 6 <sup>0</sup> .1          | + 6 <sup>0</sup> .0          | + 5 <sup>0</sup> .9       |
| 2          | 6 <sup>0</sup> .1         | 6 <sup>0</sup> .0         | 1 <sup>0</sup> .8         | 5 <sup>0</sup> .4         | 8 <sup>0</sup> .0         | 8 <sup>0</sup> .3            | 4 <sup>0</sup> .7            | 6 <sup>0</sup> .7         |
| 3          | 11 <sup>0</sup> .3        | 10 <sup>0</sup> .5        | 4 <sup>0</sup> .6         | 9 <sup>0</sup> .8         | 12 <sup>0</sup> .4        | 9 <sup>0</sup> .8            | 8 <sup>0</sup> .3            | 9 <sup>0</sup> .3         |
| 4          | 12 <sup>0</sup> .7        | 9 <sup>0</sup> .6         | 5 <sup>0</sup> .6         | 10 <sup>0</sup> .7        | 14 <sup>0</sup> .0        | 11 <sup>0</sup> .1           | 8 <sup>0</sup> .7            | 10 <sup>0</sup> .4        |
| 5          | 11 <sup>0</sup> .6        | 11 <sup>0</sup> .9        | 5 <sup>0</sup> .5         | 10 <sup>0</sup> .7        | 11 <sup>0</sup> .9        | 11 <sup>0</sup> .8           | 10 <sup>0</sup> .7           | 11 <sup>0</sup> .5        |
| 6          | 9 <sup>0</sup> .3         | 9 <sup>0</sup> .0         | 5 <sup>0</sup> .2         | 8 <sup>0</sup> .1         | 9 <sup>0</sup> .3         | 8 <sup>0</sup> .8            | 7 <sup>0</sup> .0            | 10 <sup>0</sup> .9        |
| 7          | 8 <sup>0</sup> .5         | 5 <sup>0</sup> .9         | 4 <sup>0</sup> .3         | 4 <sup>0</sup> .1         | 7 <sup>0</sup> .5         | 5 <sup>0</sup> .1            | 2 <sup>0</sup> .7            | 5 <sup>0</sup> .1         |
| 8          | 7 <sup>0</sup> .7         | 4 <sup>0</sup> .3         | 3 <sup>0</sup> .6         | 3 <sup>0</sup> .5         | 5 <sup>0</sup> .2         | 5 <sup>0</sup> .4            | 2 <sup>0</sup> .7            | 6 <sup>0</sup> .3         |
| 9          | 8 <sup>0</sup> .5         | 7 <sup>0</sup> .2         | 4 <sup>0</sup> .4         | 7 <sup>0</sup> .1         | 9 <sup>0</sup> .0         | 5 <sup>0</sup> .3            | 3 <sup>0</sup> .7            | 4 <sup>0</sup> .9         |
| 10         | 5 <sup>0</sup> .5         | 5 <sup>0</sup> .6         | 1 <sup>0</sup> .8         | 5 <sup>0</sup> .8         | 5 <sup>0</sup> .1         | 4 <sup>0</sup> .8            | 5 <sup>0</sup> .7            | 6 <sup>0</sup> .0         |
| 11         | 5 <sup>0</sup> .6         | 6 <sup>0</sup> .9         | 1 <sup>0</sup> .9         | 5 <sup>0</sup> .9         | 6 <sup>0</sup> .7         | 6 <sup>0</sup> .0            | 6 <sup>0</sup> .7            | 6 <sup>0</sup> .5         |
| 12         | 3 <sup>0</sup> .9         | 4 <sup>0</sup> .7         | 0 <sup>0</sup> .6         | 3 <sup>0</sup> .0         | 4 <sup>0</sup> .0         | 5 <sup>0</sup> .6            | 5 <sup>0</sup> .3            | 3 <sup>0</sup> .9         |
| 13         | 2 <sup>0</sup> .3         | 3 <sup>0</sup> .5         | -1 <sup>0</sup> .9        | 2 <sup>0</sup> .0         | 2 <sup>0</sup> .8         | 3 <sup>0</sup> .2            | 3 <sup>0</sup> .7            | 2 <sup>0</sup> .6         |
| 14         | 1 <sup>0</sup> .6         | 3 <sup>0</sup> .1         | -2 <sup>0</sup> .7        | 1 <sup>0</sup> .0         | 1 <sup>0</sup> .6         | 1 <sup>0</sup> .2            | 2 <sup>0</sup> .3            | 1 <sup>0</sup> .4         |
| 15         | 1 <sup>0</sup> .3         | 2 <sup>0</sup> .6         | -2 <sup>0</sup> .9        | -0 <sup>0</sup> .1        | 1 <sup>0</sup> .6         | 0 <sup>0</sup> .9            | 2 <sup>0</sup> .0            | 1 <sup>0</sup> .6         |
| 16         | 0 <sup>0</sup> .3         | 1 <sup>0</sup> .6         | -2 <sup>0</sup> .4        | -0 <sup>0</sup> .3        | 0 <sup>0</sup> .5         | 0 <sup>0</sup> .7            | 1 <sup>0</sup> .3            | 0 <sup>0</sup> .4         |
| 17         | -1 <sup>0</sup> .1        | 0 <sup>0</sup> .6         | -5 <sup>0</sup> .0        | -0 <sup>0</sup> .8        | -0 <sup>0</sup> .8        | -0 <sup>0</sup> .3           | 1 <sup>0</sup> .0            | 0 <sup>0</sup> .3         |
| 18         | + 0 <sup>0</sup> .5       | 2 <sup>0</sup> .2         | -4 <sup>0</sup> .2        | -0 <sup>0</sup> .1        | + 0 <sup>0</sup> .2       | + 1 <sup>0</sup> .0          | 1 <sup>0</sup> .3            | 1 <sup>0</sup> .2         |
| 19         | 0 <sup>0</sup> .5         | 1 <sup>0</sup> .7         | -5 <sup>0</sup> .0        | -0 <sup>0</sup> .5        | 0 <sup>0</sup> .2         | 1 <sup>0</sup> .1            | 1 <sup>0</sup> .3            | 1 <sup>0</sup> .6         |
| 20         | -0 <sup>0</sup> .1        | 1 <sup>0</sup> .4         | -3 <sup>0</sup> .4        | -0 <sup>0</sup> .1        | 1 <sup>0</sup> .3         | -0 <sup>0</sup> .6           | -0 <sup>0</sup> .3           | 1 <sup>0</sup> .7         |
| 21         | -1 <sup>0</sup> .1        | 0 <sup>0</sup> .1         | -5 <sup>0</sup> .7        | -1 <sup>0</sup> .6        | -0 <sup>0</sup> .2        | -2 <sup>0</sup> .1           | 0 <sup>0</sup> .0            | 0 <sup>0</sup> .2         |
| 22         | -1 <sup>0</sup> .9        | 0 <sup>0</sup> .0         | -7 <sup>0</sup> .2        | -2 <sup>0</sup> .0        | -2 <sup>0</sup> .7        | + 0 <sup>0</sup> .1          | + 3 <sup>0</sup> .2          | -1 <sup>0</sup> .0        |
| 23         | + 1 <sup>0</sup> .5       | 2 <sup>0</sup> .2         | -1 <sup>0</sup> .5        | + 0 <sup>0</sup> .7       | + 1 <sup>0</sup> .9       | 1 <sup>0</sup> .5            | 2 <sup>0</sup> .0            | + 1 <sup>0</sup> .4       |
| 24         | 3 <sup>0</sup> .8         | 4 <sup>0</sup> .9         | -0 <sup>0</sup> .3        | 0 <sup>0</sup> .7         | 5 <sup>0</sup> .4         | 5 <sup>0</sup> .5            | 4 <sup>0</sup> .3            | 4 <sup>0</sup> .6         |
| 25         | 3 <sup>0</sup> .0         | 3 <sup>0</sup> .9         | -1 <sup>0</sup> .8        | 2 <sup>0</sup> .7         | 4 <sup>0</sup> .5         | 3 <sup>0</sup> .7            | 4 <sup>0</sup> .0            | 3 <sup>0</sup> .9         |
| 26         | -0 <sup>0</sup> .9        | -0 <sup>0</sup> .5        | -6 <sup>0</sup> .4        | -1 <sup>0</sup> .6        | 0 <sup>0</sup> .0         | -1 <sup>0</sup> .5           | -1 <sup>0</sup> .0           | -1 <sup>0</sup> .7        |
| 27         | + 0 <sup>0</sup> .9       | + 2 <sup>0</sup> .3       | -1 <sup>0</sup> .8        | + 0 <sup>0</sup> .6       | 1 <sup>0</sup> .9         | + 1 <sup>0</sup> .8          | + 2 <sup>0</sup> .0          | + 1 <sup>0</sup> .3       |
| 28         | 6 <sup>0</sup> .9         | 8 <sup>0</sup> .2         | + 2 <sup>0</sup> .5       | 7 <sup>0</sup> .3         | 7 <sup>0</sup> .9         | 7 <sup>0</sup> .4            | 8 <sup>0</sup> .0            | 7 <sup>0</sup> .1         |
| 29         | 7 <sup>0</sup> .1         | 7 <sup>0</sup> .9         | 4 <sup>0</sup> .0         | 6 <sup>0</sup> .8         | 7 <sup>0</sup> .8         | 6 <sup>0</sup> .7            | 8 <sup>0</sup> .3            | 7 <sup>0</sup> .5         |
| 30         | 6 <sup>0</sup> .7         | 7 <sup>0</sup> .6         | 3 <sup>0</sup> .7         | 6 <sup>0</sup> .2         | 7 <sup>0</sup> .4         | 6 <sup>0</sup> .8            | 9 <sup>0</sup> .0            | 6 <sup>0</sup> .8         |
| Średnia    | + 4 <sup>0</sup> .2       | + 4 <sup>0</sup> .7       | 0 <sup>0</sup> .0         | + 3 <sup>0</sup> .3       | + 4 <sup>0</sup> .7       | + 4 <sup>0</sup> .5          | + 4 <sup>0</sup> .1          | + 4 <sup>0</sup> .3       |
| Max.<br>d. | + 17 <sup>0</sup> .6<br>5 | + 16 <sup>0</sup> .4<br>4 | + 14 <sup>0</sup> .5<br>6 | + 17 <sup>0</sup> .3<br>4 | + 21 <sup>0</sup> .2<br>4 | + 15 <sup>0</sup> .4<br>4 15 | + 17 <sup>0</sup> .0<br>5 16 | + 16 <sup>0</sup> .0<br>4 |
| Mín.<br>d. | -6 <sup>0</sup> .0<br>22  | -4 <sup>0</sup> .0<br>22  | -10 <sup>0</sup> .0<br>21 | -6 <sup>0</sup> .1<br>22  | -5 <sup>0</sup> .0<br>22  | -3 <sup>0</sup> .2<br>22     | -6 <sup>0</sup> .0<br>20     | -5 <sup>0</sup> .0<br>22  |



w stopniach Celsiusza  
dziennie.

| Du-<br>blany        | Delatyn             | Oży-<br>dów         | Krzy-<br>wo-<br>równia | Koło-<br>myja       | Ober-<br>tyn | Tar-<br>nopol       | Jagiel-<br>nica     |
|---------------------|---------------------|---------------------|------------------------|---------------------|--------------|---------------------|---------------------|
| 7.2.9               | 7.2.8               | 7.2.9               | 7.2.9                  | 7.2.9               |              | 7.2.9               | 7.2.9               |
| + 6 <sup>0</sup> .5 | + 6 <sup>0</sup> .0 | + 5 <sup>0</sup> .8 | + 3 <sup>0</sup> .9    | + 6 <sup>0</sup> .9 |              | + 5 <sup>0</sup> .8 | + 2 <sup>0</sup> .2 |
| 6.8                 | 6.3                 | 6.3                 | 2.1                    | 2.9                 |              | 3.3                 | 4.3                 |
| 10.7                | 7.3                 | 11.1                | 4.1                    | 5.3                 |              | 5.5                 | 5.2                 |
| 11.3                | 9.7                 | 12.1                | 3.9                    | 7.2                 |              | 7.6                 | 7.3                 |
| 11.5                | 8.3                 | 11.3                | 5.1                    | 8.5                 |              | 8.2                 | 9.2                 |
| 10.2                | 7.7                 | 10.5                | 5.3                    | 6.6                 |              | 7.9                 | 8.7                 |
| 5.2                 | 3.0                 | 6.6                 | -0.5                   | 2.8                 |              | 6.7                 | 7.0                 |
| 6.9                 | 1.7                 | 8.0                 | + 0.3                  | 4.5                 |              | 7.3                 | 6.6                 |
| 5.5                 | 1.0                 | 6.3                 | 1.5                    | 3.8                 |              | 5.1                 | 5.3                 |
| 6.7                 | 4.0                 | 6.8                 | 2.3                    | 5.0                 |              | 5.4                 | 4.3                 |
| 7.2                 | 5.7                 | 6.2                 | 4.3                    | 6.1                 |              | 5.6                 | 4.1                 |
| 4.7                 | 4.3                 | 4.5                 | 2.5                    | 5.9                 |              | 4.5                 | 4.3                 |
| 3.3                 | 3.0                 | 3.8                 | 2.1                    | 4.7                 |              | 3.6                 | 3.8                 |
| 1.9                 | 0.7                 | 1.8                 | -0.7                   | 1.4                 |              | 0.3                 | 1.7                 |
| 1.5                 | 0.3                 | 1.5                 | -0.9                   | 0.4                 |              | 0.0                 | -0.5                |
| 0.7                 | 0.7                 | 0.7                 | + 0.9                  | 1.3                 |              | 0.3                 | -0.4                |
| 0.4                 | -0.3                | 0.5                 | -1.7                   | -0.3                |              | -1.0                | -0.4                |
| 1.9                 | -1.0                | 1.9                 | -3.7                   | + 0.9               |              | + 0.3               | -1.0                |
| 2.1                 | -0.3                | 2.0                 | -0.3                   | 1.2                 |              | 0.8                 | -0.9                |
| 2.3                 | -1.7                | 1.9                 | -1.5                   | -3.1                |              | -0.4                | -3.0                |
| 0.1                 | -1.0                | 0.4                 | -2.7                   | -0.3                |              | -0.3                | -2.1                |
| -0.3                | -2.3                | -0.9                | -3.9                   | -0.7                |              | -0.9                | -3.4                |
| + 1.9               | + 1.3               | + 1.2               | + 1.1                  | 2.1                 |              | + 0.8               | -2.1                |
| 5.2                 | 5.3                 | 4.3                 | 1.9                    | 5.2                 |              | 3.5                 | + 1.3               |
| 4.4                 | 3.3                 | 4.1                 | 3.3                    | 5.3                 |              | 3.5                 | 2.2                 |
| -1.0                | -0.7                | -2.0                | -3.6                   | -1.6                |              | -2.6                | -3.3                |
| + 1.9               | + 2.0               | + 1.7               | -1.2                   | + 0.8               |              | -0.1                | -1.9                |
| 8.2                 | 6.7                 | 7.1                 | + 5.9                  | 7.7                 |              | + 6.3               | + 5.4               |
| 8.7                 | 8.7                 | 6.9                 | 7.4                    | 8.9                 |              | 7.6                 | 6.5                 |
| 7.7                 | 7.3                 | 7.1                 | 7.3                    | 9.2                 |              | 7.0                 | 7.8                 |
| + 4.8               | + 3.2               | + 4.6               | + 1.5                  | + 3.6               |              | + 3.4               | + 2.6               |
| + 17.0              | + 14.0              | + 17.1              | + 11.4                 | + 15.6              |              | + 15.2              | + 15.0              |
| 4                   | 4                   | 4                   | 4                      | 4                   |              | 4                   | 5                   |
| -4.0                | -8.0                | -4.4                | -10.6                  | -6.4                |              | -5.5                | -5.0                |
| 22                  | 22                  | 22                  | 22                     | 22                  |              | 22                  | 22 i 23             |

Nie zapisywano spostrzeżeń.

## Ciepłota powietrza

Średnie

*Grudzień 1899 roku.*

| Dzień      | Kami-<br>tzer-<br>Platte<br>8. 2. 8 | Biel-<br>sko<br>8. 2. 8 | Ży-<br>wiec<br>7. 2. 9 | Wado-<br>wice<br>7. 1. 10 | Czer-<br>ni-<br>chów<br>7. 2. 7 | Zako-<br>pane<br>7. 2. 9 | Kra-<br>ków<br>6. 2. 10 |
|------------|-------------------------------------|-------------------------|------------------------|---------------------------|---------------------------------|--------------------------|-------------------------|
| 1          | <sup>0</sup> +1.4                   | <sup>0</sup> +2.8       | <sup>0</sup> +4.9      | <sup>0</sup> +3.9         | <sup>0</sup> +4.2               | <sup>0</sup> -0.5        | <sup>0</sup> +4.2       |
| 2          | -0.3                                | 4.0                     | 2.9                    | 2.5                       | 1.9                             | +0.9                     | 2.8                     |
| 3          | -3.3                                | 1.0                     | 0.5                    | 0.9                       | 2.5                             | -1.7                     | 2.0                     |
| 4          | -6.2                                | -1.5                    | -2.0                   | -0.9                      | -0.8                            | -7.3                     | -0.5                    |
| 5          | -5.9                                | +0.5                    | -0.1                   | +1.3                      | +1.4                            | 0.0                      | +1.2                    |
| 6          | -5.5                                | -0.4                    | -0.6                   | 0.1                       | 0.6                             | -3.9                     | 0.6                     |
| 7          | -9.7                                | -4.5                    | -4.6                   | -3.6                      | -3.7                            | -7.8                     | -4.0                    |
| 8          | -12.9                               | -8.0                    | -9.1                   | -6.0                      | -5.3                            | -14.5                    | -6.1                    |
| 9          | -14.2                               | -7.5                    | -7.1                   | -6.8                      | -6.2                            | -11.8                    | -6.3                    |
| 10         | -14.9                               | -10.9                   | -10.7                  | -8.4                      | -9.5                            | -14.6                    | -8.5                    |
| 11         | -13.2                               | -9.2                    | -8.1                   | -8.6                      | -7.5                            | -10.9                    | -7.3                    |
| 12         | -12.0                               | -11.0                   | -12.8                  | -11.2                     | -10.5                           | -12.7                    | -10.1                   |
| 13         | -8.0                                | -10.7                   | -9.1                   | -10.1                     | -9.2                            | -8.1                     | -8.7                    |
| 14         | -6.1                                | -9.8                    | -8.6                   | -8.5                      | -9.0                            | -3.3                     | -7.6                    |
| 15         | +3.1                                | -1.0                    | +1.5                   | -2.3                      | -1.5                            | +3.0                     | -1.5                    |
| 16         | 2.0                                 | -6.3                    | -4.0                   | -5.1                      | -4.8                            | 2.2                      | -4.2                    |
| 17         | 1.9                                 | -1.7                    | -0.5                   | -0.1                      | -0.7                            | 1.2                      | -0.6                    |
| 18         | -0.1                                | -1.5                    | -0.5                   | -1.0                      | -1.6                            | 0.3                      | -1.3                    |
| 19         | -2.3                                | -2.5                    | +0.9                   | -4.7                      | -4.0                            | -2.8                     | -4.2                    |
| 20         | -7.0                                | -9.0                    | -5.9                   | -9.7                      | -9.0                            | -7.5                     | -8.5                    |
| 21         | -8.8                                | -10.7                   | -11.3                  | -12.8                     | -9.9                            | -12.3                    | -9.5                    |
| 22         | -6.3                                | -11.1                   | -12.3                  | -11.9                     | -9.4                            | -10.6                    | -9.8                    |
| 23         | -5.6                                | -10.3                   | -9.2                   | -13.1                     | -11.0                           | -11.2                    | -10.3                   |
| 24         | -5.9                                | -9.5                    | -4.9                   | -11.5                     | -11.5                           | -11.6                    | -9.9                    |
| 25         | -6.9                                | -2.9                    | -3.8                   | -8.2                      | -4.8                            | -7.3                     | -4.1                    |
| 26         | -6.2                                | -5.5                    | -3.0                   | -6.7                      | -4.2                            | -6.2                     | -4.1                    |
| 27         | -3.4                                | -2.5                    | -4.0                   | -6.0                      | -5.8                            | -8.5                     | -4.6                    |
| 28         | -1.8                                | -0.8                    | +1.3                   | -4.0                      | -2.0                            | -3.5                     | -2.1                    |
| 29         | -0.8                                | +2.6                    | 4.8                    | -3.1                      | -4.9                            | -2.5                     | -4.3                    |
| 30         | +3.0                                | 6.5                     | 6.0                    | 0.0                       | +0.1                            | +2.5                     | +2.5                    |
| 31         | 5.5                                 | 6.6                     | 6.2                    | -0.5                      | -1.8                            | 0.6                      | 0.1                     |
| Średnia    | -4.9                                | -4.0                    | -3.3                   | -5.0                      | -4.4                            | -5.5                     | -4.0                    |
| Max.<br>d. | +7.4<br>31                          | +10.5<br>30             | +8.2<br>30             | +5.4<br>1                 | +6.0<br>1                       | +6.1<br>30               | +3.8<br>1               |
| Min.<br>d. | -17.6<br>10                         | -15.7<br>22             | -15.2<br>22            | -17.5<br>24               | -13.3<br>23                     | -19.0<br>8               | -14.2<br>24             |

w stopniach Celsiusza.  
dzienne.

| Boch-<br>nia | Szczaw-<br>nica | Kry-<br>nica | Tar-<br>nów | Pilzno  | Iwo-<br>nicz | Rze-<br>szów | Smol-<br>nik |
|--------------|-----------------|--------------|-------------|---------|--------------|--------------|--------------|
| 7. 1. 9      | 7. 1. 9         | 7. 2. 9      | 7. 1. 9     | 7. 1. 9 | 6. 2. 10     | 8. 2. 8      | 7. 1. 9      |
| 0            | 0               | 0            | 0           | 0       | 0            | 0            | 0            |
| + 4.3        | + 3.5           | + 3.7        | + 4.2       | + 3.4   | + 4.8        | + 2.5        | + 4.2        |
| 2.2          | 2.2             | 1.5          | 2.7         | 3.1     | 2.0          | 2.4          | 0.8          |
| 2.0          | 0.7             | 0.1          | 1.8         | 2.0     | 0.8          | 2.1          | -0.5         |
| -0.8         | -5.7            | -3.7         | 0.0         | -0.7    | -0.3         | -0.5         | -3.4         |
| + 1.3        | -0.6            | -1.7         | 1.5         | + 0.4   | -1.4         | -0.3         | -3.5         |
| 0.7          | -2.0            | -0.8         | 0.5         | 0.1     | -3.9         | -1.0         | -1.6         |
| -4.0         | -6.2            | -5.9         | -4.3        | -4.9    | -7.0         | -6.0         | -7.4         |
| -5.7         | -10.7           | -8.4         | -5.7        | -5.9    | -11.1        | -5.4         | -9.2         |
| -5.5         | -9.6            | -9.1         | -5.9        | -6.6    | -8.8         | -6.4         | -9.3         |
| -10.0        | -13.1           | -11.5        | -8.8        | -9.4    | -9.2         | -8.7         | -9.1         |
| -7.0         | -10.1           | -7.0         | -6.0        | -6.1    | -7.5         | -7.3         | -4.9         |
| -8.8         | -11.1           | -12.1        | -8.7        | -9.2    | -9.7         | -7.5         | -14.5        |
| -5.7         | -6.6            | -6.7         | -6.1        | -6.1    | -5.4         | -5.7         | -6.0         |
| -7.0         | -2.1            | -3.7         | -3.6        | -2.2    | -1.1         | -0.8         | -1.0         |
| + 2.2        | + 3.9           | + 1.1        | -3.8        | + 2.3   | + 2.1        | + 0.3        | + 5.7        |
| -2.8         | 2.7             | 1.4          | -1.2        | -0.9    | 2.0          | 2.2          | 4.9          |
| -1.2         | 1.7             | 1.1          | + 1.1       | + 1.2   | 0.7          | 2.1          | 2.7          |
| + 0.3        | 2.2             | 0.2          | -0.9        | -1.9    | -2.6         | -2.2         | -1.3         |
| -2.0         | -1.7            | -2.5         | -4.7        | -5.4    | 7.3          | -10.2        | -5.9         |
| -5.8         | -6.3            | -6.0         | -9.6        | -9.2    | -10.7        | -11.5        | -10.0        |
| -6.2         | -7.9            | -9.7         | -9.9        | -8.7    | -10.3        | -10.6        | -11.4        |
| -5.0         | -10.2           | -8.5         | -9.0        | -9.6    | -9.5         | -8.4         | -8.3         |
| -5.7         | -8.9            | -9.2         | -9.4        | -9.0    | -8.9         | -6.7         | -10.4        |
| -3.7         | -9.6            | -7.9         | -5.9        | -6.1    | -8.3         | -6.9         | -8.0         |
| -4.0         | -7.7            | -7.8         | -3.8        | -5.0    | -7.3         | -4.9         | -8.9         |
| -1.8         | -5.3            | -6.4         | -2.5        | -4.2    | -3.5         | -5.0         | -4.6         |
| -2.5         | -4.2            | -4.4         | -1.6        | -2.7    | -2.0         | -3.0         | -3.1         |
| -0.2         | -0.3            | -2.3         | + 0.9       | -0.3    | -0.5         | -3.1         | -1.4         |
| + 0.5        | + 2.7           | - 0.7        | 1.5         | + 1.0   | + 1.3        | + 1.7        | + 1.9        |
| 3.3          | 4.5             | + 0.6        | 5.3         | 3.5     | 3.3          | 4.6          | 3.4          |
| 3.3          | 3.2             | 1.5          | 5.3         | 4.1     | 3.8          | 4.4          | 5.0          |
| -2.4         | -3.6            | -4.0         | -2.5        | -3.0    | -3.7         | -3.2         | -3.8         |
| + 6.0        | + 7.0           | + 4.6        | + 7.5       | + 5.2   | + 5.8        | + 5.4        | + 6.6        |
| 1            | 30              | 1            | 31          | 1 1 31  | 1            | 30           | 15           |
| -12.0        | -16.1           | -13.8        | -12.4       | -13.7   | -13.8        | -14.2        | -23.0        |
| 10 i 12      | 12              | 23           | 21          | 12      | 22           | 21           | 12           |

## Ciepłota powietrza Średnie

Grudzień 1899 roku.

| Dzień      | Sanok       | Prze-<br>myśl | Łom-<br>na  | Chy-<br>rów      | Stare-<br>miasto | Sam-<br>bor      | Dolina       | Lwów        |
|------------|-------------|---------------|-------------|------------------|------------------|------------------|--------------|-------------|
|            | 7. 2. 9     | 7. 1. 9       | 7. 2. 9     | 7. 2. 9          | 7. 2. 9          | 7. 1. 9          | 7. 2. 9      | 7. 2. 9     |
| 1          | + 4.5       | + 4.1         | + 1.1       | + 2.7            | + 5.0            | + 5.3            | + 2.0        | + 3.7       |
| 2          | 2.8         | 4.6           | 0.4         | 3.6              | 4.4              | 5.2              | 6.0          | 4.5         |
| 3          | 1.3         | 2.0           | -3.8        | -0.2             | 1.5              | 2.1              | 2.7          | 1.3         |
| 4          | -1.7        | -0.7          | -5.8        | -2.8             | -1.7             | -1.9             | -1.7         | -1.5        |
| 5          | -1.6        | -0.4          | -5.8        | -2.4             | -1.2             | -0.9             | -0.7         | -0.9        |
| 6          | -1.2        | -0.4          | -5.8        | -2.3             | -1.2             | -2.1             | -1.3         | -1.5        |
| 7          | -8.2        | -4.2          | -10.1       | -6.7             | -5.2             | -5.9             | -5.3         | -6.5        |
| 8          | -8.5        | -5.8          | -11.8       | -8.5             | -7.6             | -7.8             | -7.0         | -7.2        |
| 9          | -8.7        | -7.9          | -12.3       | -10.3            | -8.2             | -8.8             | -8.0         | -9.8        |
| 10         | -10.1       | -8.4          | -13.7       | -11.7            | -10.3            | -10.2            | -9.7         | -10.5       |
| 11         | -6.6        | -6.6          | -10.6       | -10.0            | -8.2             | -9.5             | -10.0        | -9.7        |
| 12         | -10.1       | -7.9          | -17.4       | -12.4            | -12.3            | -10.2            | -9.3         | -9.5        |
| 13         | -8.7        | -6.9          | -11.1       | -10.5            | -11.3            | -9.4             | -8.7         | -8.8        |
| 14         | -1.5        | -2.2          | -2.7        | -5.0             | -3.2             | -4.5             | -4.3         | -0.9        |
| 15         | + 3.4       | -0.4          | -1.0        | -4.4             | -4.4             | -2.0             | -2.3         | + 0.9       |
| 16         | 2.4         | + 1.6         | -1.3        | -0.7             | + 0.7            | + 1.5            | + 0.7        | 2.6         |
| 17         | 0.8         | 0.9           | -2.2        | -1.3             | -0.2             | -0.7             | -0.7         | 0.2         |
| 18         | -0.2        | -3.5          | -7.2        | -6.3             | -5.6             | -6.3             | -6.0         | -6.0        |
| 19         | -7.5        | -6.2          | -11.7       | -9.5             | -10.2            | -8.1             | -9.7         | -8.7        |
| 20         | -9.9        | -11.1         | -14.9       | -14.9            | -13.4            | -13.0            | -15.7        | -12.9       |
| 21         | -9.1        | -10.6         | -14.1       | -14.2            | -13.5            | -12.2            | -14.7        | -11.4       |
| 22         | -9.3        | -9.2          | -13.7       | -11.5            | -10.7            | -10.5            | -11.3        | -8.6        |
| 23         | -10.4       | 8.7           | -15.6       | -12.7            | -12.4            | -11.3            | -11.3        | -10.2       |
| 24         | -8.4        | -10.9         | -13.7       | -14.2            | -12.6            | -6.1             | -14.3        | -12.4       |
| 25         | -7.0        | -4.1          | -9.9        | -5.5             | -4.5             | -6.1             | -12.7        | -10.7       |
| 26         | -4.5        | -2.9          | -6.5        | -3.1             | -2.3             | -8.7             | -8.0         | -7.4        |
| 27         | -3.0        | -6.3          | -5.4        | -9.2             | -8.3             | -5.1             | -11.0        | -7.5        |
| 28         | -1.3        | -3.8          | -3.3        | -6.2             | -4.7             | + 0.7            | -4.0         | -4.3        |
| 29         | + 2.6       | -2.8          | 0.0         | + 2.3            | + 3.6            | 3.8              | -1.7         | -2.6        |
| 30         | 4.1         | + 5.9         | -0.6        | 4.2              | 5.5              | 5.5              | + 3.0        | + 2.2       |
| 31         | 6.0         | 6.1           | + 3.3       | 6.7              | 7.7              | 5.4              | 7.3          | 5.3         |
| Średnia    | -3.5        | -3.4          | -7.3        | -5.7             | -4.7             | -4.3             | -5.4         | -4.8        |
| Max.<br>d. | + 7.8<br>31 | + 10.0<br>31  | + 4.0<br>31 | + 8.4<br>31      | + 8.6<br>31      | + 6.2<br>2       | + 10.0<br>31 | + 8.0<br>31 |
| Min.<br>d. | -14.8<br>23 | -14.2<br>24   | -20.0<br>23 | -17.7<br>21 i 24 | -17.0<br>13      | -15.0<br>20 i 21 | -19.0<br>21  | -15.8<br>21 |

w stopniach Celsiusza.  
dzienne.

| Dubla-<br>ny | Dela-<br>tyn | Oży-<br>dów | Krzy-<br>wo-<br>równia | Koło-<br>myja | Horo-<br>denka | Tar-<br>nopol | Jagiel-<br>nica |
|--------------|--------------|-------------|------------------------|---------------|----------------|---------------|-----------------|
| 7. 2. 9      | 7. 2. 8      | 7. 2. 9     | 7. 2. 9                | 7. 12. 9      | 7. 2. 9        | 7. 2. 9       | 7. 2. 9         |
| 0            | 0            | 0           | 0                      | 0             | 0              | 0             | 0               |
| + 4'4        | + 1'3        | + 4'2       | + 0'0                  | + 1'5         | + 3'8          | + 4'2         | + 4'6           |
| 5'1          | 6'7          | 4'2         | 2'2                    | 6'0           | 3'8            | 3'7           | 3'2             |
| 2'1          | 2'3          | 1'8         | 0'9                    | 3'3           | 2'5            | 1'5           | 1'6             |
| -1'1         | - 2'0        | -1'2        | -3'9                   | -1'4          | -1'6           | -2'3          | -2'6            |
| -0'3         | -1'0         | 0'0         | -1'9                   | -1'3          | + 0'3          | -0'8          | -1'4            |
| -1'6         | -1'0         | -1'3        | -2'3                   | -0'7          | -1'5           | -2'4          | -2'4            |
| -5'9         | -6'0         | -5'6        | -3'1                   | -5'5          | -5'7           | -7'2          | -6'6            |
| -6'8         | -7'7         | -5'8        | -9'8                   | -6'7          | -6'1           | -7'8          | -7'0            |
| -9'4         | -8'3         | -10'3       | -9'4                   | -9'1          | -9'1           | -10'7         | -9'8            |
| -10'3        | -10 0        | -8'9        | -8'7                   | -9'7          | -9'9           | -10'8         | -10'0           |
| -9'5         | - 9'0        | -10'0       | - 8'4                  | -10'3         | -10'2          | -12'0         | -10'4           |
| -9'3         | -10'7        | - 8'0       | -7'9                   | -10'7         | -10'7          | -10'6         | -10'9           |
| -8'9         | -12'0        | -7'5        | -10'9                  | -8'8          | - 8'9          | -10'2         | -10'0           |
| -0'2         | -5'3         | -0'3        | -4'7                   | -3'7          | -1'5           | -1'7          | -2'1            |
| + 1'1        | -5'3         | + 2'5       | -3'6                   | -1'6          | + 2'3          | + 2'3         | + 1'5           |
| 2'7          | + 0'3        | 3'4         | + 1'8                  | + 1'5         | 1'3            | 1'5           | 1'1             |
| 0'3          | -0'7         | 1'0         | 0'8                    | -1'6          | -2'3           | -1'0          | -1'2            |
| -5'7         | -6'3         | -5'4        | -5'5                   | -7'3          | -7'8           | -7'6          | -7'0            |
| -8'9         | -10'7        | -8'6        | -14'4                  | -10'6         | -10'2          | -11'2         | -10'7           |
| -12'3        | -17'3        | -11'5       | -19'7                  | -16'4         | -15'7          | -14'0         | -14'4           |
| -11'6        | -17'0        | -9'5        | -17'3                  | -16'3         | -11'8          | -11'0         | -11'4           |
| -7'9         | -9'7         | -7'3        | -12'1                  | -9'8          | -9'2           | -9'9          | -10'0           |
| -10'1        | -15'0        | -9'0        | -16'4                  | -10'8         | -10'9          | -12'7         | -11'5           |
| -11'7        | -16'3        | -10'8       | -16'8                  | -15'8         | -12'6          | -13'3         | -12'8           |
| -10'4        | -15'7        | - 8'9       | -14'5                  | -16'6         | -14'2          | -13'4         | -12'9           |
| -6'9         | -11'3        | -6'2        | -6'2                   | -12'1         | -10'3          | -9'5          | -10'4           |
| -7'1         | -12'7        | -5'7        | -12'1                  | -9'1          | -7'0           | -7'8          | -7'6            |
| -4'2         | -9'7         | -3'8        | -4'4                   | -5'9          | -4'4           | -6'2          | -5'7            |
| -1'4         | -5'7         | -1'0        | -1'3                   | -7'3          | -4'0           | -3'5          | -2'7            |
| + 2'7        | + 2'3        | + 1'5       | + 3'3                  | -2'1          | -1'1           | -2'7          | -1'8            |
| 3 9          | 4 0          | 4 1         | -0'9                   | - 3'5         | -2'5           | -3'6          | -4'1            |
| -4'5         | -6 8         | - 4'0       | -6'7                   | -6'5          | -5'6           | -6'2          | -6'0            |
| + 7'6        | + 10'0       | + 8'1       | + 8'6                  | + 10'2        | + 9'3          | + 7'4         | + 5'5           |
| 2            | 2            | 2           | 30                     | 2             | 2              | 2             | 2               |
| -15'5        | -21'0        | -14'3       | -22'0                  | -22'0         | -17'1          | -16'5         | -16'6           |
| 21           | 21           | 20          | 21                     | 25            | 21             | 25            | 20              |

Ciśnienie powietrza  
Średnie

Styczeń 1899 roku.

| Dzień         | Biel-<br>sko<br>8. 2. 8 | Ży-<br>wiec<br>7. 2. 9 | Wado-<br>wice<br>7. 1. 10 | Czer-<br>ni-<br>chów<br>7. 2. 7 | Kra-<br>ków<br>6. 2. 10 | Boch-<br>nia<br>7. 1. 9 | Szczaw-<br>nica<br>7. 1. 9 | Kry-<br>nica<br>7. 2. 9 |
|---------------|-------------------------|------------------------|---------------------------|---------------------------------|-------------------------|-------------------------|----------------------------|-------------------------|
| 1             | 725 <sup>0</sup> ·6     | 724 <sup>0</sup> ·3    | 731 <sup>0</sup> ·1       | 736 <sup>0</sup> ·1             | 736 <sup>0</sup> ·4     | 736 <sup>0</sup> ·6     | 713 <sup>0</sup> ·3        | 703·6                   |
| 2             | 13·4                    | 13·9                   | 20·2                      | 24·7                            | 25·0                    | 25·1                    | 04·8                       | 693·5                   |
| 3             | 13·2                    | 12·1                   | 19·8                      | 24·1                            | 23·7                    | 22·8                    | 01·1                       | 88·3                    |
| 4             | 30·2                    | 27·4                   | 34·6                      | 39·9                            | 39·2                    | 38·1                    | 17·1                       | 99·9                    |
| 5             | 38·8                    | 36·4                   | 44·1                      | 49·3                            | 48·6                    | 48·6                    | 24·2                       | 712·9                   |
| 6             | 38·0                    | 35·4                   | 42·5                      | 46·9                            | 46·4                    | 46·7                    | 22·9                       | 11·8                    |
| 7             | 38·6                    | 35·9                   | 43·1                      | 49·1                            | 48·7                    | 49·1                    | 24·2                       | 13·2                    |
| 8             | 32·7                    | 31·9                   | 38·6                      | 43·2                            | 43·1                    | 43·1                    | 21·3                       | 12·0                    |
| 9             | 32·8                    | 32·2                   | 39·2                      | 44·1                            | 43·5                    | 43·7                    | 19·9                       | 09·8                    |
| 10            | 30·0                    | 30·0                   | 37·2                      | 41·5                            | 40·9                    | 41·9                    | 19·7                       | 09·2                    |
| 11            | 27·6                    | 27·5                   | 34·7                      | 38·7                            | 38·5                    | 41·3                    | 16·1                       | 07·0                    |
| 12            | 29·6                    | 27·9                   | 34·8                      | 40·5                            | 39·1                    | 41·1                    | 16·8                       | 06·4                    |
| 13            | 17·9                    | 18·3                   | 24·0                      | 27·9                            | 28·2                    | 28·1                    | 05·4                       | 695·8                   |
| 14            | 19·3                    | 19·1                   | 26·9                      | 30·4                            | 30·4                    | 29·4                    | 06·2                       | 94·8                    |
| 15            | 28·5                    | 27·3                   | 34·1                      | 38·9                            | 38·6                    | 37·7                    | 14·8                       | 702·6                   |
| 16            | 23·5                    | 23·1                   | 28·7                      | 33·1                            | 33·3                    | 32·6                    | 11·3                       | 02·1                    |
| 17            | 22·4                    | 21·6                   | 28·4                      | 31·6                            | 32·2                    | 31·3                    | 10·0                       | 698·9                   |
| 18            | 29·7                    | 27·9                   | 35·0                      | 39·5                            | 39·4                    | 38·7                    | 16·3                       | 702·5                   |
| 19            | 31·2                    | 29·7                   | 36·7                      | 41·8                            | 41·6                    | 41·8                    | 18·6                       | 04·7                    |
| 20            | 31·7                    | 30·5                   | 37·1                      | 41·9                            | 41·7                    | 41·3                    | 19·0                       | 08·1                    |
| 21            | 32·9                    | 31·4                   | 37·8                      | 43·1                            | 42·7                    | 43·0                    | 20·1                       | 09·0                    |
| 22            | 31·2                    | 30·7                   | 36·9                      | 41·9                            | 42·1                    | 42·2                    | 21·0                       | 09·4                    |
| 23            | 31·7                    | 30·5                   | 37·8                      | 42·8                            | 42·6                    | 42·5                    | 21·6                       | 08·4                    |
| 24            | 32·6                    | 32·0                   | 39·7                      | 44·6                            | 44·4                    | 44·0                    | 21·1                       | 08·7                    |
| 25            | 39·1                    | 37·0                   | 45·7                      | 50·9                            | 50·9                    | 50·3                    | 25·0                       | 13·5                    |
| 26            | 44·7                    | 42·1                   | 50·6                      | 56·9                            | 56·7                    | 55·4                    | 30·1                       | 18·0                    |
| 27            | 42·7                    | 40·8                   | 48·7                      | 54·4                            | 54·0                    | 53·8                    | 29·3                       | 18·6                    |
| 28            | 36·8                    | 34·6                   | 41·1                      | 46·4                            | 46·0                    | 46·2                    | 24·5                       | 12·5                    |
| 29            | 26·1                    | 25·3                   | 33·4                      | 36·4                            | 36·8                    | 36·9                    | 12·8                       | 03·6                    |
| 30            | 28·2                    | 27·2                   | 35·1                      | 39·3                            | 38·9                    | 39·1                    | 14·2                       | 02·6                    |
| 31            | 25·3                    | 24·7                   | 31·1                      | 36·5                            | 36·2                    | —                       | 14·0                       | 02·3                    |
| Średnia       | 729·9                   | 728·7                  | 735·8                     | 740·5                           | 740·3                   | 740·4                   | 717·3                      | 705·9                   |
| Max.<br>d. g. | 745·1<br>26, 10 w.      | 742·2<br>26, 2         | 750·9<br>26, 10           | 757·6<br>26, 7 w.               | 757·6<br>26, 10 w.      | 757·0<br>26, 9          | 732·3<br>26, 9             | 720·1<br>26, 9          |
| Min.<br>d. g. | 708·2<br>2, 8 w.        | 709·4<br>3, 7          | 715·1<br>2, 10            | 721·3<br>2, 7 w.                | 719·9<br>2, 10 w.       | 720·9<br>2, 9           | 699·6<br>3, 7              | 687·5<br>3, 7           |

## w milimetrach.

dienne.

Luty 1899 roku.

| Lwów    | Dubla-<br>ny | Tar-<br>nopol | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>hi-<br>chów | Kra-<br>ków | Boch-<br>nia |
|---------|--------------|---------------|--------------|-------------|---------------|----------------------|-------------|--------------|
| 7. 2. 9 | 7. 2. 9      | 7. 2. 9       | 3. 2. 8      | 7. 2. 9     | 7. 1. 10      | 7. 2. 7              | 6. 2. 10    | 7. 1. 9      |
| 728.4   | 734.3        | 729.8         | 716.0        | 714.8       | 722.4         | 726.2                | 726.5       | 726.7        |
| 19.2    | 24.9         | 21.3          | 16.8         | 14.9        | 22.6          | 27.3                 | 27.0        | 27.1         |
| 13.1    | 18.7         | 14.3          | 20.6         | 18.5        | 27.3          | 30.8                 | 31.0        | 29.7         |
| 23.4    | 28.9         | 21.6          | 30.7         | 28.7        | 35.7          | 41.5                 | 41.1        | 40.6         |
| 36.2    | 42.7         | 37.4          | 26.7         | 25.7        | 34.1          | 37.6                 | 37.6        | 38.3         |
| 33.3    | 39.4         | 34.1          | 32.4         | 29.5        | 35.7          | 43.4                 | 43.2        | 42.2         |
| 37.4    | 43.4         | 37.0          | 29.2         | 28.9        | 35.6          | 41.2                 | 41.2        | 41.3         |
| 33.9    | 40.4         | 35.7          | 30.1         | 28.9        | 36.6          | 40.8                 | 40.6        | 39.7         |
| 33.7    | 39.3         | 31.3          | 30.7         | 29.9        | 36.7          | 41.9                 | 42.2        | 42.1         |
| 34.6    | 40.1         | 36.0          | 32.3         | 30.8        | 37.8          | 42.7                 | 42.6        | 42.7         |
| 31.6    | 37.2         | 33.8          | 31.3         | 30.3        | 36.9          | 41.8                 | 41.6        | 42.0         |
| 30.3    | 36.5         | 32.4          | 26.0         | 25.4        | 32.1          | 36.9                 | 36.3        | 36.6         |
| 19.5    | 25.3         | 21.0          | 24.4         | 26.9        | 34.1          | 40.7                 | 37.4        | 37.4         |
| 18.9    | 24.4         | 19.4          | 31.2         | 29.3        | 37.3          | 42.0                 | 42.1        | 41.8         |
| 26.0    | 31.7         | 25.9          | 31.7         | 30.5        | 37.9          | 42.3                 | 42.5        | 42.0         |
| 29.4    | 30.5         | 26.1          | 31.9         | 30.9        | 37.4          | 42.4                 | 42.3        | 42.0         |
| 21.2    | 26.7         | 22.0          | 34.8         | 33.1        | 40.5          | 45.5                 | 45.4        | 43.9         |
| 26.7    | 32.5         | 27.0          | 38.5         | 36.8        | 44.1          | 50.0                 | 49.7        | 49.1         |
| 31.6    | 39.1         | 32.5          | 38.3         | 36.6        | 43.7          | 49.6                 | 49.5        | 49.7         |
| 31.3    | 36.8         | 32.6          | 35.1         | 34.4        | 40.1          | 45.8                 | 45.7        | 45.9         |
| 33.3    | 39.1         | 34.5          | 35.9         | 34.4        | 40.7          | 45.7                 | 45.5        | 44.6         |
| 32.4    | 38.1         | 34.2          | 33.1         | 32.3        | 38.5          | 42.8                 | 43.2        | 43.1         |
| 32.8    | 38.5         | 34.1          | 34.7         | 33.2        | 40.2          | 45.7                 | 45.8        | 45.0         |
| 34.2    | 39.8         | 35.3          | 39.9         | 37.9        | 45.8          | 51.6                 | 51.5        | 50.8         |
| 40.0    | 45.8         | 40.1          | 42.6         | 40.2        | 48.1          | 51.0                 | 53.9        | 53.6         |
| 46.9    | 53.1         | 47.0          | 40.4         | 38.6        | 46.0          | 51.4                 | 51.5        | 50.8         |
| 44.2    | 49.8         | 43.8          | 40.6         | 38.5        | 45.4          | 50.9                 | 50.5        | 50.4         |
| 35.2    | 40.8         | 35.1          | 40.6         | 38.3        | 44.3          | 50.6                 | 50.0        | 49.1         |
| 25.7    | 31.0         | 25.3          |              |             |               |                      |             |              |
| 27.9    | 33.2         | 27.3          |              |             |               |                      |             |              |
| 28.1    | 33.8         | 28.8          |              |             |               |                      |             |              |
| 730.2   | 736.0        | 731.0         | 732.1        | 730.6       | 737.8         | 742.9                | 742.8       | 742.4        |
| 747.4   | 753.6        | 747.2         | 743.3        | 740.7       | 749.1         | 755.3                | 754.7       | 754.2        |
| 26, 9   | 26, 9        | 26, 2 w.      | 25, 11 r.    | 25, 7       | 25, 7         | 25, 7 r.             | 25, 3 r.    | 25, 7        |
| 711.9   | 717.3        | 713.8         | 714.4        | 713.8       | 721.0         | 725.3                | 724.3       | 725.4        |
| 3, 2    | 3, 2         | 3, 2 w.       | 1, 10 r.     | 1, 9        | 1, 10         | 1, 7 w.              | 1, 10 w.    | 1, 9         |

**Ciśnienie powietrza**  
Średnie

*Luty 1899 roku.*

*Marzec 1899 roku.*

| Dzień         | Szenaw-<br>nica | Kry-<br>nica   | Lwów           | Dubla-<br>ny   | Tar-<br>nopol    | Biel-<br>sko      | Ży-<br>wiec    | Wado-<br>wice   |
|---------------|-----------------|----------------|----------------|----------------|------------------|-------------------|----------------|-----------------|
|               | 7. 1. 9         | 7. 2. 9        | 7. 2. 9        | 7. 2. 9        | 7. 2. 9          | 8. 2. 8           | 7. 2. 9        | 7. 1. 10        |
| 1             | 706·7           | 694·1          | 719·0          | 724·8          | 720·5            | 734·0             | 732·7          | 739·8           |
| 2             | 04·6            | 91·9           | 17·2           | 22·8           | 17·5             | 30·8              | 30·0           | 36·3            |
| 3             | 05·8            | 94·4           | 18·1           | 23·8           | 17·6             | 31·6              | 30·4           | 37·1            |
| 4             | 16·1            | 703·4          | 28·2           | 34·3           | 28·2             | 23·4              | 23·6           | 29·9            |
| 5             | 15·9            | 04·8           | 28·6           | 34·5           | 30·0             | 26·4              | 26·5           | 32·9            |
| 6             | 16·8            | 06·4           | 30·2           | 36·5           | 29·9             | 37·1              | 35·4           | 43·0            |
| 7             | 17·5            | 07·0           | 33·4           | 39·6           | 35·8             | 33·6              | 32·8           | 40·0            |
| 8             | 12·0            | 05·6           | 29·8           | 35·7           | 30·8             | 26·9              | 27·7           | 34·0            |
| 9             | 19·3            | 08·9           | 33·9           | 39·9           | 36·2             | 23·4              | 24·1           | 31·6            |
| 10            | 20·8            | 10·0           | 31·6           | 37·1           | 32·2             | 29·4              | 29·4           | 36·5            |
| 11            | 20·3            | 10·2           | 32·2           | 37·5           | 32·7             | 38·9              | 37·2           | 45·0            |
| 12            | 13·7            | 04·8           | 26·7           | 31·8           | 27·3             | 40·9              | 39·3           | 46·3            |
| 13            | 15·0            | 04·1           | 26·8           | 32·0           | 26·4             | 43·6              | 41·8           | 48·8            |
| 14            | 19·3            | 08·3           | 32·8           | 38·2           | 33·4             | 42·3              | 41·1           | 47·8            |
| 15            | 19·5            | 09·3           | 33·1           | 38·6           | 34·6             | 40·2              | 38·4           | 45·5            |
| 16            | 20·5            | 08·8           | 32·1           | 38·0           | 33·1             | 37·5              | 36·8           | 42·6            |
| 17            | 19·7            | 08·7           | 32·9           | 38·6           | 32·6             | 35·9              | 34·9           | 40·6            |
| 18            | 23·4            | 12·5           | 37·7           | 43·7           | 37·8             | 23·5              | 23·5           | 30·1            |
| 19            | 24·0            | 14·4           | 40·6           | 46·5           | 41·7             | 23·8              | 23·5           | 30·6            |
| 20            | 21·9            | 12·2           | 36·3           | 41·6           | 37·6             | 20·6              | 20·7           | 27·3            |
| 21            | 20·9            | 08·8           | 30·7           | 36·1           | 30·2             | 20·6              | 20·2           | 27·8            |
| 22            | 19·0            | 06·6           | 28·2           | 33·8           | 27·5             | 27·1              | 26·7           | 33·2            |
| 23            | 20·9            | 07·4           | 32·5           | 38·1           | 31·4             | 25·2              | 24·7           | 31·7            |
| 24            | 25·5            | 12·2           | 39·2           | 45·3           | 38·9             | 27·0              | 25·5           | 33·7            |
| 25            | 27·6            | 15·3           | 40·4           | 46·8           | 39·8             | 33·7              | 32·1           | 39·4            |
| 26            | 26·8            | 13·3           | 38·7           | 44·8           | 38·2             | 36·5              | 34·6           | 41·0            |
| 27            | 27·0            | 13·9           | 36·6           | 42·3           | 36·4             | 34·0              | 32·9           | 39·7            |
| 28            | 23·9            | 13·0           | 34·9           | 40·6           | 33·8             | 35·4              | 33·8           | 40·9            |
| 29            |                 |                |                |                |                  | 35·2              | 34·4           | 40·2            |
| 30            |                 |                |                |                |                  | 29·4              | 29·1           | 34·8            |
| 31            |                 |                |                |                |                  | 30·2              | 30·0           | 34·8            |
| Średnia       | 718·7           | 707·5          | 731·5          | 737·2          | 731·9            | 731·6             | 730·8          | 737·5           |
| Max.<br>d. g. | 729·0<br>24, 9  | 715·4<br>25, 7 | 741·6<br>24, 9 | 747·9<br>24, 9 | 742·1<br>19, 2w. | 744·3<br>13, 11r. | 742·1<br>13, 9 | 749·6<br>13, 10 |
| Min.<br>d. g. | 704·0<br>2, 9   | 690·9<br>2, 7  | 715·1<br>2, 7  | 720·8<br>2, 7  | 715·1<br>2, 7 r. | 718·8<br>21, 11r. | 718·6<br>21, 7 | 726·3<br>20, 10 |



w milimetrach.  
dzienne.

| Czer-<br>ni-<br>chów | Kra-<br>ków | Boch-<br>nia | Szczaw-<br>nica | Kry-<br>nica | Lwów    | Du-<br>blany | Tar-<br>nopol |
|----------------------|-------------|--------------|-----------------|--------------|---------|--------------|---------------|
| 7. 2. 7              | 6. 2. 10    | 7. 1. 9      | 7. 1. 9         | 7. 2. 9      | 7. 2. 9 | 7. 2. 9      | 7. 2. 9       |
| 743·9                | 744·2       | 742·2        | 721·6           | 708·0        | 728·6   | 734·3        | 727·5         |
| 40·1                 | 40·3        | 40·3         | 19·4            | 05·6         | 27·5    | 33·0         | 27·4          |
| 41·9                 | 41·4        | 41·0         | 18·4            | 04·9         | 28·5    | 33·8         | 27·6          |
| 33·9                 | 34·3        | 34·4         | 14·7            | 01·8         | 24·3    | 29·8         | 25·0          |
| 37·4                 | 38·3        | 37·6         | 13·1            | 01·9         | 25·5    | 31·1         | 25·4          |
| 48·2                 | 48·0        | 47·4         | 23·1            | 09·5         | 36·5    | 42·3         | 36·9          |
| 45·1                 | 45·2        | 45·3         | 24·0            | 10·9         | 37·0    | 42·5         | 37·9          |
| 38·6                 | 38·7        | 39·4         | 18·3            | 07·0         | 31·8    | 37·1         | 33·3          |
| 35·1                 | 35·7        | 35·2         | 13·8            | 02·7         | 27·8    | 33·5         | 28·9          |
| 41·5                 | 41·4        | 41·3         | 18·5            | 09·0         | 33·9    | 39·7         | 35·6          |
| 50·1                 | 49·6        | 48·6         | 24·4            | 15·5         | 38·7    | 44·4         | 40·0          |
| 51·7                 | 52·1        | 51·9         | 28·0            | 17·6         | 41·8    | 47·2         | 42·3          |
| 54·5                 | 54·4        | 54·0         | 28·7            | 18·4         | 42·4    | 48·2         | 42·3          |
| 53·5                 | 53·5        | 53·2         | 28·4            | 18·4         | 41·9    | 47·5         | 42·0          |
| 50·6                 | 50·4        | 50·1         | 26·4            | 15·6         | 37·5    | 42·8         | 37·2          |
| 47·9                 | 48·1        | 47·2         | 23·7            | 13·3         | 35·5    | 41·2         | 35·1          |
| 46·3                 | 45·8        | 46·0         | 22·7            | 11·0         | 34·7    | 40·2         | 35·0          |
| 33·8                 | 34·7        | 34·1         | 10·3            | 00·2         | 23·0    | 28·5         | 23·2          |
| 34·9                 | 34·7        | 33·9         | 11·0            | 698·8        | 22·5    | 28·0         | 22·1          |
| 31·6                 | 32·2        | 31·6         | 09·4            | 98·2         | 23·8    | 29·5         | 24·3          |
| 31·5                 | 31·7        | 30·9         | 09·5            | 97·3         | 20·1    | 25·8         | 20·5          |
| 38·2                 | 37·9        | 38·1         | 13·2            | 702·8        | 27·3    | 33·1         | 27·8          |
| 35·9                 | 36·1        | 36·2         | 13·1            | 01·1         | 28·1    | 33·9         | 29·7          |
| 38·0                 | 38·2        | 37·3         | 12·7            | 02·1         | 25·5    | 31·0         | 24·8          |
| 45·2                 | 44·9        | 44·5         | 18·6            | 07·4         | 32·3    | 38·2         | 32·6          |
| 47·4                 | 46·9        | 46·9         | 22·0            | 10·5         | 34·9    | 40·7         | 34·7          |
| 44·5                 | 44·6        | 43·9         | 20·6            | 09·2         | 34·0    | 39·5         | 35·2          |
| 46·4                 | 46·7        | 46·2         | 22·1            | 13·5         | 38·2    | 43·9         | 39·7          |
| 45·9                 | 45·6        | 39·9         | 22·7            | 12·3         | 38·3    | 44·3         | 40·3          |
| 39·7                 | 39·7        | 41·6         | 16·8            | 05·3         | 28·9    | 34·3         | 29·6          |
| 40·8                 | 40·6        | 40·4         | 16·7            | 05·0         | 25·4    | 31·0         | 25·3          |
| 742·4                | 742·4       | 742·0        | 718·9           | 707·6        | 731·5   | 737·1        | 731·9         |
| 754·8                | 755·1       | 754·4        | 729·6           | 719·8        | 743·1   | 749·0        | 743·6         |
| 14, 7 r.             | 14, 1 r.    | 14, 7        | 13, 9           | 13, 9        | 14, 7   | 13, 9        | 12, 7         |
| 730·3                | 729·9       | 730·2        | 707·8           | 694·6        | 719·3   | 725·2        | 718·9         |
| 20, 7 w.             | 21, 6 r.    | 21, 7        | 18, 9           | 21, 2        | 21, 9   | 21, 2        | 21, 9         |

## Ciśnienie powietrza

Średnie

Kwiecień 1899 roku.

| Dzień         | Biel-<br>sko<br>8. 2. 8 | Ży-<br>wiec<br>7. 2. 9 | Wado-<br>wice<br>7. 1. 10 | Czer-<br>ni-<br>chów<br>7. 2. 7 | Kra-<br>ków<br>6. 2. 10 | Boch-<br>nia<br>7. 1. 9 | Szcza-<br>w-<br>nica<br>7. 1. 9 | Kry-<br>nica<br>7. 2. 9 |
|---------------|-------------------------|------------------------|---------------------------|---------------------------------|-------------------------|-------------------------|---------------------------------|-------------------------|
| 1             | 734.4                   | 732.6                  | 735.7                     | 744.9                           | 744.6                   | 744.1                   | 721.0                           | 706.5                   |
| 2             | 31.0                    | 31.3                   | 37.9                      | 41.9                            | 42.3                    | 42.3                    | 21.5                            | 07.6                    |
| 3             | 33.7                    | 32.6                   | 36.8                      | 44.8                            | 44.6                    | 44.0                    | 21.9                            | 09.0                    |
| 4             | 35.0                    | 33.6                   | 40.1                      | 46.1                            | 46.0                    | 45.7                    | 22.9                            | 12.2                    |
| 5             | 34.2                    | 33.8                   | 40.6                      | 45.0                            | 45.6                    | 45.5                    | 21.5                            | 10.9                    |
| 6             | 34.1                    | 33.3                   | 39.5                      | 44.7                            | 44.7                    | 44.8                    | 21.5                            | 10.2                    |
| 7             | 25.5                    | 25.5                   | 31.9                      | 36.5                            | 36.9                    | 35.9                    | 15.3                            | 04.7                    |
| 8             | 20.4                    | 19.6                   | 26.7                      | 30.4                            | 30.4                    | 30.6                    | 09.4                            | 697.9                   |
| 9             | 24.5                    | 23.1                   | 30.7                      | 35.1                            | 35.1                    | 35.2                    | 11.4                            | 700.5                   |
| 10            | 28.2                    | 26.8                   | 33.4                      | 38.9                            | 38.4                    | 38.8                    | 14.7                            | 04.3                    |
| 11            | 21.9                    | 21.4                   | 27.7                      | 32.3                            | 32.8                    | 32.5                    | 11.4                            | 00.2                    |
| 12            | 22.2                    | 21.2                   | 28.3                      | 32.2                            | 32.3                    | 31.1                    | 09.1                            | 697.8                   |
| 13            | 25.5                    | 23.9                   | 31.4                      | 35.8                            | 36.2                    | 36.3                    | 12.9                            | 701.8                   |
| 14            | 21.7                    | 21.3                   | 28.3                      | 32.3                            | 32.7                    | 32.4                    | 11.8                            | 699.4                   |
| 15            | 24.1                    | 22.9                   | 30.0                      | 34.9                            | 34.6                    | 34.4                    | 12.4                            | 701.9                   |
| 16            | 23.8                    | 22.9                   | 29.1                      | 33.9                            | 34.2                    | 32.8                    | 11.7                            | 01.4                    |
| 17            | 30.5                    | 29.3                   | 36.4                      | 41.3                            | 40.9                    | 37.7                    | 19.2                            | 07.5                    |
| 18            | 34.0                    | 31.7                   | 39.2                      | 44.9                            | 44.2                    | 44.7                    | 21.3                            | 09.9                    |
| 19            | 31.3                    | 30.2                   | 36.8                      | 42.8                            | 42.7                    | 43.0                    | 18.5                            | 07.7                    |
| 20            | 27.9                    | 27.2                   | 33.5                      | 38.6                            | 38.3                    | 38.8                    | 14.4                            | 03.9                    |
| 21            | 27.5                    | 26.1                   | 33.3                      | 37.7                            | 37.1                    | 36.5                    | 13.2                            | 03.0                    |
| 22            | 29.7                    | 28.7                   | 35.7                      | 40.3                            | 40.3                    | 40.1                    | 17.6                            | 05.3                    |
| 23            | 36.7                    | 34.5                   | 42.2                      | 47.6                            | 46.9                    | 47.3                    | 22.0                            | 11.7                    |
| 24            | 37.1                    | 35.3                   | 42.6                      | 48.2                            | 48.0                    | 48.0                    | 23.0                            | 13.3                    |
| 25            | 28.6                    | 28.2                   | 35.3                      | 39.5                            | 40.2                    | 41.7                    | 17.5                            | 06.5                    |
| 26            | 24.5                    | 24.1                   | 31.3                      | 35.0                            | 35.0                    | 35.0                    | 15.6                            | 02.9                    |
| 27            | 28.0                    | 26.2                   | 34.6                      | 37.0                            | 37.1                    | 38.2                    | 14.5                            | 04.7                    |
| 28            | 32.0                    | 30.2                   | 37.3                      | 42.4                            | 41.5                    | 42.0                    | 18.5                            | 07.1                    |
| 29            | 29.1                    | 28.7                   | 35.2                      | 39.8                            | 39.6                    | 39.7                    | 17.6                            | 05.6                    |
| 30            | 24.9                    | 24.6                   | 31.2                      | 35.1                            | 35.0                    | 35.2                    | 12.9                            | 02.1                    |
| 31            |                         |                        |                           |                                 |                         |                         |                                 |                         |
| Średnia       | 728.7                   | 727.7                  | 734.4                     | 739.3                           | 739.3                   | 739.1                   | 716.5                           | 705.3                   |
| Max.<br>d. g. | 738.8<br>24, 9 r.       | 736.9<br>24, 7         | 744.5<br>24, 7            | 750.4<br>24, 7 r.               | 749.7<br>24, 8 r.       | 749.0<br>24, 7          | 723.8<br>24, 1                  | 714.6<br>24, 7          |
| Min.<br>d. g. | 718.9<br>7, 12 pd.      | 718.8<br>8, 9          | 725.4<br>11, 10           | 730.3<br>8, 7 w.<br>12, 7 r.    | 729.4<br>12, 5 r.       | 729.3<br>12, 7          | 707.7<br>12, 1                  | 695.9<br>12, 2          |

w milimetrach.

dzienne.

Maj 1899 roku.

| Lwów    | Du-<br>blany | Tar-<br>nopol | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Kra-<br>ków | Boch-<br>nia |
|---------|--------------|---------------|--------------|-------------|---------------|----------------------|-------------|--------------|
| 7. 2. 9 | 7. 2. 9      | 7. 2. 8       | 8. 2. 8      | 7. 2. 9     | 7. 1. 10      | 7. 2. 7              | 6. 2. 10    | 7. 1. 9      |
| 730.2   | 735.4        | 728.8         | 732.3        | 730.3       | 737.3         | 742.3                | 741.1       | 741.3        |
| 31.7    | 37.7         | 32.8          | 30.8         | 31.1        | 36.5          | 42.1                 | 41.9        | 42.8         |
| 33.2    | 38.5         | 33.2          | 27.4         | 26.9        | 34.6          | 38.4                 | 38.2        | 39.4         |
| 38.4    | 43.7         | 39.7          | 27.9         | 27.1        | 34.1          | 38.3                 | 37.4        | 38.1         |
| 36.6    | 42.1         | 38.6          | 31.3         | 29.3        | 36.2          | 42.3                 | 40.8        | 42.2         |
| 35.1    | 40.5         | 35.8          | 28.9         | 27.8        | 35.4          | 39.8                 | 40.0        | 40.2         |
| 29.4    | 35.2         | 31.0          | 32.2         | 30.3        | 37.6          | 42.9                 | 42.6        | 43.2         |
| 23.7    | 29.4         | 25.5          | 30.2         | 29.1        | 36.1          | 40.5                 | 40.5        | 41.3         |
| 24.0    | 29.5         | 25.8          | 26.7         | 26.3        | 33.0          | 37.3                 | 37.9        | 40.1         |
| 27.6    | 33.5         | 26.8          | 23.7         | 22.7        | 29.9          | 33.6                 | 33.6        | 33.8         |
| 24.8    | 30.4         | 26.0          | 26.2         | 24.7        | 32.2          | 35.9                 | 35.3        | 35.2         |
| 22.5    | 28.0         | 23.5          | 28.7         | 26.6        | 34.3          | 38.7                 | 38.0        | 38.3         |
| 27.1    | 32.6         | 27.7          | 31.8         | 30.0        | 37.4          | 42.3                 | 41.9        | 42.0         |
| 25.4    | 30.9         | 26.7          | 31.5         | 30.1        | 37.3          | 42.3                 | 42.1        | 42.8         |
| 26.9    | 32.0         | 28.1          | 26.7         | 27.0        | 34.0          | 37.7                 | 38.2        | 40.4         |
| 24.3    | 29.6         | 25.4          | 30.6         | 29.3        | 35.9          | 40.6                 | 40.6        | 40.2         |
| 32.1    | 37.2         | 32.3          | 36.0         | 34.1        | 41.1          | 46.5                 | 46.4        | 46.0         |
| 35.2    | 40.7         | 36.5          | 37.2         | 35.7        | 42.7          | 47.8                 | 47.9        | 47.5         |
| 33.0    | 38.1         | 33.5          | 35.9         | 34.4        | 41.2          | 46.8                 | 46.8        | 47.0         |
| 28.6    | 34.2         | 29.5          | 32.0         | 31.8        | 38.6          | 42.5                 | 42.2        | 42.7         |
| 25.5    | 32.7         | 25.6          | 29.5         | 28.9        | 38.4          | 39.2                 | 39.2        | 39.5         |
| 30.1    | 34.9         | 30.1          | 30.4         | 29.3        | 38.4          | 40.6                 | 40.7        | 40.4         |
| 35.8    | 41.2         | 35.9          | 32.1         | 30.9        | 37.9          | 43.1                 | 42.8        | 43.4         |
| 38.5    | 43.8         | 38.7          | 28.7         | 27.8        | 35.4          | 39.2                 | 39.1        | 39.7         |
| 33.5    | 38.7         | 35.0          | 30.4         | 19.8        | 26.9          | 30.5                 | 31.1        | 30.7         |
| 28.3    | 33.4         | 30.2          | 21.2         | 20.4        | 27.0          | 30.9                 | 31.5        | 30.8         |
| 29.2    | 34.4         | 31.0          | 28.4         | 27.0        | 33.8          | 38.2                 | 38.1        | 37.7         |
| 32.1    | 37.2         | 34.0          | 33.0         | 31.4        | 38.4          | 43.5                 | 43.2        | 43.2         |
| 30.9    | 36.3         | 32.5          | 32.1         | 30.8        | 38.0          | 42.7                 | 42.3        | 42.5         |
| 26.3    | 31.8         | 27.1          | 35.7         | 34.0        | 41.1          | 46.1                 | 46.0        | 45.1         |
|         |              |               | 40.5         | 38.8        | 45.2          | 50.7                 | 50.3        | 50.0         |
| 730.0   | 735.4        | 731.0         | 730.3        | 729.1       | 736.3         | 740.7                | 740.6       | 740.9        |
| 739.2   | 744.3        | 740.2         | 741.0        | 739.2       | 745.6         | 751.3                | 750.9       | 750.5        |
| 4.9     | 24.7         | 4. 2. 9       | 31. 10. r.   | 31. 2       | 31. 1         | 31. 7 r.             | 31. 10 r.   | 31. 1        |
|         |              | 5. 7          |              |             |               |                      |             |              |
| 721.9   | 727.4        | 722.6         | 719.5        | 719.1       | 726.2         | 729.4                | 730.0       | 729.8        |
| 12. 2   | 12. 2        | 12. 9         | 25. 6 w.     | 25. 2       | 26. 7         | 25. 7 w.             | 25. 4 w.    | 25. 9        |

## Ciśnienie powietrza Średnie

*Maj 1899 roku.*

*Czerwiec 1899 roku.*

| Dzień         | Szczaw-<br>nica | Kry-<br>nica   | Lwów           | Du-<br>blany   | Tar-<br>nopol  | Biel-<br>sko       | Ży-<br>wiec    | Wado-<br>wice  |
|---------------|-----------------|----------------|----------------|----------------|----------------|--------------------|----------------|----------------|
|               | 7. 1. 9         | 7. 2. 9        | 7. 2. 9        | 7. 2. 9        | 7. 2. 9        | 8. 2. 8            | 7. 2. 9        | 7. 1. 10       |
| 1             | 715.7           | 706.0          | 729.1          | 734.2          | 728.8          | 737.3              | 736.3          | 742.0          |
| 2             | 19.6            | 06.6           | 32.7           | 38.0           | 33.4           | 36.9               | 35.9           | 41.9           |
| 3             | 16.4            | 04.7           | 30.7           | 36.0           | 31.7           | 36.8               | 35.7           | 41.8           |
| 4             | 15.3            | 04.4           | 29.5           | 34.8           | 30.3           | 35.3               | 34.8           | 41.2           |
| 5             | 18.2            | 06.3           | 32.0           | 37.0           | 33.0           | 38.6               | 37.1           | 44.3           |
| 6             | 17.9            | 06.3           | 33.1           | 38.3           | 35.0           | 36.9               | 35.6           | 42.1           |
| 7             | 19.7            | 08.3           | 34.4           | 39.6           | 36.3           | 32.8               | 32.8           | 38.7           |
| 8             | 17.8            | 06.7           | 34.0           | 39.4           | 36.9           | 36.5               | 35.0           | 41.6           |
| 9             | 16.9            | 05.0           | 31.6           | 37.1           | 34.2           | 34.2               | 33.1           | 39.6           |
| 10            | 10.9            | 01.3           | 27.6           | 32.8           | 29.4           | 30.8               | 29.3           | 37.1           |
| 11            | 13.7            | 02.7           | 26.2           | 31.2           | 27.1           | 34.5               | 22.9           | 39.5           |
| 12            | 15.2            | 04.4           | 27.9           | 32.9           | 28.4           | 29.9               | 29.4           | 35.4           |
| 13            | 18.5            | 07.7           | 32.3           | 37.5           | 32.6           | 21.1               | 20.2           | 27.3           |
| 14            | 20.4            | 09.0           | 34.6           | 39.7           | 36.7           | 24.8               | 23.3           | 30.9           |
| 15            | 18.4            | 06.5           | 32.9           | 38.0           | 34.9           | 27.6               | 27.0           | 34.1           |
| 16            | 18.3            | 07.6           | 32.0           | 37.0           | 33.5           | 31.2               | 29.6           | 37.1           |
| 17            | 21.7            | 11.7           | 35.0           | 40.3           | 35.4           | 29.2               | 28.5           | 35.6           |
| 18            | 24.1            | 13.6           | 38.0           | 43.1           | 38.2           | 25.7               | 25.1           | 32.0           |
| 19            | 23.1            | 12.8           | 38.8           | 44.0           | 39.9           | 25.3               | 24.7           | 31.5           |
| 20            | 20.4            | 09.5           | 34.6           | 39.5           | 36.0           | 26.4               | 25.4           | 32.9           |
| 21            | 17.6            | 05.6           | 29.6           | 34.9           | 31.2           | 24.6               | 24.0           | 29.9           |
| 22            | 18.2            | 06.2           | 29.6           | 34.8           | 30.4           | 21.1               | 20.9           | 27.3           |
| 23            | 18.4            | 08.6           | 33.9           | 39.2           | 34.6           | 20.4               | 19.6           | 26.8           |
| 24            | 16.7            | 05.3           | 30.7           | 36.1           | 32.5           | 28.3               | 26.4           | 34.3           |
| 25            | 08.6            | 699.3          | 24.9           | 30.4           | 27.2           | 31.3               | 29.8           | 36.8           |
| 26            | 08.1            | 98.5           | 22.7           | 28.0           | 24.4           | 34.8               | 33.2           | 39.7           |
| 27            | 13.2            | 703.7          | 28.5           | 33.8           | 29.9           | 30.9               | 29.8           | 36.4           |
| 28            | 21.6            | 07.6           | 33.4           | 38.5           | 34.4           | 34.0               | 32.1           | 38.6           |
| 29            | 19.7            | 06.0           | 30.5           | 36.0           | 30.1           | 32.0               | 30.9           | 37.4           |
| 30            | 22.0            | 10.2           | 34.6           | 40.0           | 34.7           | 30.0               | 30.3           | 36.3           |
| 31            | 25.8            | 15.9           | 40.0           | 45.0           | 40.3           |                    |                |                |
| Średnia       | 717.8           | 706.7          | 731.8          | 737.0          | 732.9          | 730.6              | 729.6          | 736.3          |
| Max.<br>d. g. | 725.9<br>31, 9  | 716.6<br>31, 9 | 740.1<br>31, 9 | 745.4<br>31, 9 | 740.8<br>31, 9 | 739.9<br>1, 12pd.  | 737.7<br>1, 7  | 744.6<br>5, 10 |
| Min.<br>d. g. | 707.1<br>26, 7  | 697.6<br>26, 7 | 722.4<br>26, 2 | 727.7<br>26, 7 | 723.8<br>26, 2 | 719.5<br>13, 1 po. | 718.9<br>13, 2 | 726.1<br>13, 1 |

## w milimetrach.

dzienne.

| Czer-<br>ni-<br>chów | Kra-<br>ków       | Boch-<br>nia   | Szczaw-<br>nica | Kry-<br>nica   | Lwów           | Dubla-<br>ny   | Tar-<br>nopol     |
|----------------------|-------------------|----------------|-----------------|----------------|----------------|----------------|-------------------|
| 7. 2. 7              | 6. 2. 10          | 7. 1. 9        | 7. 1. 9         | 7. 2. 9        | 7. 2. 9        | 7. 2. 9        | 7. 2. 9           |
| 748·1                | 747·6             | 747·5          | 723·9           | 713·0          | 737·7          | 742·8          | 738·6             |
| 47·3                 | 47·2              | 47·4           | 24·6            | 12·6           | 36·7           | 41·6           | 36·6              |
| 47·8                 | 47·6              | 47·2           | 26·4            | 13·3           | 38·9           | 44·1           | 39·8              |
| 46·1                 | 46·1              | 45·7           | 22·9            | 11·8           | 36·9           | 42·2           | 38·6              |
| 49·6                 | 49·3              | 49·1           | 24·4            | 13·8           | 38·2           | 43·4           | 38·5              |
| 47·3                 | 46·7              | 46·5           | 24·4            | 12·7           | 37·1           | 42·1           | 38·0              |
| 42·7                 | 42·4              | 41·9           | 19·5            | 07·7           | 30·8           | 35·6           | 30·9              |
| 46·8                 | 46·4              | 45·6           | 22·4            | 11·5           | 33·9           | 38·6           | 33·4              |
| 44·5                 | 44·1              | 44·3           | 21·5            | 10·2           | 34·3           | 39·8           | 35·0              |
| 40·9                 | 40·9              | 40·6           | 17·1            | 05·9           | 29·8           | 34·9           | 30·2              |
| 44·8                 | 44·4              | 44·0           | 21·2            | 09·2           | 33·1           | 38·1           | 32·5              |
| 39·9                 | 39·6              | 39·2           | 18·5            | 06·7           | 29·8           | 35·1           | 29·8              |
| 30·7                 | 30·5              | 29·7           | 08·4            | 698·9          | 20·8           | 25·6           | 21·2              |
| 35·1                 | 34·7              | 34·2           | 11·7            | 701·9          | 25·6           | 30·5           | 26·4              |
| 38·3                 | 38·3              | 38·2           | 15·9            | 04·5           | 28·2           | 33·8           | 29·3              |
| 42·0                 | 41·3              | 41·7           | 18·5            | 06·1           | 31·8           | 37·0           | 32·6              |
| 39·8                 | 39·6              | 40·0           | 16·7            | 05·3           | 29·7           | 35·1           | 30·4              |
| 35·6                 | 35·5              | 35·3           | 12·9            | 02·0           | 25·6           | 31·2           | 26·0              |
| 35·2                 | 35·0              | 34·6           | 12·1            | 01·8           | 24·2           | 29·9           | 24·1              |
| 36·5                 | 36·4              | 36·2           | 12·8            | 02·9           | 25·9           | 30·8           | 25·8              |
| 34·7                 | 34·6              | 34·6           | 13·4            | 02·5           | 26·2           | 31·5           | 26·9              |
| 30·9                 | 31·3              | 31·3           | 09·4            | 00·1           | 23·6           | 29·0           | 25·3              |
| 29·6                 | 29·6              | 28·8           | 07·1            | 696·5          | 19·0           | 24·4           | 19·8              |
| 37·9                 | 37·3              | 36·7           | 14·7            | 703·5          | 22·7           | 27·6           | 20·2              |
| 41·7                 | 41·6              | 41·9           | 19·1            | 07·9           | 31·0           | 36·0           | 30·6              |
| 44·7                 | 44·5              | 44·3           | 21·7            | 11·1           | 33·6           | 38·9           | 34·3              |
| 41·0                 | 40·8              | 40·9           | 19·8            | 11·0           | 30·8           | 36·2           | 31·8              |
| 43·7                 | 43·1              | 42·7           | 19·5            | 12·3           | 29·8           | 35·2           | 29·9              |
| 42·1                 | 42·1              | 42·3           | 20·4            | 10·9           | 31·2           | 36·3           | 31·2              |
| 40·3                 | 40·5              | 41·1           | 19·3            | 11·7           | 31·9           | 37·3           | 32·9              |
| 740·8                | 740·6             | 740·5          | 718·0           | 707·3          | 730·3          | 735·5          | 730·7             |
| 749·8<br>6, 7 r.     | 749·9<br>1, 1 r.  | 749·6<br>5, 9  | 728·5<br>3, 7   | 714·6<br>26, 9 | 739·6<br>1, 7  | 744·9<br>1, 7  | 740·3<br>1, 7 r.  |
| 729·0<br>23, 2       | 728·7<br>23, 3 w. | 728·7<br>23, 9 | 706·7<br>13, 1  | 695·9<br>23, 2 | 717·4<br>24, 7 | 722·4<br>24, 7 | 713·9<br>24, 7 r. |

## Ciśnienie powietrza Średnie

Lipiec 1899 roku.

| Dzień         | Biel-<br>sko<br>8. 2. 8 | Ży-<br>wiec<br>7. 2. 9 | Wado-<br>wice | Czer-<br>ni-<br>chów<br>7. 2. 7 | Kra-<br>ków<br>6. 2. 10 | Boch-<br>nia | Szczaw-<br>nica<br>7. 1. 9 | Kry-<br>nica<br>7. 2. 9 |
|---------------|-------------------------|------------------------|---------------|---------------------------------|-------------------------|--------------|----------------------------|-------------------------|
| 1             | 730.9                   | 730.1                  |               | 741.2                           | 740.8                   |              | 718.3                      | 711.6                   |
| 2             | 27.1                    | 25.6                   |               | 37.2                            | 37.2                    |              | 15.9                       | 09.2                    |
| 3             | 26.0                    | 24.6                   |               | 35.5                            | 35.8                    |              | 13.7                       | 05.6                    |
| 4             | 29.2                    | 28.0                   |               | 38.9                            | 38.8                    |              | 17.8                       | 10.3                    |
| 5             | 28.1                    | 27.6                   |               | 37.3                            | 37.7                    |              | 15.9                       | 08.7                    |
| 6             | 28.9                    | 28.0                   |               | 38.5                            | 38.3                    |              | 15.0                       | 08.2                    |
| 7             | 31.3                    | 29.6                   |               | 41.0                            | 40.8                    |              | 17.4                       | 10.0                    |
| 8             | 33.1                    | 31.2                   |               | 42.9                            | 42.4                    |              | 19.7                       | 11.4                    |
| 9             | 33.5                    | 31.8                   |               | 43.5                            | 43.3                    |              | 19.6                       | 12.3                    |
| 10            | 34.8                    | 33.3                   |               | 45.3                            | 45.4                    |              | 21.5                       | 14.1                    |
| 11            | 35.3                    | 33.9                   |               | 46.4                            | 46.5                    |              | 22.7                       | 15.1                    |
| 12            | 34.3                    | 33.1                   |               | 45.4                            | 45.6                    |              | 22.2                       | 14.7                    |
| 13            | 33.4                    | 32.2                   |               | 44.0                            | 44.1                    |              | 22.1                       | 14.2                    |
| 14            | 33.9                    | 32.6                   |               | 44.6                            | 44.5                    |              | 21.6                       | 14.7                    |
| 15            | 34.9                    | 33.3                   |               | 45.1                            | 45.2                    |              | 22.4                       | 14.6                    |
| 16            | 34.5                    | 32.8                   |               | 45.1                            | 44.9                    |              | 22.1                       | 14.6                    |
| 17            | 31.9                    | 31.3                   |               | 41.8                            | 41.9                    |              | 19.4                       | 12.1                    |
| 18            | 29.8                    | 29.1                   |               | 39.8                            | 39.7                    |              | 17.7                       | 11.2                    |
| 19            | 31.9                    | 30.8                   |               | 41.9                            | 41.9                    |              | 18.8                       | 12.0                    |
| 20            | 34.2                    | 32.8                   |               | 44.4                            | 44.3                    |              | 20.4                       | 14.3                    |
| 21            | 35.1                    | 34.0                   |               | 45.3                            | 45.4                    |              | 22.6                       | 14.7                    |
| 22            | 33.5                    | 32.1                   |               | 43.5                            | 43.4                    |              | 20.6                       | 14.0                    |
| 23            | 30.2                    | 29.9                   |               | 40.6                            | 40.3                    |              | 19.2                       | 12.2                    |
| 24            | 27.2                    | 27.0                   |               | 37.4                            | 37.6                    |              | 15.8                       | 08.8                    |
| 25            | 30.7                    | 29.7                   |               | 40.5                            | 40.4                    |              | 18.6                       | 11.0                    |
| 26            | 34.9                    | 34.2                   |               | 45.1                            | 44.3                    |              | 21.1                       | 14.3                    |
| 27            | 33.7                    | 33.9                   |               | 43.6                            | 43.9                    |              | 21.1                       | 14.1                    |
| 28            | 36.0                    | 34.7                   |               | 46.3                            | 46.0                    |              | 21.3                       | 15.8                    |
| 29            | 34.4                    | 33.9                   |               | 44.9                            | 44.6                    |              | 21.6                       | 14.5                    |
| 30            | 34.7                    | 34.2                   |               | 45.3                            | 45.1                    |              | 22.3                       | 14.7                    |
| 31            | 38.1                    | 36.5                   |               | 48.6                            | 48.0                    |              | 24.7                       | 17.1                    |
| Średnia       | 732.4                   | 731.4                  |               | 742.6                           | 742.5                   |              | 719.8                      | 712.6                   |
| Max.<br>d. g. | 739.6<br>31, 11 w.      | 737.7<br>31, 9         |               | 749.9<br>31, 7 w.               | 749.0<br>31, 12 r.      |              | 725.8<br>31, 9             | 718.3<br>31, 9          |
| Min.<br>d. g. | 722.9<br>3, 4 r.        | 723.5<br>3, 7          |               | 733.7<br>3, 7 r.                | 733.6<br>3, 5 r.        |              | 711.7<br>3, 7              | 704.8<br>3, 2           |

Nie zapisywano spostrzeżeń.

Nie zapisywano spostrzeżeń.

Stan ciśnienia powietrza w Krynicy w miesiącach lipca, sierpniu i wrześniu moeno podwyższony.

w milimetrach.

dzienne.

Sierpień 1899 roku.

| Lwów    | Dubla-<br>ny | Tar-<br>nopol | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Kra-<br>ków | Boch-<br>nia |
|---------|--------------|---------------|--------------|-------------|---------------|----------------------|-------------|--------------|
| 7. 2. 9 | 7. 2. 9      | 7. 2. 9       | 8. 2. 8      | 7. 2. 9     | 7. 1. 10      | 7. 2. 7              | 6. 2. 10    | 7. 1. 9      |
| 732.1   | 737.6        | 733.7         | 739.4        | 737.7       |               | 749.8                | 749.8       |              |
| 29.5    | 35.1         | 31.8          | 36.6         | 36.0        |               | 47.1                 | 46.9        |              |
| 25.9    | 31.4         | 27.6          | 33.1         | 33.1        |               | 43.7                 | 43.7        |              |
| 30.4    | 35.6         | 31.7          | 32.7         | 32.8        |               | 43.7                 | 43.5        |              |
| 28.7    | 34.3         | 31.1          | 32.6         | 32.7        |               | 43.3                 | 43.4        |              |
| 27.7    | 33.3         | 29.3          | 30.7         | 30.9        |               | 42.3                 | 41.1        |              |
| 29.5    | 35.1         | 30.5          | 28.9         | 29.4        |               | 38.6                 | 39.5        |              |
| 30.9    | 36.1         | 31.5          | 29.5         | 28.2        |               | 40.3                 | 40.2        |              |
| 31.8    | 37.0         | 32.2          | 25.1         | 24.7        |               | 36.4                 | 36.7        |              |
| 33.8    | 39.4         | 34.5          | 32.7         | 31.1        |               | 43.2                 | 42.5        |              |
|         |              |               |              |             |               |                      |             |              |
| 36.7    | 42.0         | 37.4          | 32.9         | 31.2        |               | 42.7                 | 42.7        |              |
| 36.8    | 41.8         | 37.4          | 30.9         | 30.4        |               | 40.9                 | 40.7        |              |
| 34.7    | 39.9         | 35.5          | 35.5         | 33.8        |               | 45.3                 | 45.5        |              |
| 35.6    | 40.7         | 36.3          | 37.9         | 36.2        |               | 47.9                 | 47.7        |              |
| 35.8    | 40.9         | 37.1          | 36.2         | 35.3        |               | 46.1                 | 46.1        |              |
| 35.1    | 40.2         | 35.9          | 33.6         | 32.3        |               | 43.4                 | 43.2        |              |
| 31.3    | 36.7         | 32.1          | 30.1         | 29.5        |               | 39.8                 | 39.7        |              |
| 29.8    | 34.9         | 30.7          | 30.0         | 29.1        |               | 40.1                 | 39.6        |              |
| 31.7    | 36.6         | 32.3          | 29.4         | 28.6        |               | 39.6                 | 39.3        |              |
| 33.0    | 38.1         | 33.5          | 30.2         | 29.2        |               | 40.3                 | 40.2        |              |
|         |              |               |              |             |               |                      |             |              |
| 34.0    | 39.2         | 34.0          | 33.7         | 32.3        |               | 43.9                 | 43.6        |              |
| 32.5    | 37.7         | 33.3          | 36.9         | 35.3        |               | 47.5                 | 47.4        |              |
| 31.3    | 36.8         | 31.9          | 35.9         | 35.0        |               | 46.6                 | 46.4        |              |
| 28.9    | 34.2         | 30.2          | 33.3         | 33.3        |               | 44.1                 | 43.9        |              |
| 29.7    | 35.1         | 30.4          | 33.1         | 33.5        |               | 44.0                 | 43.9        |              |
| 32.7    | 37.9         | 33.3          | 33.7         | 32.9        |               | 43.9                 | 43.2        |              |
| 33.3    | 38.4         | 33.8          | 33.3         | 32.5        |               | 43.4                 | 43.0        |              |
| 34.3    | 39.5         | 34.4          | 31.4         | 30.3        |               | 41.7                 | 41.7        |              |
| 34.7    | 40.0         | 35.7          | 31.2         | 30.8        |               | 41.4                 | 41.7        |              |
| 35.0    | 40.3         | 36.3          | 32.6         | 31.2        |               | 42.8                 | 42.5        |              |
| 37.6    | 42.5         | 37.9          | 30.4         | 30.1        |               | 40.6                 | 40.6        |              |
|         |              |               |              |             |               |                      |             |              |
| 732.4   | 737.7        | 733.3         | 732.7        | 731.9       |               | 743.0                | 742.9       |              |
|         |              |               |              |             |               |                      |             |              |
| 738.5   | 743.4        | 738.3         | 740.3        | 737.9       |               | 750.2                | 750.0       |              |
| 31, 9   | 31, 9        | 31, 9         | 1, 11 r.     | 1, 7        |               | 1, 7 r               | 1, 10 w     |              |
|         |              |               |              |             |               |                      |             |              |
| 724.3   | 729.9        | 726.1         | 723.2        | 723.1       |               | 735.4                | 734.7       |              |
| 3, 9    | 3, 9         | 3, 9          | 9, 10 w.     | 9, 7        |               | 9, 2                 | 9, 1 w.     |              |

Nie zapisywano spostrzeżeń.

Nie zapisywano spostrzeżeń.

## Ciśnienie powietrza Średnie

Sierpień 1899 roku.

Wrzesień 1899 roku.

| Dzień         | Szczaw-<br>nica | Kry-<br>nica  | Lwów          | Dubla-<br>ny  | Tar-<br>nopol           | Biel-<br>sko      | Ży-<br>wiec    | Wado-<br>wice  |
|---------------|-----------------|---------------|---------------|---------------|-------------------------|-------------------|----------------|----------------|
|               | 7. 1. 9         | 7. 2. 9       | 7. 2. 9       | 7. 2. 9       | 7. 2. 9                 | 8. 2. 8           | 7. 2. 9        | 7. 1. 10       |
| 1             | 725.8           | 718.9         | 738.9         | 743.8         | 739.3                   | 729.9             | 729.2          | 736.8          |
| 2             | 24.6            | 16.4          | 36.8          | 42.0          | 37.5                    | 28.7              | 28.8           | 35.4           |
| 3             | 21.4            | 14.2          | 34.0          | 39.2          | 35.0                    | 31.2              | 30.4           | 34.0           |
| 4             | 21.1            | 14.3          | 34.4          | 39.5          | 35.7                    | 36.9              | 35.5           | 41.8           |
| 5             | 21.4            | 14.6          | 34.3          | 39.5          | 36.0                    | 36.4              | 34.9           | 41.3           |
| 6             | 19.8            | 12.7          | 31.7          | 36.9          | 32.8                    | 31.9              | 31.8           | 38.6           |
| 7             | 17.1            | 10.6          | 30.1          | 35.2          | 31.0                    | 30.3              | 30.1           | 37.2           |
| 8             | 17.4            | 09.7          | 30.6          | 36.1          | 31.0                    | 30.5              | 29.4           | 36.6           |
| 9             | 12.0            | 04.6          | 28.2          | 33.8          | 30.8                    | 29.3              | 27.6           | 35.3           |
| 10            | 19.0            | 11.4          | 28.8          | 34.0          | 29.0                    | 26.6              | 25.7           | 32.8           |
| 11            | 19.8            | 12.4          | 31.6          | 36.8          | 31.5                    | 25.0              | 23.7           | 30.4           |
| 12            | 18.0            | 10.5          | 29.6          | 34.7          | 30.4                    | 21.3              | 20.1           | 27.3           |
| 13            | 21.8            | 14.0          | 33.2          | 38.4          | 33.1                    | 23.6              | 22.2           | 29.8           |
| 14            | 23.9            | 17.6          | 37.4          | 42.6          | 37.8                    | 27.8              | 26.2           | 34.4           |
| 15            | 22.4            | 15.9          | 36.1          | 41.3          | 37.0                    | 29.0              | 27.6           | 35.2           |
| 16            | 20.0            | 14.3          | 35.3          | 40.3          | 36.6                    | 26.8              | 26.4           | 32.9           |
| 17            | 16.6            | 10.6          | 30.0          | 35.3          | 31.9                    | 26.4              | 24.7           | 32.6           |
| 18            | 17.3            | 10.0          | 28.9          | 34.6          | 29.9                    | 27.1              | 26.2           | 33.6           |
| 19            | 17.6            | 09.3          | 28.6          | 33.9          | 29.8                    | 28.0              | 26.6           | 34.5           |
| 20            | 18.4            | 09.9          | 29.6          | 34.7          | 30.6                    | 26.6              | 26.7           | 32.8           |
| 21            | 20.3            | 13.3          | 32.1          | 37.3          | 32.9                    | 30.9              | 29.4           | 36.4           |
| 22            | 23.4            | 16.1          | 36.2          | 41.4          | 36.8                    | 32.2              | 31.4           | 38.3           |
| 23            | 23.7            | 15.9          | 36.2          | 41.4          | 36.8                    | 32.7              | 31.1           | 38.6           |
| 24            | 21.0            | 13.4          | 32.1          | 37.3          | 32.5                    | 29.2              | 28.4           | 35.6           |
| 25            | 20.5            | 13.3          | 31.1          | 36.4          | 30.7                    | 30.4              | 29.5           | 36.4           |
| 26            | 19.0            | 12.3          | 29.1          | 34.3          | 28.9                    | 29.9              | 29.1           | 36.4           |
| 27            | 19.6            | 12.6          | 31.2          | 36.3          | 31.1                    | 31.4              | 30.6           | 38.1           |
| 28            | 18.9            | 11.6          | 31.4          | 36.5          | 32.0                    | 31.6              | 30.6           | 37.9           |
| 29            | 19.3            | 12.2          | 32.0          | 37.3          | 33.2                    | 32.2              | 30.3           | 37.1           |
| 30            | 20.3            | 13.0          | 32.3          | 37.5          | 33.0                    | 29.3              | 29.9           | 36.6           |
| 31            | 19.5            | 11.9          | 31.9          | 37.1          | 33.4                    |                   |                |                |
| Średnia       | 720.3           | 712.8         | 732.4         | 737.6         | 733.2                   | 729.4             | 728.5          | 735.5          |
| Max.<br>d. g. | 726.7<br>1, 1   | 719.2<br>1, 9 | 739.0<br>1, 2 | 744.0<br>1, 2 | 739.4<br>1, 7 F<br>12 W | 737.9<br>4, 11 W. | 736.1<br>4, 9  | 742.9<br>4, 10 |
| Min.<br>d. g. | 709.9<br>9, 1   | 703.0<br>9, 2 | 725.7<br>9, 2 | 731.4<br>9, 9 | 727.9<br>10, 7 F.       | 719.9<br>12, 12 W | 719.6<br>12, 9 | 727.2<br>12, 7 |



w milimetrach.  
dzienne.

| Czer-<br>ni-<br>chów | Kra-<br>ków | Boch-<br>nia | Szczaw-<br>nica | Kry-<br>nica | Lwów    | Du-<br>blany | Tar-<br>nopol |
|----------------------|-------------|--------------|-----------------|--------------|---------|--------------|---------------|
| 7. 2. 7              | 6. 2. 10    | 7. 1. 9      | 7. 1. 9         | 7. 2. 9      | 7. 2. 9 | 7. 2. 9      | 7. 2. 9       |
| 739.7                | 740.0       | 740.4        | 718.6           | 711.1        | 730.9   | 735.9        | 732.0         |
| 38.6                 | 39.2        | 38.9         | 17.4            | 10.7         | 30.4    | 35.6         | 31.8          |
| 41.2                 | 41.1        | 40.4         | 18.5            | 11.2         | 30.2    | 35.2         | 30.5          |
| 47.3                 | 47.0        | 45.8         | 23.2            | 16.1         | 34.8    | 40.1         | 34.5          |
| 46.9                 | 46.6        | 44.3         | 22.5            | 17.0         | 36.1    | 41.4         | 36.4          |
| 42.3                 | 42.3        | 42.1         | 19.6            | 13.6         | 33.5    | 39.1         | 35.0          |
| 40.2                 | 40.2        | 40.2         | 18.5            | 11.6         | 30.1    | 35.4         | 31.3          |
| 41.0                 | 40.8        | 40.6         | 18.0            | 11.0         | 31.7    | 37.1         | 32.7          |
| 39.3                 | 39.1        | 39.0         | 15.6            | 08.7         | 29.2    | 34.6         | 29.7          |
| 36.2                 | 36.7        | 36.5         | 13.3            | 05.7         | 26.5    | 32.3         | 28.0          |
| 34.5                 | 34.0        | 33.6         | 11.7            | 03.0         | 22.1    | 27.6         | 22.6          |
| 31.3                 | 31.3        | 30.8         | 09.3            | 01.6         | 22.0    | 27.5         | 22.4          |
| 34.4                 | 34.5        | 33.9         | 12.3            | 04.9         | 27.4    | 32.6         | 28.0          |
| 38.1                 | 37.9        | 37.2         | 14.7            | 07.1         | 27.5    | 33.1         | 28.2          |
| 39.2                 | 39.0        | 37.9         | 17.4            | 08.8         | 27.8    | 33.4         | 27.5          |
| 37.2                 | 37.3        | 37.5         | 17.3            | 07.8         | 28.4    | 34.1         | 29.2          |
| 36.6                 | 36.4        | 35.5         | 15.3            | 07.2         | 28.0    | 33.8         | 29.6          |
| 37.3                 | 37.4        | 37.4         | 16.7            | 07.7         | 28.4    | 33.9         | 29.1          |
| 38.2                 | 38.0        | 38.0         | 16.9            | 08.6         | 28.5    | 33.8         | 29.4          |
| 36.8                 | 36.9        | 36.6         | 16.2            | 08.2         | 29.2    | 34.8         | 30.7          |
| 40.7                 | 40.7        | 39.2         | 18.8            | 10.7         | 30.6    | 36.1         | 31.2          |
| 42.8                 | 42.9        | 43.2         | 21.6            | 13.7         | 35.3    | 40.6         | 36.5          |
| 43.4                 | 43.3        | 43.2         | 20.8            | 13.7         | 34.5    | 40.1         | 36.0          |
| 39.3                 | 39.1        | 38.7         | 17.1            | 09.4         | 29.6    | 34.5         | 30.3          |
| 40.7                 | 40.9        | 40.8         | 18.0            | 11.5         | 32.1    | 37.7         | 33.0          |
| 40.6                 | 40.5        | 40.5         | 18.6            | 11.5         | 32.0    | 37.8         | 33.6          |
| 42.2                 | 42.3        | 41.5         | 20.3            | 13.3         | 34.4    | 39.8         | 36.0          |
| 42.4                 | 42.3        | 42.7         | 20.7            | 13.5         | 35.7    | 41.3         | 37.7          |
| 42.2                 | 42.1        | 41.8         | 19.5            | 12.5         | 33.4    | 38.9         | 35.2          |
| 40.0                 | 40.6        | 40.9         | 18.6            | 12.0         | 32.6    | 38.1         | 34.1          |
| 739.7                | 739.7       | 739.3        | 717.6           | 710.1        | 730.4   | 735.9        | 731.4         |
| 748.3                | 748.3       | 747.3        | 723.9           | 717.6        | 736.3   | 742.1        | 738.1         |
| 5, 7 r.              | 4, 12 n.    | 4, 9         | 4, 9            | 5, 7         | 5, 2    | 5, 7         | 28, 7         |
| 730.3                | 730.2       | 729.8        | 709.1           | 701.5        | 720.6   | 726.0        | 721.1         |
| 12, 7 w.             | 12, 9 w.    | 12, 9        | 12, 9           | 12, 2        | 11, 2   | 11, 2        | 11, 2         |

**Ciśnienie powietrza**  
Średnie

*Październik 1899 roku.*

| Dzień         | Biel-<br>sko<br>8. 2. 8 | Ży-<br>wiec<br>7. 2. 9 | Wado-<br>wice<br>7. 1. 10 | Czer-<br>ni-<br>chów<br>7. 2. 7 | Kra-<br>ków<br>6. 2. 10 | Boch-<br>nia<br>7. 1. 9 | Szczaw-<br>nica<br>7. 1. 9 | Kry-<br>nica<br>7. 2. 9 |
|---------------|-------------------------|------------------------|---------------------------|---------------------------------|-------------------------|-------------------------|----------------------------|-------------------------|
| 1             | 732.2                   | 730.4                  | 739.4                     | 742.7                           | 742.7                   | 742.0                   | 720.3                      | 714.0                   |
| 2             | 31.4                    | 30.0                   | 38.4                      | 41.8                            | 42.1                    | 41.9                    | 20.2                       | 12.5                    |
| 3             | 34.8                    | 31.8                   | 40.7                      | 45.4                            | 45.1                    | 43.8                    | 21.7                       | 12.1                    |
| 4             | 34.8                    | 33.2                   | 41.3                      | 45.7                            | 45.6                    | 45.5                    | 23.1                       | 12.4                    |
| 5             | 33.8                    | 32.3                   | 40.1                      | 43.9                            | 44.0                    | 44.8                    | 22.2                       | 11.9                    |
| 6             | 33.8                    | 31.8                   | 39.6                      | 44.3                            | 44.0                    | 43.3                    | 22.5                       | 10.5                    |
| 7             | 30.3                    | 28.7                   | 36.9                      | 41.0                            | 41.1                    | 41.6                    | 18.2                       | 08.1                    |
| 8             | 34.2                    | 32.8                   | 40.0                      | 43.9                            | 43.8                    | 43.2                    | 17.8                       | 05.7                    |
| 9             | 42.0                    | 40.2                   | 47.5                      | 52.9                            | 52.6                    | 51.3                    | 26.9                       | 07.5                    |
| 10            | 38.1                    | 37.5                   | 44.4                      | 48.9                            | 49.1                    | 49.0                    | 23.7                       | 12.3                    |
| 11            | 37.1                    | 36.3                   | 43.4                      | 48.2                            | 47.8                    | 47.6                    | 24.4                       | 14.4                    |
| 12            | 30.9                    | 30.6                   | 37.5                      | 41.6                            | 41.4                    | 42.1                    | 20.3                       | 09.9                    |
| 13            | 25.6                    | 25.6                   | 33.7                      | 35.9                            | 36.5                    | 36.3                    | 13.8                       | 05.4                    |
| 14            | 32.3                    | 31.2                   | 38.3                      | 42.5                            | 42.2                    | 41.4                    | 18.3                       | 08.6                    |
| 15            | 37.9                    | 36.5                   | 43.8                      | 48.3                            | 48.1                    | 46.9                    | 24.7                       | 13.6                    |
| 16            | 38.4                    | 37.7                   | 44.0                      | 49.1                            | 48.9                    | 48.4                    | 24.8                       | 14.6                    |
| 17            | 37.8                    | 36.4                   | 43.3                      | 48.0                            | 47.3                    | 46.8                    | 23.6                       | 13.0                    |
| 18            | 39.8                    | 38.0                   | 45.5                      | 50.5                            | 50.2                    | 48.4                    | 23.3                       | 14.9                    |
| 19            | 43.3                    | 41.6                   | 48.6                      | 52.3                            | 53.6                    | 52.4                    | 27.8                       | 18.9                    |
| 20            | 42.7                    | 41.6                   | 47.6                      | 53.1                            | 52.7                    | 52.2                    | 27.9                       | 18.6                    |
| 21            | 41.5                    | 40.9                   | 47.1                      | 51.9                            | 51.9                    | 51.4                    | 28.0                       | 18.1                    |
| 22            | 43.4                    | 42.0                   | 48.6                      | 54.4                            | 54.1                    | 53.6                    | 29.7                       | 20.1                    |
| 23            | 38.0                    | 38.1                   | 44.6                      | 49.1                            | 49.0                    | 48.9                    | 26.3                       | 16.5                    |
| 24            | 31.5                    | 30.9                   | 38.2                      | 41.7                            | 41.6                    | 42.2                    | 19.3                       | 09.0                    |
| 25            | 32.4                    | 32.0                   | 37.9                      | 41.8                            | 41.5                    | 40.5                    | 19.1                       | 05.8                    |
| 26            | 36.6                    | 35.4                   | 43.0                      | 47.0                            | 46.7                    | 45.4                    | 23.0                       | 12.0                    |
| 27            | 34.8                    | 34.8                   | 41.5                      | 45.6                            | 45.4                    | 45.4                    | 23.2                       | 12.5                    |
| 28            | 33.1                    | 33.6                   | 40.2                      | 43.6                            | 43.5                    | 43.1                    | 21.8                       | 12.1                    |
| 29            | 35.1                    | 34.1                   | 41.5                      | 45.4                            | 45.2                    | 44.3                    | 23.3                       | 13.3                    |
| 30            | 32.6                    | 32.5                   | 39.1                      | 42.7                            | 42.9                    | 42.9                    | 21.7                       | 11.8                    |
| 31            | 30.7                    | 29.9                   | 35.7                      | 40.6                            | 41.5                    | 40.6                    | 19.6                       | 09.1                    |
| Średnia       | 735.5                   | 734.5                  | 741.7                     | 745.9                           | 745.9                   | 745.4                   | 722.6                      | 712.2                   |
| Max.<br>d. g. | 744.4<br>22, 10 r.      | 742.2<br>19, 9         | 749.3<br>22, 7            | 753.8<br>19, 7 w.               | 755.3<br>22, 9 r.       | 754.2<br>22, 1          | 730.9<br>22, 9             | 720.3<br>22, 2          |
| Min.<br>d. g. | 724.8<br>13, 2.         | 724.8<br>13, 2         | 733.4<br>13, 7            | 734.6<br>13, 2                  | 735.0<br>13, 2 w.       | 735.5<br>13, 9          | 712.4<br>13, 1             | 704.3<br>13, 2          |

w milimetrach.

dzienne.

Listopad 1899 roku.

| Lwów    | Du-<br>blany | Tar-<br>nopol | Biel-<br>sko | Zy-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Kra-<br>ków | Boch-<br>nia |
|---------|--------------|---------------|--------------|-------------|---------------|----------------------|-------------|--------------|
| 7. 2. 9 | 7. 2. 9      | 7. 2. 9       | 8. 2. 8      | 7. 2. 9     | 7. 1. 10      | 7. 2. 7              | 6. 2. 10    | 7. 1. 9      |
| 734.7   | 740.0        | 736.2         | 740.4        | 737.1       | 737.1         | 751.3                | 750.8       | 749.8        |
| 35.2    | 40.5         | 37.0          | 37.1         | 37.9        | 41.9          | 48.3                 | 48.3        | 47.9         |
| 34.9    | 40.2         | 35.4          | 35.0         | 35.5        | 41.6          | 46.3                 | 46.4        | 46.2         |
| 36.9    | 42.0         | 37.3          | 34.8         | 35.0        | 41.6          | 45.9                 | 46.0        | 45.3         |
| 35.0    | 40.4         | 35.9          | 37.3         | 36.1        | 43.0          | 47.8                 | 47.9        | 47.1         |
| 33.2    | 38.6         | 33.5          | 35.6         | 35.6        | 42.0          | 46.5                 | 46.5        | 45.8         |
| 32.1    | 38.1         | 33.2          | 36.3         | 35.7        | 42.2          | 47.1                 | 46.8        | 45.7         |
| 29.0    | 34.1         | 27.9          | 32.9         | 32.4        | 38.9          | 43.7                 | 43.3        | 43.6         |
| 39.5    | 44.8         | 39.0          | 29.4         | 28.7        | 35.8          | 39.8                 | 39.9        | 39.1         |
| 39.5    | 45.0         | 40.6          | 32.9         | 31.2        | 38.3          | 43.2                 | 42.6        | 42.1         |
| 38.5    | 44.2         | 39.4          | 32.7         | 31.4        | 38.0          | 42.6                 | 42.7        | 41.5         |
| 34.0    | 40.3         | 36.3          | 33.7         | 33.0        | 40.1          | 43.8                 | 44.1        | 43.4         |
| 29.0    | 35.0         | 31.5          | 37.7         | 35.7        | 42.8          | 47.7                 | 47.5        | 45.5         |
| 30.5    | 36.0         | 30.6          | 39.1         | 37.4        | 44.5          | 50.0                 | 50.0        | 48.9         |
| 36.2    | 41.6         | 36.6          | 36.7         | 35.1        | 41.8          | 46.3                 | 46.0        | 45.4         |
| 37.1    | 42.8         | 37.5          | 36.3         | 34.8        | 42.3          | 46.9                 | 46.6        | 45.0         |
| 35.2    | 40.7         | 35.2          | 42.7         | 40.2        | 47.1          | 53.5                 | 53.0        | 51.9         |
| 38.7    | 44.4         | 38.9          | 42.1         | 40.2        | 47.4          | 53.0                 | 52.7        | 51.5         |
| 41.2    | 46.9         | 41.5          | 41.8         | 39.5        | 46.8          | 53.0                 | 52.5        | 51.6         |
| 40.4    | 45.9         | 39.9          | 32.7         | 32.1        | 39.0          | 43.4                 | 43.6        | 43.9         |
| 39.4    | 44.9         | 39.7          | 38.8         | 36.6        | 43.9          | 49.7                 | 48.9        | 48.1         |
| 43.4    | 49.0         | 43.1          | 34.0         | 33.9        | 40.7          | 44.2                 | 44.8        | 43.3         |
| 40.0    | 45.4         | 41.3          | 37.5         | 36.2        | 42.8          | 48.0                 | 47.1        | 47.0         |
| 31.4    | 36.8         | 32.7          | 33.2         | 32.9        | 39.1          | 42.8                 | 42.6        | 42.5         |
| 27.0    | 32.2         | 26.5          | 35.6         | 34.4        | 41.7          | 45.5                 | 45.9        | 44.1         |
| 33.6    | 39.0         | 32.5          | 44.0         | 41.0        | 48.1          | 55.2                 | 54.6        | 53.6         |
| 36.6    | 42.2         | 37.8          | 36.1         | 36.4        | 41.4          | 46.0                 | 46.2        | 46.0         |
| 34.1    | 39.6         | 35.4          | 36.4         | 35.5        | 41.6          | 45.8                 | 45.5        | 44.6         |
| 35.0    | 40.3         | 35.5          | 37.8         | 36.5        | 42.7          | 47.6                 | 47.2        | 45.9         |
| 34.4    | 39.8         | 35.8          | 38.7         | 37.0        | 43.7          | 49.2                 | 49.1        | 47.9         |
| 31.3    | 36.6         | 32.8          |              |             |               |                      |             |              |
| 735.4   | 740.9        | 736.0         | 736.6        | 735.5       | 740.9         | 747.1                | 747.0       | 746.1        |
| 744.1   | 749.9        | 744.3         | 745.0        | 742.6       | 749.7         | 755.7                | 756.1       | 755.1        |
| 22, 9   | 22, 9        | 22, 9 w.      | 26, 10 w.    | 18, 9       | 26, 7         | 26, 2                | 26, 10 r.   | 26, 1        |
| 725.5   | 730.8        | 724.9         | 727.9        | 728.2       | 734.7         | 738.9                | 738.8       | 738.6        |
| 8, 7    | 8, 7         | 8, 7 r.       | 9, 3 w.      | 9, 9        | 8, 7          | 9, 7                 | 9, 8 r.     | 9, 7         |

**Ciśnienie powietrza**  
Średnie

*Listopad 1899 roku.*

*Grudzień 1899 roku.*

| Dzień         | Szczaw-<br>nica | Kry-<br>nica   | Lwów           | Du-<br>blany   | Tar-<br>nopol       | Biel-<br>sko       | Ży-<br>wiec    | Wado-<br>wice  |
|---------------|-----------------|----------------|----------------|----------------|---------------------|--------------------|----------------|----------------|
|               | 7. 1. 9         | 7. 2. 9        | 7. 2. 9        | 7. 2. 9        | 7. 2. 9             | 8. 2. 8            | 7. 2. 9        | 7. 1. 10       |
| 1             | 725.9           | 716.8          | 729.5          | 745.0          | 739.7               | 735.0              | 734.4          | 741.2          |
| 2             | 25.5            | 16.4           | 40.2           | 45.9           | 42.1                | 28.3               | 28.7           | 34.6           |
| 3             | 23.4            | 14.2           | 38.4           | 43.9           | 39.9                | 31.7               | 30.4           | 37.8           |
| 4             | 23.2            | 13.7           | 36.9           | 42.4           | 38.4                | 36.8               | 34.8           | 41.6           |
| 5             | 23.6            | 15.1           | 38.5           | 43.8           | 39.7                | 22.9               | 22.8           | 28.7           |
| 6             | 23.1            | 13.7           | 38.6           | 44.2           | 40.6                | 26.2               | 24.2           | 32.0           |
| 7             | 23.4            | 13.5           | 38.4           | 44.0           | 40.5                | 27.9               | 26.4           | 34.5           |
| 8             | 22.0            | 11.1           | 35.4           | 41.1           | 37.6                | 31.7               | 30.0           | 37.9           |
| 9             | 17.2            | 07.3           | 30.3           | 35.8           | 32.6                | 33.2               | 31.2           | 39.2           |
| 10            | 20.1            | 08.5           | 32.3           | 37.7           | 32.9                | 32.7               | 31.1           | 39.2           |
| 11            | 21.0            | 09.8           | 31.9           | 37.4           | 33.5                | 30.3               | 29.7           | 36.9           |
| 12            | 21.3            | 10.9           | 34.1           | 39.9           | 35.4                | 33.4               | 31.7           | 39.1           |
| 13            | 23.2            | 13.0           | 34.9           | 40.6           | 35.6                | 23.4               | 22.5           | 29.9           |
| 14            | 26.2            | 14.9           | 37.1           | 42.8           | 37.1                | 21.1               | 20.4           | 28.1           |
| 15            | 23.0            | 11.1           | 33.4           | 39.5           | 34.5                | 23.2               | 21.9           | 29.9           |
| 16            | 21.4            | 10.3           | 32.0           | 38.0           | 32.7                | 27.9               | 25.7           | 34.1           |
| 17            | 28.2            | 17.8           | 41.9           | 47.5           | 42.3                | 29.5               | 27.8           | 36.2           |
| 18            | 27.4            | 18.1           | 41.3           | 46.5           | 41.7                | 37.7               | 35.9           | 43.6           |
| 19            | 29.1            | 14.6           | 42.5           | 48.5           | 43.0                | 43.0               | 40.9           | 49.2           |
| 20            | 22.2            | 09.7           | 31.9           | 38.5           | 34.1                | 44.1               | 42.1           | 50.6           |
| 21            | 24.4            | 14.9           | 36.3           | 42.2           | 36.7                | 45.7               | 43.7           | 52.0           |
| 22            | 22.3            | 10.7           | 32.3           | 37.9           | 33.1                | 44.9               | 42.9           | 50.8           |
| 23            | 24.5            | 13.2           | 35.5           | 41.1           | 36.4                | 41.3               | 39.5           | 49.3           |
| 24            | 21.0            | 09.4           | 30.7           | 35.9           | 31.5                | 38.2               | 36.7           | 44.9           |
| 25            | 22.0            | 10.9           | 31.8           | 37.0           | 31.3                | 31.5               | 31.3           | 40.8           |
| 26            | 29.6            | 20.1           | 44.1           | 50.1           | 44.5                | 31.5               | 30.5           | 38.7           |
| 27            | 23.6            | 12.8           | 34.7           | 40.5           | 35.6                | 29.6               | 29.3           | 37.6           |
| 28            | 22.4            | 11.2           | 31.2           | 36.6           | 30.4                | 27.2               | 25.2           | 34.9           |
| 29            | 23.9            | 12.5           | 33.1           | 38.1           | 32.0                | 22.6               | 23.1           | 33.0           |
| 30            | 25.2            | 14.4           | 35.8           | 41.3           | 35.6                | 28.2               | 25.3           | 34.0           |
| 31            |                 |                |                |                |                     | 32.9               | 31.7           | 39.5           |
| Średnia       | 723.6           | 713.0          | 735.8          | 741.5          | 736.7               | 732.1              | 730.8          | 728.7          |
| Max.<br>d. g. | 730.2<br>19, 7  | 720.5<br>26, 2 | 745.0<br>26, 2 | 750.8<br>26, 2 | 744, 9<br>26, 12, 9 | 746.2<br>21, 11 r. | 744.2<br>21, 9 | 752.3<br>21, 7 |
| Min.<br>d. g. | 716.2<br>9, 1   | 706.5<br>9, 2  | 727.5<br>16, 7 | 733.1<br>25, 7 | 727.5<br>25, 7 r.   | 720.0<br>14, 5 r.  | 720.2<br>14, 7 | 727.4<br>14, 7 |

w milimetrach.  
dzienne.

| Czer-<br>ni-<br>chów | Kra-<br>ków | Boch-<br>nia | Szczaw-<br>nica | Kry-<br>nica | Lwów    | Dubla-<br>ny | Tar-<br>nopol |
|----------------------|-------------|--------------|-----------------|--------------|---------|--------------|---------------|
| 7. 2. 7              | 6. 2. 10    | 7. 1. 9      | 7. 1. 9         | 7. 2. 9      | 7. 2. 9 | 7. 2. 9      | 7. 2. 9       |
| 746.3                | 746.1       | 746.1        | 722.0           | 712.2        | 735.8   | 741.3        | 737.0         |
| 38.6                 | 38.6        | 38.4         | 17.5            | 05.8         | 27.8    | 32.9         | 28.8          |
| 41.3                 | 42.1        | 40.8         | 18.0            | 06.2         | 27.1    | 32.7         | 27.1          |
| 47.7                 | 46.4        | 45.2         | 23.2            | 12.3         | 31.6    | 40.3         | 34.5          |
| 31.8                 | 32.0        | 30.9         | 09.9            | 698.7        | 18.9    | 24.6         | 19.7          |
| 35.7                 | 34.8        | 32.4         | 11.1            | 700.1        | 19.0    | 24.5         | 17.2          |
| 38.5                 | 38.6        | 37.0         | 13.3            | 03.5         | 25.1    | 30.9         | 24.4          |
| 42.7                 | 43.1        | 42.1         | 19.5            | 07.4         | 30.9    | 36.9         | 31.1          |
| 44.9                 | 44.8        | 44.2         | 20.3            | 08.5         | 34.4    | 40.4         | 35.8          |
| 44.9                 | 44.9        | 44.1         | 20.5            | 08.9         | 35.9    | 42.1         | 38.0          |
| 41.2                 | 42.0        | 40.8         | 17.1            | 05.4         | 34.5    | 40.9         | 37.5          |
| 44.8                 | 44.4        | 44.1         | 20.0            | 08.2         | 36.0    | 42.2         | 38.0          |
| 34.5                 | 34.3        | 34.9         | 11.8            | 00.1         | 28.9    | 35.0         | 32.4          |
| 32.6                 | 32.7        | 32.0         | 09.6            | 699.1        | 25.1    | 30.7         | 27.4          |
| 33.6                 | 34.2        | 32.2         | 10.6            | 701.1        | 27.5    | 33.1         | 29.6          |
| 38.1                 | 38.2        | 36.5         | 15.0            | 03.0         | 29.3    | 35.0         | 32.3          |
| 39.7                 | 41.0        | 42.6         | 16.3            | 06.4         | 34.1    | 39.5         | 36.9          |
| 49.8                 | 50.2        | 47.3         | 23.9            | 14.7         | 44.1    | 50.1         | 46.8          |
| 55.1                 | 55.5        | 49.8         | 30.3            | 19.7         | 50.4    | 56.4         | 52.8          |
| 56.7                 | 57.7        | 52.3         | 31.8            | 22.4         | 52.9    | 59.2         | 54.9          |
| 58.4                 | 58.8        | 55.4         | 31.7            | 20.8         | 51.0    | 57.3         | 51.0          |
| 57.5                 | 57.5        | 51.7         | 31.7            | 20.8         | 47.5    | 54.3         | 48.0          |
| 53.6                 | 53.7        | 52.2         | 28.6            | 18.2         | 45.8    | 52.7         | 47.6          |
| 49.4                 | 49.6        | 48.0         | 25.2            | 14.7         | 41.5    | 47.8         | 43.8          |
| 42.6                 | 42.3        | 41.1         | 19.6            | 12.2         | 34.4    | 40.4         | 37.0          |
| 42.5                 | 42.3        | 38.3         | 18.5            | 09.6         | 33.3    | 39.2         | 35.7          |
| 40.9                 | 41.2        | 38.7         | 19.1            | 07.9         | 34.9    | 41.0         | 37.8          |
| 38.0                 | 38.2        | 36.4         | 15.8            | 03.8         | 30.0    | 36.1         | 32.7          |
| 33.6                 | 34.0        | 38.0         | 11.4            | 01.9         | 29.0    | 34.7         | 32.2          |
| 38.4                 | 38.9        | 39.4         | 15.6            | 05.9         | 29.9    | 35.5         | 32.3          |
| 43.4                 | 43.9        | 44.2         | 20.3            | 10.4         | 35.6    | 41.7         | 38.4          |
| 743.1                | 743.3       | 741.9        | 719.3           | 708.7        | 734.3   | 740.3        | 736.1         |
| 758.5                | 759.6       | 756.5        | 732.7           | 722.9        | 753.1   | 759.8        | 755.0         |
| 21, 7 w.             | 21, 9 r.    | 21, 9        | 20, 9           | 20, 9        | 20, 2   | 20, 9        | 20, 7 r.      |
| 731.0                | 730.6       | 729.6        | 708.9           | 697.0        | 714.6   | 720.0        | 712.2         |
| 5, 7 w.              | 5, 7 w.     | 6, 7         | 5, 9            | 5, 9         | 6, 7    | 6, 7         | 6, 7 r.       |

**Sredni kieru-  
oraz liczba dostrzeżonych**

*Styczeń 1899 roku.*

| Dzień | Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków | Boch-<br>nia | Szczaw-<br>nica |
|-------|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|--------------|-----------------|
| 1     | W                       | N            | SW          | SW            | W                    | NW            | ENE         | E            | E               |
| 2     | SW                      | S            | SW          | S             | W                    | SW            | SSW         | W            | S               |
| 3     | W                       | NE           | NW          | W             | W                    | N             | WSW         | NW           | NW              |
| 4     | NW                      | N            | NW          | W             | NW                   | NW            | NW          | NW           | W               |
| 5     | —                       | S            | NE          | S             | W                    | N             | NW          | NW           | NW              |
| 6     | SE                      | NW           | W           | W             | NW                   | W             | WSW         | NW           | W               |
| 7     | SW                      | SE           | N           | N             | SE                   | W             | NNW         | N            | S               |
| 8     | SW                      | S            | S           | S             | W                    | SW            | WSW         | NW           | NE              |
| 9     | W                       | NW           | SW          | W             | W                    | E             | SW          | W            | E               |
| 10    | SW                      | SW           | SW          | NE            | SW                   | SE            | SSE         | E            | NE              |
| 11    | W                       | S            | SW          | NW            | NW                   | N             | SSW         | W            | NE              |
| 12    | SW                      | W            | SW          | S             | W                    | —             | WSW         | NW           | N               |
| 13    | W                       | SW           | W           | W             | SW                   | NE            | SW          | SW           | N               |
| 14    | NW                      | W            | NW          | W             | W                    | NE            | WSW         | NW           | W               |
| 15    | W                       | W            | SW          | W             | W                    | NE            | W           | NW           | NW              |
| 16    | SW                      | SE           | SW          | SW            | W                    | E             | SW          | NW           | NE              |
| 17    | W                       | W            | W           | SW            | NW                   | E             | SW          | W            | W               |
| 18    | S                       | NW           | W           | W             | NW                   | E             | WSW         | NW           | W               |
| 19    | SW                      | W            | SW          | SW            | W                    | E             | WSW         | NW           | W               |
| 20    | W                       | W            | SW          | W             | W                    | E             | WSW         | W            | SW              |
| 21    | SW                      | S            | SW          | S             | W                    | E             | SW          | E            | NE              |
| 22    | —                       | S            | SW          | NE            | W                    | E             | SSW         | NW           | NE              |
| 23    | SE                      | NE           | S           | SE            | W                    | E             | SSW         | W            | N               |
| 24    | SW                      | N            | W           | N             | W                    | E             | SW          | NW           | NW              |
| 25    | SW                      | NE           | NE          | NE            | E                    | SW            | NE          | NE           | NW              |
| 26    | SE                      | E            | E           | E             | E                    | SW            | ENE         | E            | NW              |
| 27    | SE                      | NE           | SE          | SE            | E                    | SW            | ENE         | E            | SW              |
| 28    | SW                      | N            | S           | SW            | SW                   | W             | SW          | E            | S               |
| 29    | SW                      | W            | SW          | SW            | W                    | NE            | WSW         | NW           | N               |
| 30    | SW                      | N            | N           | SW            | W                    | E             | NNW         | NW           | N               |
| 31    | SW                      | NE           | S           | E             | W                    | SE            | WSW         | NW           | NE              |
| N     | 0                       | 10           | 5           | 5             | 0                    | 6             | 4.5         | 2            | 13              |
| NE    | 0                       | 12           | 6           | 12            | 0                    | 8             | 7.5         | 4            | 16              |
| E     | 1                       | 7            | 4           | 3             | 8                    | 29            | 6.0         | 15           | 13              |
| SE    | 6                       | 7            | 7           | 9             | 3                    | 6             | 2.0         | 0            | 1               |
| S     | 3                       | 25           | 10          | 6             | 0                    | 2             | 4.5         | 0            | 11              |
| SW    | 36                      | 6            | 38          | 32            | 7                    | 17            | 40.0        | 5            | 7               |
| W     | 22                      | 20           | 12          | 16            | 59                   | 17            | 21.5        | 16           | 19              |
| NW    | 9                       | 6            | 11          | 8             | 16                   | 5             | 7.0         | 50           | 13              |
| Ciszy | 10                      | —            | —           | 4             | —                    | —             | —           | —            | —               |
| brak  | —                       | —            | —           | —             | —                    | 3             | —           | 1            | —               |

## nek wiatru

kierunków wiatru i cisz.

| Tar-nów | Pil-zno | Iwo-nicz | Rze-szów | Smol-nik | Sanok | Prze-myśl | Łom-na | Chy-rów |
|---------|---------|----------|----------|----------|-------|-----------|--------|---------|
| E       | S       | SW       | W        | S        | SW    | W         | SE     | NE      |
| SW      | SE      | SW       | S        | SW       | S     | W         | SW     | SW      |
| NW      | E       | SW       | W        | SW       | SW    | SW        | SE     | SW      |
| NW      | W       | SE       | W        | N        | NW    | W         | NE     | NW      |
| NW      | W       | NE       | W        | N        | N     | NW        | NE     | SW      |
| W       | NW      | NE       | W        | NW       | SW    | NW        | SE     | S       |
| NE      | NE      | S        | W        | N        | SE    | NW        | N      | SW      |
| W       | SE      | S        | W        | S        | S     | W         | SE     | SW      |
| W       | SW      | S        | W        | SE       | S     | W         | SE     | SW      |
| W       | SE      | S        | W        | SE       | SE    | W         | SW     | SW      |
| SW      | SE      | S        | W        | SE       | SE    | SW        | SE     | W       |
| W       | S       | S        | W        | SW       | S     | SW        | SE     | SW      |
| W       | SW      | S        | W        | SW       | SW    | W         | SW     | SW      |
| W       | W       | NE       | W        | NW       | W     | W         | SE     | SW      |
| SW      | NW      | W        | W        | W        | SW    | W         | SW     | W       |
| SW      | W       | SW       | S        | SE       | SW    | W         | SW     | SW      |
| NW      | NW      | S        | S        | S        | SE    | NW        | SW     | SW      |
| SW      | NW      | SW       | S        | SE       | S     | W         | SW     | NE      |
| SW      | NW      | SW       | S        | S        | S     | W         | SW     | SW      |
| SW      | SW      | S        | S        | SE       | SW    | W         | SE     | S       |
| SW      | S       | S        | S        | S        | SE    | W         | SW     | S       |
| W       | SE      | SW       | S        | S        | S     | W         | SW     | S       |
| W       | SE      | SW       | W        | S        | S     | W         | NE     | SW      |
| NE      | SE      | S        | W        | E        | SE    | W         | NE     | SW      |
| NE      | SE      | NE       | E        | E        | E     | SE        | NE     | S       |
| —       | E       | NE       | E        | S        | S     | E         | NE     | SW      |
| NW      | SE      | S        | E        | S        | S     | SW        | NE     | W       |
| NW      | SE      | S        | W        | S        | S     | W         | SW     | W       |
| NW      | SE      | SW       | W        | S        | N     | W         | NE     | W       |
| NW      | SW      | W        | S        | N        | N     | W         | NE     | SW      |
| 0       | 2       | 0        | 0        | 15       | 3     | 0         |        |         |
| 10      | 1       | 14       | 0        | 1        | 2     | 0         |        |         |
| 2       | 11      | 0        | 9        | 5        | 3     | 2         |        |         |
| 0       | 30      | 4        | 0        | 26       | 24    | 4         |        |         |
| 0       | 8       | 41       | 31       | 24       | 23    | 0         |        |         |
| 23      | 11      | 23       | 0        | 11       | 25    | 11        |        |         |
| 28      | 14      | 11       | 53       | 3        | 10    | 59        |        |         |
| 25      | 10      | 0        | 0        | 5        | 3     | 17        |        |         |
| 5       | —       | —        | 0        | 3        | —     | —         |        |         |
| —       | —       | —        | —        | —        | —     | —         |        |         |

Średni kieru-  
oraz liczba dostrzeżonych

Styczeń 1899 roku.

| Dzień | Stare-<br>miasto | Sam-<br>bor | Doli-<br>na | Lwów | Du-<br>blany | Delat-<br>tyn | Oży-<br>dów | Ober-<br>tyn | Tarno-<br>pol | Jagiel-<br>nica |
|-------|------------------|-------------|-------------|------|--------------|---------------|-------------|--------------|---------------|-----------------|
| 1     | SW               | SW          | W           | S    | SW           | SW            | W           | SW           | SE            | NE              |
| 2     | SW               | SW          | W           | S    | SE           | NE            | SW          | SW           | SE            | SE              |
| 3     | S                | SE          | W           | S    | SE           | N             | SE          | SW           | SE            | NE              |
| 4     | N                | NW          | NW          | NW   | NW           | W             | W           | NW           | NW            | N               |
| 5     | N                | NW          | NW          | NW   | NW           | SW            | NW          | NW           | NW            | N               |
| 6     | W                | NW          | NW          | W    | W            | NW            | SW          | NW           | NW            | N               |
| 7     | NW               | NW          | W           | W    | W            | SW            | W           | NW           | NW            | N               |
| 8     | SW               | SW          | W           | SW   | SW           | SW            | E           | NW           | S             | NE              |
| 9     | SW               | SW          | W           | SW   | W            | NW            | S           | SE           | SW            | E               |
| 10    | SW               | SW          | W           | S    | SE           | NE            | SW          | SE           | S             | SE              |
| 11    | SW               | SW          | W           | S    | SE           | N             | SW          | SE           | SE            | E               |
| 12    | SW               | SW          | W           | S    | SW           | SW            | S           | SE           | S             | W               |
| 13    | SW               | SW          | W           | S    | SW           | SW            | S           | SE           | SW            | W               |
| 14    | SW               | SW          | W           | W    | W            | W             | SW          | SW           | S             | E               |
| 15    | NW               | NW          | W           | W    | W            | W             | W           | SW           | NW            | W               |
| 16    | SW               | SW          | NW          | SW   | W            | SW            | S           | SW           | SW            | SE              |
| 17    | SW               | SW          | NW          | SW   | W            | SW            | SW          | SW           | SW            | S               |
| 18    | SW               | SW          | NW          | W    | W            | SW            | W           | NW           | W             | N               |
| 19    | SW               | SW          | NW          | W    | W            | SW            | W           | NW           | W             | N               |
| 20    | SW               | SW          | NW          | W    | W            | SW            | SW          | SE           | SW            | —               |
| 21    | SW               | SW          | NW          | SW   | W            | SW            | SW          | SW           | SW            | N               |
| 22    | SW               | SW          | W           | SW   | SW           | SW            | SW          | NE           | SW            | —               |
| 23    | SW               | SW          | W           | SW   | SW           | NE            | W           | SE           | SE            | —               |
| 24    | SW               | SW          | W           | SW   | W            | SW            | W           | SW           | S             | —               |
| 25    | N                | SE          | W           | NE   | NE           | NW            | NW          | SW           | E             | N               |
| 26    | NE               | SE          | W           | E    | E            | NE            | E           | NW           | NE            | N               |
| 27    | E                | SW          | W           | W    | W            | SW            | SW          | NW           | W             | N               |
| 28    | SW               | SW          | W           | W    | W            | SW            | W           | NW           | W             | W               |
| 29    | SW               | SW          | W           | W    | W            | SW            | W           | NW           | SW            | —               |
| 30    | W                | NW          | W           | W    | W            | W             | W           | SW           | NW            | W               |
| 31    | W                | NW          | W           | SW   | W            | NE            | W           | SW           | SW            | W               |
| N     | 8                | 0           |             | 4    | 1            | 7             | 0           | 0            | 1             | 28              |
| NE    | 3                | 1           |             | 3    | 2            | 10            | 0           | 3            | 2             | 7               |
| E     | 3                | 1           |             | 1    | 4            | 0             | 5           | 0            | 1             | 10              |
| SE    | 1                | 5           |             | 3    | 11           | 2             | 3           | 20           | 12            | 3               |
| S     | 3                | 1           |             | 13   | 0            | 0             | 14          | 0            | 15            | 3               |
| SW    | 60               | 55          |             | 36   | 14           | 50            | 21          | 35           | 26            | 0               |
| W     | 8                | 3           |             | 26   | 45           | 17            | 38          | 0            | 8             | 13              |
| NW    | 7                | 21          |             | 6    | 13           | 7             | 5           | 35           | 19            | 3               |
| Cieży | —                | 6           |             | 1    | 3            | —             | 7           | —            | 9             | 26              |
| brak  | —                | —           |             | —    | —            | —             | —           | —            | —             | —               |







## nek wiatru

kierunków wiatru i cisz.

| Stare-<br>miasto                                      | Sam-<br>bor                                                    | Doli-<br>na                                             | Lwów                                             | Du-<br>blany                                     | Delat-<br>tyn                                           | Oży-<br>dów                                            | Ober-<br>tyn                                           | Tar-<br>nopol                                        | Jagiel-<br>nica                                     |
|-------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------------------|--------------------------------------------------|--------------------------------------------------|---------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------|------------------------------------------------------|-----------------------------------------------------|
| SW<br>E<br>NE<br>NW<br>SW<br>N<br>S<br>SW<br>SW<br>SW | SW<br>SW<br>NW<br>NW<br>SW<br>NW<br>SE<br>SW<br>SW<br>SW<br>SW | W<br>W<br>W<br>W<br>W<br>W<br>W<br>NW<br>NW<br>NW<br>NW | S<br>W<br>N<br>W<br>S<br>W<br>S<br>SW<br>S<br>W  | E<br>W<br>NW<br>W<br>W<br>S<br>W<br>SE<br>SW     | NE<br>SW<br>SW<br>W<br>SW<br>NE<br>SW<br>SW<br>SW<br>SW | SW<br>W<br>SW<br>NW<br>SW<br>W<br>SW<br>SW<br>SW<br>SW | SW<br>NW<br>SW<br>E<br>E<br>E<br>NE<br>NE<br>NE<br>NE  | SE<br>W<br>N<br>NW<br>SE<br>N<br>SE<br>SW<br>SE<br>W | E<br>SW<br>SW<br>N<br>E<br>W<br>E<br>E<br>SW<br>NW  |
| SW<br>SW<br>SW<br>W<br>SW<br>SW<br>N<br>N<br>SE<br>SW | SW<br>SW<br>SW<br>SW<br>SW<br>W<br>SE<br>SE<br>SE              | W<br>W<br>W<br>W<br>NW<br>W<br>W<br>W<br>NW             | W<br>W<br>W<br>W<br>SW<br>W<br>N<br>NW<br>S<br>S | W<br>W<br>W<br>W<br>SW<br>W<br>NW<br>E<br>SW     | SW<br>SW<br>SW<br>NE<br>SW<br>W<br>W<br>NE<br>NE        | W<br>W<br>W<br>SW<br>W<br>W<br>N<br>SE<br>S            | NE<br>NE<br>SE<br>SE<br>S<br>S<br>NW<br>NW<br>NW<br>NW | SW<br>SW<br>W<br>NW<br>S<br>NW<br>NW<br>N<br>NE<br>S | —<br>NW<br>SW<br>W<br>W<br>NW<br>SE<br>SW<br>E<br>E |
| NW<br>NW<br>N<br>E<br>N<br>NW<br>NW<br>NW             | NW<br>NW<br>NW<br>NE<br>N<br>NW<br>NW<br>NW                    | NW<br>NW<br>NW<br>NW<br>NW<br>W<br>W                    | W<br>N<br>N<br>N<br>N<br>N<br>W<br>NW            | W<br>NW<br>W<br>NW<br>W<br>W<br>W                | W<br>SW<br>SW<br>NW<br>W<br>SW<br>NW<br>W               | W<br>W<br>W<br>N<br>N<br>N<br>W<br>W                   | NW<br>NW<br>NW<br>NW<br>NW<br>NW<br>NW<br>NE           | NW<br>N<br>N<br>N<br>N<br>N<br>W<br>N                | NW<br>W<br>W<br>N<br>E<br>W<br>W<br>W               |
| 17<br>6<br>3<br>2<br>6<br>33<br>7<br>10<br>—          | 4<br>2<br>0<br>12<br>0<br>32<br>5<br>25<br>4<br>—              |                                                         | 12<br>2<br>2<br>4<br>9<br>17<br>24<br>14<br>—    | 2<br>0<br>5<br>6<br>4<br>7<br>40<br>19<br>1<br>— | 4<br>11<br>1<br>0<br>0<br>42<br>20<br>6<br>—            | 10<br>0<br>3<br>3<br>4<br>17<br>29<br>6<br>12<br>—     | 0<br>22<br>8<br>6<br>7<br>7<br>0<br>34<br>—<br>—       | 19<br>3<br>1<br>10<br>6<br>7<br>8<br>19<br>11<br>—   | 5<br>2<br>14<br>4<br>1<br>9<br>24<br>12<br>13<br>—  |

**Sredni kieru-**  
**oraz liczba dostrzeżonych**

*Marzec 1899 roku.*

| Dzień | Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków | Boch-<br>nia | Szczaw-<br>nica |
|-------|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|--------------|-----------------|
| 1     | W                       | NW           | SW          | W             | NW                   | NE            | W           | NW           | W               |
| 2     | SW                      | SW           | S           | NW            | NW                   | NE            | W           | NW           | W               |
| 3     | W                       | SW           | NW          | W             | NW                   | E             | W           | NW           | NW              |
| 4     | SW                      | W            | SW          | SW            | NW                   | N             | W           | W            | W               |
| 5     | SW                      | N            | NW          | NW            | W                    | S             | NNW         | NE           | W               |
| 6     | SE                      | NE           | E           | SW            | NW                   | S             | SW          | NW           | W               |
| 7     | SW                      | S            | E           | S             | NW                   | S             | WSW         | NW           | NE              |
| 8     | SW                      | S            | S           | NW            | NW                   | S             | SW          | W            | NE              |
| 9     | E                       | S            | E           | NE            | SW                   | SW            | ENE         | W            | NE              |
| 10    | SE                      | SE           | W           | S             | SW                   | E             | E           | SW           | E               |
| 11    | SW                      | NW           | W           | NW            | NW                   | NW            | W           | W            | E               |
| 12    | -                       | W            | N           | NW            | SW                   | N             | WSW         | E            | N               |
| 13    | SW                      | NE           | NE          | NW            | W                    | SW            | NNW         | NE           | NE              |
| 14    | SW                      | NE           | SW          | SW            | W                    | W             | NW          | W            | SW              |
| 15    | SW                      | S            | W           | NW            | W                    | N             | WSW         | NW           | NW              |
| 16    | NW                      | NW           | W           | NW            | W                    | -             | WSW         | W            | W               |
| 17    | W                       | NW           | SW          | W             | W                    | E             | WSW         | NW           | W               |
| 18    | NW                      | NW           | NW          | NW            | NW                   | W             | WSW         | W            | SW              |
| 19    | NW                      | N            | N           | NW            | NW                   | W             | W           | NW           | W               |
| 20    | SW                      | S            | N           | SW            | SW                   | W             | W           | NW           | SW              |
| 21    | SW                      | NE           | SW          | SW            | NW                   | W             | W           | NW           | W               |
| 22    | SW                      | W            | S           | SW            | NW                   | NW            | SW          | NW           | W               |
| 23    | SW                      | W            | SW          | SW            | "                    | W             | SW          | NW           | SW              |
| 24    | NW                      | SW           | SW          | NW            | W                    | NW            | NW          | NW           | NW              |
| 25    | SW                      | N            | NE          | NE            | NW                   | W             | N           | N            | W               |
| 26    | E                       | S            | E           | SW            | NW                   | SW            | SSW         | NW           | NW              |
| 27    | SW                      | W            | W           | NW            | NW                   | W             | WNW         | W            | SW              |
| 28    | W                       | S            | SE          | SW            | W                    | W             | W           | W            | E               |
| 29    | SW                      | S            | S           | SW            | W                    | NW            | WSW         | W            | S               |
| 30    | SW                      | NW           | SW          | W             | NW                   | NW            | W           | W            | SW              |
| 31    | NW                      | NW           | NW          | NW            | NW                   | -             | WNW         | NW           | W               |
| N     | 0                       | 9            | 10          | 4             | 2                    | 9             | 5.0         | 2            | 14              |
| NE    | 0                       | 8            | 5           | 4             | 0                    | 5             | 0.5         | 6            | 9               |
| E     | 3                       | 6            | 14          | 1             | 1                    | 7             | 2.5         | 3            | 14              |
| SE    | 6                       | 4            | 7           | 4             | 1                    | 5             | 1.0         | 0            | 4               |
| S     | 2                       | 27           | 8           | 6             | 0                    | 13            | 4.0         | 0            | 4               |
| SW    | 36                      | 10           | 16          | 30            | 15                   | 11            | 25.0        | 3            | 7               |
| W     | 14                      | 18           | 18          | 14            | 26                   | 21            | 40.5        | 30           | 26              |
| NW    | 15                      | 17           | 15          | 30            | 48                   | 14            | 14.5        | 49           | 15              |
| Ciszy | 17                      | -            | -           | -             | -                    | -             | -           | -            | -               |
| brak  | -                       | -            | -           | -             | -                    | 8             | -           | -            | -               |

## nek wiatru

kierunków wiatru i cisz.

| Tar-nów | Pilzno | Iwo-nicz | Rze-szów | Smol-nik | Sanok | Prze-myśl | Łom-na | Chy-rów | Stare-miasto |
|---------|--------|----------|----------|----------|-------|-----------|--------|---------|--------------|
| NW      | NW     | W        | W        | NW       | SW    | NW        | SW     | SW      | NW           |
| W       | W      | NW       | W        | NW       | S     | NW        | SW     | SW      | SW           |
| W       | W      | S        | W        | NW       | SW    | W         | SW     | SW      | W            |
| NW      | S      | SW       | W        | S        | S     | NW        | NW     | W       | SW           |
| NW      | NE     | NE       | W        | N        | NE    | NE        | SW     | NW      | NE           |
| NW      | SW     | NE       | W        | NE       | N     | NE        | NE     | NE      | E            |
| NW      | S      | S        | W        | SW       | SE    | W         | NE     | SW      | SW           |
| NW      | S      | S        | W        | SE       | SE    | W         | W      | S       | SW           |
| W       | S      | SW       | S        | SE       | SW    | SW        | NW     | S       | SW           |
| W       | S      | SW       | S        | S        | S     | W         | SW     | NE      | SW           |
| S       | W      | NW       | S        | S        | S     | SW        | SE     | SW      | SW           |
| —       | E      | SW       | S        | S        | SE    | W         | SW     | SW      | S            |
| W       | S      | NE       | S        | N        | N     | N         | NE     | SW      | N            |
| W       | NW     | SE       | W        | N        | NE    | NW        | NW     | SW      | SW           |
| W       | W      | NE       | W        | N        | S     | NW        | NW     | W       | NW           |
| W       | NW     | SE       | W        | N        | SW    | NW        | SW     | SW      | NW           |
| W       | NW     | NW       | S        | NW       | NW    | W         | NE     | SW      | NW           |
| W       | NW     | W        | S        | SW       | SW    | W         | SW     | SW      | SW           |
| NW      | NW     | W        | N        | NW       | N     | NW        | N      | NW      | W            |
| NW      | S      | SW       | W        | S        | SE    | W         | NW     | SW      | SW           |
| NW      | NW     | NW       | W        | W        | SW    | NW        | SE     | NE      | NE           |
| W       | SW     | NE       | W        | SE       | NE    | NW        | NW     | SW      | NW           |
| NW      | S      | SW       | W        | W        | E     | SW        | SW     | E       | S            |
| NW      | NE     | SE       | W        | N        | NW    | NE        | NE     | N       | N            |
| NW      | NE     | NE       | W        | N        | N     | N         | NE     | N       | NE           |
| NW      | NW     | SW       | W        | N        | N     | W         | NE     | N       | N            |
| NW      | SW     | S        | S        | SE       | SE    | W         | SW     | SW      | SW           |
| SW      | S      | SW       | S        | SE       | S     | W         | SE     | SW      | SW           |
| W       | NW     | S        | W        | S        | SE    | W         | SE     | SW      | E            |
| NW      | NW     | NE       | W        | NW       | SE    | NW        | SE     | SW      | NW           |
| NW      | NW     | NE       | W        | NW       | NW    | N         | SE     | SW      | NW           |
| 0       | 2      | 2        | 6        | 18       | 8     | 5         |        |         | 9            |
| 0       | 8      | 24       | 0        | 2        | 16    | 2         |        |         | 7            |
| 0       | 3      | 0        | 0        | 1        | 4     | 2         |        |         | 3            |
| 0       | 2      | 7        | 0        | 21       | 14    | 2         |        |         | 0            |
| 3       | 26     | 17       | 27       | 18       | 21    | 0         |        |         | 13           |
| 4       | 11     | 22       | 0        | 5        | 18    | 13        |        |         | 30           |
| 38      | 12     | 8        | 0        | 1        | 3     | 37        |        |         | 16           |
| 43      | 29     | 13       | 0        | 21       | 9     | 32        |        |         | 15           |
| 5       | —      | —        | —        | 6        | —     | —         |        |         | —            |
| —       | —      | —        | —        | —        | —     | —         |        |         | —            |

Sredni kieru-  
oraz liczba dostrzeżonych

Marzec 1899 roku.

| Dzień | Sam-<br>bor | Doli-<br>na | Lwów | Du-<br>blany | Dela-<br>typ | Oży-<br>dów | Ober-<br>tyń | Tar-<br>nopol | Jagiel-<br>nica |
|-------|-------------|-------------|------|--------------|--------------|-------------|--------------|---------------|-----------------|
| 1     | NW          | W           | NW   | W            | SW           | W           | NW           | W             | W               |
| 2     | NW          | W           | SW   | W            | SW           | W           | SW           | W             | W               |
| 3     | W           | W           | W    | W            | SW           | W           | SE           | NW            | NW              |
| 4     | SW          | W           | SW   | W            | SW           | SW          | SE           | S             | NE              |
| 5     | NE          | W           | NW   | NW           | NW           | NW          | SW           | NW            | W               |
| 6     | SW          | NW          | SW   | NW           | N            | NE          | NW           | N             | NW              |
| 7     | SW          | NW          | S    | SW           | SW           | SW          | NE           | SW            | SW              |
| 8     | SW          | W           | SW   | W            | SW           | SW          | NE           | S             | NE              |
| 9     | SW          | W           | S    | SW           | NE           | SW          | NE           | S             | NE              |
| 10    | SW          | W           | S    | SW           | NE           | SW          | SE           | SE            | E               |
| 11    | SW          | W           | W    | SE           | NE           | SW          | SE           | S             | NE              |
| 12    | SW          | W           | SW   | W            | NE           | SE          | SE           | S             | SE              |
| 13    | NW          | W           | W    | W            | SW           | NW          | SW           | N             | NW              |
| 14    | NW          | W           | W    | W            | SW           | NW          | NW           | W             | NW              |
| 15    | NW          | W           | W    | W            | SW           | NW          | NW           | NW            | W               |
| 16    | NW          | NW          | W    | W            | SW           | W           | SW           | NW            | NW              |
| 17    | NW          | W           | W    | W            | W            | W           | NW           | W             | NW              |
| 18    | NW          | NW          | W    | W            | SW           | NW          | NW           | SW            | SW              |
| 19    | NW          | NW          | W    | NW           | W            | W           | NW           | W             | W               |
| 20    | SE          | NW          | SE   | SE           | SW           | SE          | NW           | SW            | NE              |
| 21    | SW          | W           | SE   | SW           | SW           | SW          | NE           | SE            | NE              |
| 22    | NW          | W           | W    | NW           | NE           | W           | NE           | W             | NW              |
| 23    | SW          | W           | S    | SW           | NE           | S           | NW           | S             | E               |
| 24    | NW          | W           | N    | NW           | W            | E           | NW           | N             | SW              |
| 25    | NE          | W           | NE   | E            | W            | N           | NW           | N             | NW              |
| 26    | NW          | W           | N    | NW           | W            | NE          | NW           | NE            | NW              |
| 27    | SW          | W           | SW   | SW           | SW           | SE          | NE           | S             | E               |
| 28    | SW          | W           | S    | SE           | SW           | SW          | NE           | SW            | NW              |
| 29    | SE          | W           | SE   | E            | SW           | SE          | NE           | SE            | E               |
| 30    | SE          | W           | SW   | W            | SW           | SW          | NE           | SE            | —               |
| 31    | NW          | W           | W    | W            | SW           | W           | SW           | W             | W               |
| N     | 2           |             | 5    | 2            | 4            | 3           | 0            | 6             | 0               |
| NE    | 3           |             | 3    | 2            | 17           | 5           | 28           | 4             | 13              |
| E     | 0           |             | 1    | 4            | 0            | 4           | 0            | 0             | 12              |
| SE    | 9           |             | 7    | 8            | 0            | 12          | 15           | 10            | 1               |
| S     | 0           |             | 11   | 2            | 0            | 3           | 0            | 12            | 2               |
| SW    | 31          |             | 25   | 16           | 49           | 25          | 13           | 15            | 7               |
| W     | 2           |             | 29   | 37           | 17           | 20          | 0            | 15            | 25              |
| NW    | 37          |             | 11   | 18           | 6            | 10          | 37           | 14            | 24              |
| Ciszy | 9           |             | 1    | 4            | —            | 11          | —            | 17            | 9               |
| brak  | —           |             | —    | —            | —            | —           | —            | —             | —               |

## nek wiatru

kierunków wiatru i cisz.

Kwiecień 1899 roku.

| Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków | Boch-<br>nia | Szczaw-<br>nica |
|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|--------------|-----------------|
| W                       | NW           | NW          | NW            | NW                   | N             | NNW         | N            | NW              |
| SW                      | W            | SW          | NW            | NW                   | N             | WSW         | NW           | NW              |
| SW                      | NW           | NW          | SW            | W                    | SW            | WNW         | NW           | NW              |
| SW                      | N            | SW          | SW            | W                    | SW            | NNE         | NW           | E               |
| SW                      | SW           | SW          | SW            | W                    | SW            | WSW         | W            | S               |
| SW                      | W            | S           | SW            | W                    | SW            | W           | W            | S               |
| SW                      | SW           | S           | S             | W                    | SW            | SW          | SW           | SW              |
| SW                      | NW           | SW          | SW            | W                    | W             | W           | W            | SW              |
| W                       | S            | N           | NW            | NW                   | NW            | SW          | NW           | W               |
| W                       | NW           | SW          | NW            | W                    | NW            | W           | NW           | NW              |
| SW                      | SW           | SW          | SW            | W                    | SW            | SW          | NW           | W               |
| SW                      | W            | W           | SW            | NW                   | NW            | NNW         | NW           | SW              |
| W                       | S            | E           | NE            | SE                   | SW            | NE          | E            | NE              |
| SW                      | SW           | SE          | S             | SW                   | SW            | E           | E            | S               |
| SE                      | NW           | S           | S             | SW                   | SW            | S           | E            | SW              |
| SW                      | NW           | W           | W             | W                    | SW            | WSW         | W            | W               |
| SW                      | W            | S           | SW            | W                    | W             | SW          | W            | S               |
| SW                      | NE           | S           | SE            | W                    | SW            | ENE         | W            | S               |
| W                       | E            | NE          | SE            | E                    | SW            | ENE         | W            | NW              |
| E                       | NE           | NE          | NE            | E                    | SW            | NE          | E            | NW              |
| SW                      | N            | W           | N             | NW                   | W             | N           | NW           | W               |
| W                       | NW           | NW          | NW            | NW                   | SW            | NW          | W            | NW              |
| NW                      | NW           | NW          | N             | W                    | —             | NW          | N            | NW              |
| SW                      | NE           | NE          | NE            | SE                   | N             | E           | E            | NW              |
| SE                      | S            | S           | S             | W                    | SW            | E           | SE           | W               |
| SW                      | S            | S           | S             | W                    | SW            | ESE         | W            | NE              |
| NW                      | W            | N           | NW            | SE                   | SW            | S           | W            | NE              |
| SE                      | NW           | SW          | SW            | SW                   | SW            | W           | NW           | NW              |
| SW                      | S            | SW          | S             | W                    | SW            | W           | NW           | NW              |
| SW                      | W            | S           | NW            | W                    | W             | W           | W            | W               |
| 0                       | 5            | 14          | 3             | 1                    | 10            | 9.5         | 6            | 3               |
| 0                       | 6            | 0           | 9             | 0                    | 0             | 6.5         | 0            | 12              |
| 3                       | 4            | 0           | 3             | 7                    | 3             | 12.0        | 15           | 12              |
| 8                       | 2            | 0           | 11            | 10                   | 2             | 5.0         | 2            | 0               |
| 4                       | 19           | 30          | 13            | 1                    | 1             | 8.0         | 0            | 10              |
| 53                      | 14           | 24          | 26            | 10                   | 48            | 16.0        | 4            | 8               |
| 10                      | 19           | 4           | 7             | 47                   | 8             | 16.5        | 32           | 25              |
| 11                      | 16           | 10          | 18            | 14                   | 12            | 16.5        | 31           | 20              |
| 1                       | 5            | 8           | —             | —                    | —             | —           | —            | —               |
| —                       | —            | —           | —             | —                    | 6             | —           | —            | —               |

Sredni kieru-  
oraz liczba dostrzeżonych

*Kwiecień 1899 roku.*

| Dzień         | Tar-<br>nów | Pilzno | Iwo-<br>nicz | Rze-<br>szów | Smol-<br>nik | Sanok | Prze-<br>myśl | Łom-<br>na | Chy-<br>rów |
|---------------|-------------|--------|--------------|--------------|--------------|-------|---------------|------------|-------------|
| 1             | NW          | NW     | NE           | W            | NW           | NW    | N             | NW         | W           |
| 2             | W           | NW     | SW           | W            | SE           | SE    | NW            | SW         | SW          |
| 3             | NW          | SW     | NE           | W            | NW           | SE    | W             | NW         | W           |
| 4             | W           | S      | NE           | W            | S            | SE    | N             | NW         | S           |
| 5             | W           | S      | S            | S            | SE           | SE    | SW            | SE         | S           |
| 6             | W           | S      | NE           | S            | SW           | SW    | NW            | SW         | SW          |
| 7             | W           | S      | S            | S            | SE           | NW    | W             | SW         | SW          |
| 8             | W           | SW     | S            | S            | S            | S     | SW            | SE         | SW          |
| 9             | W           | NW     | S            | W            | SW           | NW    | NW            | SW         | SW          |
| 10            | W           | NW     | NE           | W            | N            | SW    | NW            | SW         | SW          |
| 11            | W           | S      | S            | W            | S            | SW    | W             | SW         | S           |
| 12            | W           | S      | S            | W            | S            | SW    | W             | S          | S           |
| 13            | W           | W      | NE           | W            | SE           | NW    | NW            | NE         | SW          |
| 14            | W           | S      | SW           | E            | SW           | S     | W             | SW         | NW          |
| 15            | W           | SW     | S            | E            | SW           | S     | W             | SW         | S           |
| 16            | W           | SW     | S            | E            | SW           | S     | W             | SW         | SW          |
| 17            | W           | SW     | SW           | E            | S            | NW    | W             | SW         | W           |
| 18            | SW          | W      | SW           | S            | S            | SE    | SW            | SW         | NE          |
| 19            | SW          | NE     | SE           | N            | S            | E     | SW            | SW         | N           |
| 20            | W           | SE     | NE           | N            | S            | S     | NE            | NE         | E           |
| 21            | W           | W      | S            | N            | SW           | SW    | NE            | SW         | S           |
| 22            | W           | N      | S            | W            | SE           | SW    | W             | W          | S           |
| 23            | W           | NE     | NE           | W            | N            | NW    | W             | NE         | S           |
| 24            | W           | E      | NE           | S            | N            | N     | NE            | E          | N           |
| 25            | W           | NE     | S            | S            | S            | S     | NE            | E          | E           |
| 26            | SW          | S      | S            | S            | SW           | S     | SW            | SE         | S           |
| 27            | S           | E      | SW           | S            | SW           | SW    | SW            | SE         | E           |
| 28            | SW          | N      | NE           | S            | S            | S     | SE            | SW         | SW          |
| 29            | SW          | SW     | NW           | W            | S            | S     | NW            | E          | SW          |
| 30            | W           | S      | S            | S            | SW           | S     | SW            | SE         | SW          |
| N             | 0           | 6      | 0            | 8            | 12           | 3     | 8             |            |             |
| NE            | 0           | 7      | 30           | 0            | 1            | 3     | 11            |            |             |
| E             | 3           | 5      | 0            | 11           | 1            | 3     | 1             |            |             |
| SE            | 0           | 5      | 4            | 0            | 13           | 16    | 4             |            |             |
| S             | 3           | 24     | 31           | 31           | 30           | 20    | 0             |            |             |
| SW            | 13          | 15     | 22           | 0            | 22           | 24    | 18            |            |             |
| W             | 65          | 14     | 0            | 40           | 2            | 3     | 28            |            |             |
| NW            | 6           | 14     | 3            | 0            | 8            | 18    | 20            |            |             |
| Ciszy<br>brak | —           | —      | —            | —            | 1            | —     | —             |            |             |



## nek wiatru

kierunków wiatru i cisz.

| Stare miasto                                          | Sam-bor                                            | Dolina                                     | Lwów                                               | Du-blany                                            | Delatyn                                            | Oży-dów                                            | Ober-tyn                                           | Tar-nopol                                          | Jagiel-nica                                        |
|-------------------------------------------------------|----------------------------------------------------|--------------------------------------------|----------------------------------------------------|-----------------------------------------------------|----------------------------------------------------|----------------------------------------------------|----------------------------------------------------|----------------------------------------------------|----------------------------------------------------|
| NW<br>W<br>NW<br>S<br>SW<br>W<br>SW<br>S<br>SW<br>SW  | NW<br>NW<br>NW<br>SE<br>SW<br>SW<br>SE<br>SE<br>SE | W<br>W<br>W<br>W<br>W<br>W<br>W<br>W<br>NW | NW<br>W<br>W<br>S<br>S<br>SW<br>SW<br>SE<br>NW     | W<br>W<br>W<br>SE<br>W<br>W<br>SE<br>W<br>W         | SW<br>SW<br>SW<br>SW<br>SW<br>SW<br>SW<br>NE<br>NW | W<br>W<br>W<br>E<br>SE<br>W<br>SE<br>S             | SW<br>SW<br>SW<br>NE<br>NE<br>NE<br>SE<br>SE<br>NW | NW<br>W<br>NW<br>SE<br>S<br>SW<br>SW<br>SE<br>SE   | W<br>W<br>W<br>E<br>E<br>E<br>W<br>SE<br>SW        |
| SW<br>S<br>E<br>SW<br>SW<br>SW<br>SW<br>E<br>E        | SE<br>SE<br>SE<br>SW<br>SW<br>NW<br>SW<br>SW<br>SE | W<br>W<br>W<br>W<br>NW<br>W<br>NW<br>NW    | SW<br>W<br>SE<br>S<br>S<br>W<br>W<br>NE<br>NE      | W<br>SW<br>W<br>E<br>W<br>W<br>NE<br>E<br>E         | NW<br>SW<br>SW<br>SW<br>SW<br>SW<br>SW<br>SW<br>SW | SW<br>SW<br>S<br>SW<br>SW<br>W<br>NE<br>N          | SW<br>SW<br>SW<br>SE<br>SE<br>NE<br>NE<br>SW       | SW<br>S<br>SE<br>SE<br>SW<br>SW<br>SW<br>E<br>SE   | SW<br>E<br>E<br>—<br>SW<br>W<br>W<br>E<br>S<br>S   |
| SW<br>SW<br>NE<br>E<br>SW<br>S<br>E<br>SW<br>SW<br>SW | SW<br>SW<br>NE<br>NE<br>SW<br>SW<br>W<br>W<br>SW   | W<br>W<br>W<br>W<br>W<br>E<br>W<br>W       | W<br>W<br>N<br>NE<br>SE<br>S<br>S<br>SE<br>S       | NW<br>W<br>NE<br>NW<br>E<br>S<br>S<br>S<br>SE<br>SW | SW<br>SW<br>NW<br>SW<br>SW<br>SW<br>SW<br>SW<br>SW | W<br>W<br>W<br>N<br>E<br>E<br>E<br>SE<br>SE<br>SW  | SW<br>SW<br>NW<br>NW<br>NW<br>NE<br>NE<br>NE<br>SW | NW<br>W<br>NW<br>NW<br>SE<br>SE<br>SE<br>SE<br>SE  | S<br>W<br>W<br>W<br>E<br>S<br>S<br>E<br>E<br>E     |
| 6<br>4<br>10<br>2<br>20<br>36<br>4<br>8<br>—<br>—     | 0<br>5<br>1<br>23<br>1<br>36<br>7<br>12<br>5<br>—  |                                            | 5<br>6<br>1<br>14<br>18<br>22<br>12<br>9<br>3<br>— | 2<br>6<br>10<br>15<br>8<br>8<br>30<br>9<br>2<br>—   | 0<br>15<br>2<br>0<br>0<br>63<br>4<br>6<br>—<br>—   | 4<br>1<br>19<br>15<br>3<br>20<br>21<br>2<br>5<br>— | 0<br>37<br>0<br>13<br>0<br>27<br>0<br>13<br>—<br>— | 2<br>1<br>3<br>32<br>6<br>13<br>5<br>12<br>16<br>— | 0<br>1<br>21<br>2<br>13<br>3<br>18<br>4<br>28<br>— |

Sredni kieru-  
oraz liczba dostrzeżonych

*Maj 1899 roku.*

| Dzień | Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków | Boch-<br>nia | Szczaw-<br>nica |
|-------|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|--------------|-----------------|
| 1     | W                       | NW           | W           | NW            | NW                   | N             | NNW         | NW           | W               |
| 2     | S                       | NW           | E           | NE            | W                    | N             | NE          | N            | N               |
| 3     | SW                      | S            | SW          | SW            | W                    | W             | E           | NW           | NE              |
| 4     | SW                      | NW           | W           | W             | W                    | SW            | WNW         | W            | N               |
| 5     | SW                      | NE           | N           | NE            | NE                   | NW            | NE          | E            | N               |
| 6     | SE                      | NW           | S           | NW            | S                    | SW            | NNE         | E            | W               |
| 7     | SW                      | NW           | SW          | SW            | SE                   | SW            | N           | SE           | E               |
| 8     | SW                      | SW           | NW          | S             | E                    | SW            | ESE         | SE           | E               |
| 9     | SW                      | S            | SE          | S             | E                    | SW            | ESE         | S            | NE              |
| 10    | S                       | NE           | SE          | S             | W                    | S             | ESE         | SW           | E               |
| 11    | W                       | W            | SW          | N             | W                    | SW            | W           | NW           | NW              |
| 12    | W                       | NW           | NW          | NW            | W                    | SW            | W           | NW           | N               |
| 13    | SE                      | NE           | N           | SW            | SE                   | SW            | NE          | NW           | N               |
| 14    | SE                      | SE           | SE          | SE            | E                    | SW            | NW          | SE           | NE              |
| 15    | SE                      | S            | SE          | S             | E                    | S             | SSE         | S            | S               |
| 16    | SW                      | N            | NW          | SW            | W                    | W             | W           | SW           | N               |
| 17    | SE                      | NE           | E           | NE            | W                    | NW            | NW          | E            | W               |
| 18    | SE                      | SE           | E           | E             | W                    | SW            | ESE         | E            | N               |
| 19    | SE                      | NE           | NE          | NE            | E                    | W             | E           | SE           | E               |
| 20    | SW                      | SW           | E           | W             | SW                   | S             | SSW         | SE           | S               |
| 21    | W                       | W            | SW          | W             | W                    | W             | W           | W            | NW              |
| 22    | W                       | W            | SW          | W             | W                    | NW            | NW          | W            | W               |
| 23    | W                       | N            | NW          | N             | W                    | NW            | E           | NE           | W               |
| 24    | SW                      | NW           | NW          | NW            | W                    | SW            | WSW         | W            | W               |
| 25    | SW                      | SW           | SW          | S             | SW                   | SW            | E           | E            | E               |
| 26    | SW                      | S            | SW          | SW            | SW                   | SW            | WSW         | NW           | NW              |
| 27    | W                       | NW           | SW          | W             | W                    | NW            | W           | NW           | NE              |
| 28    | W                       | NW           | NW          | N             | W                    | W             | W           | NW           | W               |
| 29    | E                       | N            | NE          | N             | N                    | N             | N           | N            | NW              |
| 30    | N                       | NW           | NW          | SW            | N                    | W             | N           | W            | W               |
| 31    | NW                      | NW           | NW          | NW            | NW                   | SW            | WNW         | W            | NW              |
| N     | 2                       | 10           | 15          | 8             | 4                    | 8             | 18'0        | 8            | 21              |
| NE    | 1                       | 8            | 0           | 11            | 5                    | 0             | 9'0         | 3            | 10              |
| E     | 8                       | 6            | 0           | 4             | 17                   | 0             | 12'0        | 12           | 16              |
| SE    | 17                      | 4            | 0           | 11            | 7                    | 0             | 9'0         | 18           | 1               |
| S     | 6                       | 19           | 20          | 9             | 3                    | 7             | 2'5         | 3            | 7               |
| SW    | 32                      | 7            | 23          | 23            | 5                    | 40            | 5'5         | 4            | 2               |
| W     | 19                      | 14           | 13          | 15            | 43                   | 17            | 20'5        | 20           | 22              |
| NW    | 3                       | 23           | 13          | 12            | 7                    | 20            | 16'5        | 25           | 14              |
| Ciszy | 5                       | 2            | 9           | —             | —                    | —             | —           | —            | —               |
| brak  | —                       | —            | —           | —             | —                    | 1             | —           | —            | —               |

## nek wiatru

kierunków wiatru i cisz.

| Tar-nów                                                | Pilzno                                                   | Iwo-nicz                                                     | Rze-szów                                         | Smol-nik                                                | Sanok                                                     | Prze-myśl                                                  | Łom-na                                                       | Chy-rów                                                      | Stare-miasto                                                |
|--------------------------------------------------------|----------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------|
| W<br>W<br>SW<br>W<br>W<br>S<br>S<br>SE<br>SE<br>SW     | NW<br>NE<br>NE<br>SE<br>NE<br>SE<br>SE<br>SE<br>SE<br>SW | NE<br>SE<br>S<br>NW<br>NE<br>NE<br>NE<br>SW<br>SW<br>S       | W<br>W<br>S<br>S<br>S<br>S<br>S<br>E<br>E        | NW<br>NW<br>SW<br>S<br>NE<br>SE<br>S<br>SW<br>SW<br>S   | N<br>NE<br>E<br>NE<br>SE<br>NW<br>S<br>S<br>S<br>SW       | NW<br>NW<br>E<br>SW<br>NW<br>SW<br>NE<br>SE<br>SE<br>SW    | SE<br>SE<br>E<br>NW<br>SE<br>SE<br>S<br>SE<br>SE<br>NE       | W<br>SW<br>SW<br>S<br>SE<br>SE<br>SE<br>S                    | NW<br>N<br>SW<br>SW<br>E<br>SW<br>E<br>SE<br>SE<br>SW       |
| W<br>W<br>SW<br>SW<br>SE<br>SW<br>SW<br>SE<br>SW<br>SW | W<br>W<br>E<br>E<br>E<br>SW<br>NE<br>NE<br>E<br>S        | S<br>S<br>SE<br>S<br>S<br>SW<br>NE<br>NE<br>SE<br>SW         | W<br>W<br>S<br>S<br>S<br>W<br>W<br>S<br>S<br>S   | W<br>E<br>NE<br>SE<br>SE<br>S<br>NW<br>E<br>W<br>S      | SW<br>NW<br>SW<br>SE<br>S<br>SW<br>NW<br>NE<br>E<br>SE    | W<br>NW<br>NE<br>SE<br>SW<br>SW<br>N<br>NE<br>SE<br>SW     | SW<br>SW<br>E<br>E<br>SE<br>SW<br>NW<br>NE<br>SE<br>SE       | SW<br>SW<br>NE<br>SE<br>S<br>SW<br>SW<br>NW<br>SE<br>S       | NW<br>NW<br>NE<br>S<br>SW<br>SW<br>N<br>NE<br>SE<br>SW      |
| W<br>W<br>W<br>W<br>W<br>NW<br>W<br>NW<br>W<br>W       | W<br>W<br>W<br>SW<br>SE<br>W<br>NW<br>W<br>NE<br>NE<br>N | S<br>NW<br>NE<br>S<br>SW<br>SW<br>SW<br>NE<br>NE<br>NE<br>NE | S<br>S<br>W<br>W<br>W<br>W<br>W<br>W<br>W<br>W   | SE<br>W<br>N<br>S<br>S<br>S<br>SW<br>W<br>NE<br>N<br>NE | SW<br>SW<br>N<br>SW<br>SW<br>SW<br>W<br>N<br>N<br>N<br>NE | W<br>NW<br>NW<br>NW<br>SW<br>SW<br>W<br>NW<br>N<br>N<br>NW | SW<br>SW<br>NE<br>NE<br>S<br>SW<br>NW<br>SE<br>NE<br>N<br>NE | SW<br>SW<br>N<br>SE<br>SE<br>S<br>SW<br>SW<br>NW<br>NW<br>SW | S<br>NW<br>NE<br>W<br>SW<br>SW<br>SW<br>NE<br>N<br>NW<br>NE |
| 0<br>1<br>0<br>13<br>6<br>18<br>43<br>11<br>11<br>—    | 3<br>21<br>14<br>17<br>6<br>5<br>19<br>8<br>—<br>—       | 0<br>32<br>0<br>7<br>28<br>16<br>1<br>9<br>—<br>—            | 0<br>0<br>7<br>0<br>40<br>0<br>46<br>0<br>—<br>— | 9<br>7<br>9<br>11<br>21<br>13<br>8<br>11<br>4<br>—      | 13<br>14<br>9<br>8<br>11<br>20<br>7<br>11<br>—<br>—       | 9<br>10<br>5<br>12<br>1<br>21<br>10<br>25<br>—<br>—        | —<br>—<br>—<br>—<br>—<br>—<br>—<br>—<br>—<br>—               | 11<br>10<br>7<br>8<br>10<br>27<br>6<br>10<br>4<br>—          |                                                             |

Średni kieru-  
oraz liczba dostrzeżonych

Maj 1899 roku.

| Dzień | Sam-<br>bor | Doli-<br>na | Lwów | Du-<br>blany | Delat-<br>ty | Oży-<br>dów | Ober-<br>tyn | Tar-<br>nopol | Jagiel-<br>nica |
|-------|-------------|-------------|------|--------------|--------------|-------------|--------------|---------------|-----------------|
| 1     | SW          | W           | W    | W            | SW           | W           | SW           | W             | W               |
| 2     | W           | W           | W    | W            | SW           | W           | NW           | SW            | W               |
| 3     | SW          | W           | W    | SE           | SW           | E           | SW           | SE            | —               |
| 4     | SW          | W           | S    | SE           | SW           | W           | SW           | S             | —               |
| 5     | E           | W           | E    | E            | SW           | E           | SE           | S             | E               |
| 6     | SE          | W           | SW   | E            | SW           | SE          | NE           | SE            | —               |
| 7     | E           | W           | SE   | E            | SW           | E           | NE           | SE            | NE              |
| 8     | SE          | SW          | SE   | E            | NE           | E           | NE           | SE            | E               |
| 9     | SE          | E           | SE   | SE           | NE           | E           | SE           | SE            | E               |
| 10    | NE          | NE          | S    | S            | SW           | SE          | SE           | SE            | E               |
| 11    | SW          | W           | W    | SW           | SW           | SW          | SE           | SW            | S               |
| 12    | SW          | W           | W    | W            | SW           | W           | SE           | W             | —               |
| 13    | SE          | W           | N    | NE           | NE           | N           | NW           | N             | —               |
| 14    | SE          | NW          | S    | SE           | SW           | E           | NE           | SE            | E               |
| 15    | W           | NW          | S    | SW           | SW           | SE          | NE           | SE            | E               |
| 16    | W           | W           | S    | W            | SW           | S           | NE           | S             | NE              |
| 17    | SE          | W           | N    | NW           | SW           | N           | SW           | NE            | —               |
| 18    | SE          | W           | NE   | NE           | W            | E           | NW           | N             | —               |
| 19    | SE          | W           | SE   | E            | SW           | N           | NE           | NE            | —               |
| 20    | SE          | W           | S    | SE           | SW           | SE          | NE           | SE            | —               |
| 21    | SW          | W           | SW   | SE           | SW           | W           | NW           | NW            | W               |
| 22    | SW          | W           | W    | W            | NE           | W           | NW           | W             | —               |
| 23    | NE          | W           | N    | W            | W            | NW          | NW           | NW            | W               |
| 24    | NE          | W           | W    | SW           | SW           | S           | SE           | SE            | E               |
| 25    | SW          | W           | SE   | SE           | SW           | SE          | SE           | S             | —               |
| 26    | SW          | W           | S    | SW           | SW           | SW          | SW           | SE            | E               |
| 27    | SW          | W           | W    | W            | SW           | SW          | NW           | SW            | —               |
| 28    | NW          | W           | W    | W            | NE           | SE          | SE           | W             | —               |
| 29    | NW          | W           | NW   | NE           | SW           | W           | NW           | NW            | W               |
| 30    | NW          | W           | W    | NW           | W            | W           | NW           | NW            | NW              |
| 31    | SW          | W           | NW   | W            | SW           | W           | NE           | NW            | W               |
| N     | 0           |             | 0    | 0            | 5            | 7           | 0            | 8             | 0               |
| NE    | 8           |             | 4    | 8            | 12           | 1           | 33           | 5             | 4               |
| E     | 4           |             | 2    | 15           | 0            | 19          | 0            | 6             | 16              |
| SE    | 32          |             | 19   | 20           | 0            | 16          | 21           | 25            | 0               |
| S     | 0           |             | 14   | 4            | 0            | 5           | 0            | 14            | 1               |
| SW    | 34          |             | 18   | 12           | 61           | 11          | 16           | 10            | 0               |
| W     | 7           |             | 17   | 20           | 11           | 24          | 0            | 8             | 0               |
| NW    | 7           |             | 8    | 11           | 4            | 4           | 23           | 10            | 3               |
| Ciszy | 1           |             | 1    | 3            | —            | 6           | —            | 7             | 60              |
| brak  | —           |             | —    | —            | —            | —           | —            | —             | —               |

## nek wiatru

kierunków wiatru i cisz.

Czerwiec 1899 roku.

| Kami-<br>tzer<br>Platte                                 | Biel-<br>sko                                         | Ży-<br>wiec                                              | Wado-<br>wice                                        | Czer-<br>ni-<br>chów                               | Zako-<br>pane                                           | Kra-<br>ków                                                         | Boch-<br>nia                                          | Szczaw-<br>nica                                    |
|---------------------------------------------------------|------------------------------------------------------|----------------------------------------------------------|------------------------------------------------------|----------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------------------|-------------------------------------------------------|----------------------------------------------------|
| SW<br>NW<br>W<br>NW<br>W<br>N<br>NW<br>NW<br>NW<br>NW   | S<br>NW<br>N<br>W<br>NW<br>W<br>NW<br>NW<br>NW<br>NW | SW<br>NW<br>NW<br>SW<br>NE<br>SW<br>NW<br>NW<br>NW<br>NW | NE<br>N<br>N<br>SW<br>N<br>SW<br>NW<br>NW<br>W<br>W  | NW<br>NW<br>W<br>W<br>W<br>W<br>W<br>W<br>W<br>N   | SW<br>SW<br>SW<br>S<br>SW<br>SW<br>SW<br>SW<br>NW<br>NW | WSW<br>N<br>E<br>W<br>NW<br>WSW<br>W<br>NNW<br>W<br>N               | W<br>NW<br>SE<br>SE<br>NW<br>SE<br>W<br>N<br>NW<br>NW | N<br>NW<br>S<br>N<br>NE<br>W<br>NW<br>N<br>NW      |
| NW<br>SW<br>W<br>NW<br>SW<br>SW<br>E<br>NE<br>SW<br>SE  | N<br>W<br>NW<br>W<br>SW<br>NE<br>NE<br>E<br>NE<br>N  | W<br>S<br>W<br>S<br>E<br>NE<br>E<br>E<br>NE<br>NE        | N<br>SW<br>W<br>SW<br>E<br>S<br>NE<br>W<br>N<br>NE   | N<br>W<br>NW<br>NW<br>NW<br>W<br>E<br>E<br>NE<br>E | NW<br>NW<br>SW<br>W<br>W<br>SW<br>SW<br>SW<br>SW        | N<br>SW<br>W<br>W<br>E<br>N<br>ENE<br>NE<br>SW<br>NNW               | N<br>NW<br>NW<br>NW<br>E<br>W<br>E<br>E<br>W<br>E     | W<br>W<br>W<br>W<br>E<br>E<br>E<br>E<br>N<br>N     |
| S<br>SW<br>NW<br>NW<br>NW<br>NW<br>NW<br>NW<br>NW<br>SE | NW<br>S<br>N<br>NW<br>NW<br>W<br>NW<br>NW<br>NW<br>S | N<br>SW<br>NW<br>NW<br>SE<br>NW<br>SW<br>W<br>SW<br>SE   | NE<br>SW<br>N<br>W<br>NW<br>W<br>W<br>NW<br>NE<br>NE | E<br>W<br>W<br>NW<br>W<br>W<br>NW<br>NW<br>E       | SW<br>SW<br>W<br>W<br>W<br>W<br>W<br>W<br>SW<br>S       | WSW<br>ESE<br>N<br>NNW<br>W<br>W<br>WNW<br>NNW<br>W<br>ENE          | SE<br>W<br>W<br>NW<br>NW<br>W<br>NW<br>W<br>W         | W<br>SW<br>N<br>N<br>N<br>W<br>W<br>W<br>E<br>E    |
| 2<br>3<br>3<br>4<br>2<br>15<br>10<br>42<br>9<br>—       | 9<br>6<br>3<br>4<br>10<br>5<br>17<br>29<br>7<br>—    | 3<br>12<br>0<br>11<br>4<br>21<br>12<br>17<br>10<br>—     | 15<br>19<br>2<br>3<br>1<br>17<br>14<br>19<br>—<br>—  | 4<br>4<br>15<br>1<br>0<br>0<br>41<br>25<br>—<br>—  | 0<br>0<br>1<br>0<br>6<br>44<br>27<br>12<br>—<br>—       | 14.0<br>7.5<br>10.5<br>1.5<br>1.0<br>14.5<br>27.5<br>13.5<br>—<br>— | 3<br>7<br>3<br>6<br>0<br>2<br>10<br>53<br>—<br>—      | 28<br>4<br>17<br>0<br>3<br>4<br>22<br>12<br>—<br>— |



## nek wiatru

kierunków wiatru i cisz.

| Stare-<br>miasto | Sam-<br>bor | Dolina | Lwów | Du-<br>blany | Del-<br>tyn | Oży-<br>dów | Ober-<br>tyn | Tar-<br>nopol | Jagiel-<br>nica |
|------------------|-------------|--------|------|--------------|-------------|-------------|--------------|---------------|-----------------|
| N                | W           | W      | W    | W            | SW          | W           | SW           | NW            | —               |
| N                | SW          | W      | W    | W            | SW          | SW          | SW           | NW            | N               |
| E                | NE          | W      | SW   | W            | SW          | W           | NE           | NW            | N               |
| S                | SW          | W      | SW   | SW           | NW          | E           | NE           | SE            | NW              |
| N                | NW          | W      | W    | W            | SW          | W           | SW           | W             | NW              |
| NW               | NW          | SW     | SW   | W            | SW          | W           | NW           | W             | NW              |
| NW               | NW          | NW     | W    | W            | SW          | W           | SW           | W             | NW              |
| NW               | NW          | W      | W    | W            | N           | W           | NW           | W             | NW              |
| SW               | N           | W      | W    | W            | SW          | NW          | NW           | W             | NW              |
| NW               | N           | W      | W    | W            | SW          | SW          | SW           | SW            | —               |
| NE               | NE          | W      | N    | NE           | SW          | SW          | NW           | N             | NW              |
| N                | NE          | NW     | N    | NW           | W           | N           | NW           | N             | N               |
| SW               | SW          | NW     | SW   | W            | SE          | SW          | SW           | SW            | W               |
| W                | SW          | W      | SW   | W            | SW          | N           | SW           | SW            | —               |
| E                | SE          | W      | E    | SE           | SW          | N           | SE           | SE            | S               |
| NE               | NE          | W      | W    | W            | W           | N           | SE           | N             | —               |
| E                | SE          | W      | N    | E            | SW          | N           | NE           | NE            | —               |
| E                | SE          | W      | NE   | NE           | SW          | N           | NE           | N             | —               |
| S                | SW          | W      | E    | E            | SW          | N           | SW           | NE            | —               |
| NE               | NW          | NE     | W    | NW           | W           | W           | SW           | N             | —               |
| W                | NW          | W      | W    | W            | SW          | W           | SW           | NW            | —               |
| SW               | SW          | W      | SW   | W            | SW          | W           | NE           | SW            | —               |
| SW               | NW          | W      | SW   | SW           | SW          | W           | SW           | N             | —               |
| NW               | NW          | NW     | W    | W            | SW          | W           | NW           | NW            | N               |
| NW               | NW          | W      | W    | W            | SW          | W           | NW           | NW            | N               |
| N                | NW          | W      | SW   | W            | SW          | W           | SW           | NW            | —               |
| SW               | NW          | W      | SW   | W            | SW          | NW          | SW           | SW            | —               |
| N                | NW          | W      | W    | NW           | SW          | W           | NW           | NW            | —               |
| NE               | NW          | W      | W    | NW           | SW          | W           | NW           | NW            | —               |
| S                | NE          | W      | NW   | W            | SW          | W           | NE           | W             | —               |
| 12               | 7           |        | 7    | 1            | 6           | 15          | 0            | 13            | 9               |
| 7                | 11          |        | 4    | 4            | 10          | 0           | 15           | 7             | 0               |
| 8                | 1           |        | 2    | 7            | 1           | 2           | 0            | 1             | 0               |
| 0                | 7           |        | 1    | 3            | 3           | 1           | 7            | 4             | 1               |
| 13               | 1           |        | 4    | 0            | 0           | 0           | 0            | 2             | 1               |
| 19               | 18          |        | 26   | 8            | 56          | 12          | 41           | 12            | 1               |
| 7                | 3           |        | 28   | 40           | 12          | 47          | 0            | 12            | 4               |
| 15               | 42          |        | 15   | 23           | 2           | 6           | 27           | 26            | 12              |
| 9                | —           |        | 3    | 4            | —           | 7           | —            | 13            | 62              |
| —                | —           |        | —    | —            | —           | —           | —            | —             | —               |

Średni kieru.  
oraz liczba dostrzeżonych

Lipiec 1899 roku.

| Dzień | Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków | Boch-<br>nia | Szcza-<br>w-<br>nica |
|-------|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|--------------|----------------------|
| 1     | NW                      | NW           | S           | N             | SW                   | SW            | W           |              | W                    |
| 2     | SW                      | N            | SE          | SW            | SW                   | SW            | SE          |              | E                    |
| 3     | W                       | W            | SW          | SW            | W                    | W             | W           |              | W                    |
| 4     | W                       | W            | SW          | SW            | W                    | SW            | WSW         |              | W                    |
| 5     | NW                      | W            | SW          | W             | W                    | W             | W           |              | NW                   |
| 6     | NW                      | NW           | W           | W             | NW                   | SW            | NW          |              | W                    |
| 7     | NW                      | NW           | NW          | N             | NE                   | W             | NW          |              | W                    |
| 8     | NW                      | NW           | NW          | W             | NE                   | W             | NNE         |              | W                    |
| 9     | NW                      | NW           | NW          | NW            | NE                   | SW            | SE          |              | W                    |
| 10    | NE                      | NE           | SW          | SW            | W                    | SW            | WSW         |              | W                    |
| 11    | E                       | E            | SW          | NE            | W                    | SW            | NE          |              | NW                   |
| 12    | E                       | E            | NE          | NE            | W                    | SW            | E           |              | NE                   |
| 13    | E                       | E            | NE          | E             | W                    | SW            | E           |              | N                    |
| 14    | SE                      | NE           | NE          | E             | W                    | SW            | E           |              | NE                   |
| 15    | SW                      | NE           | NE          | NE            | W                    | SW            | ENE         |              | N                    |
| 16    | SE                      | N            | E           | E             | W                    | SW            | ESE         |              | W                    |
| 17    | SE                      | N            | NE          | E             | W                    | SW            | N           |              | W                    |
| 18    | NE                      | NW           | W           | W             | W                    | SW            | WSW         |              | SW                   |
| 19    | N                       | NW           | N           | NW            | W                    | SW            | S           |              | W                    |
| 20    | N                       | NE           | NW          | W             | W                    | SW            | NW          |              | NW                   |
| 21    | E                       | NE           | NW          | E             | W                    | SW            | NNE         |              | N                    |
| 22    | N                       | N            | NE          | W             | W                    | SW            | NNE         |              | N                    |
| 23    | N                       | S            | S           | NW            | W                    | S             | WSW         |              | E                    |
| 24    | SW                      | S            | S           | W             | W                    | SW            | W           |              | NE                   |
| 25    | SW                      | W            | S           | W             | NW                   | SW            | WSW         |              | NW                   |
| 26    | NW                      | NW           | NW          | W             | NW                   | SW            | NW          |              | NW                   |
| 27    | NW                      | W            | NW          | NW            | NW                   | SW            | WSW         |              | W                    |
| 28    | W                       | NW           | NW          | W             | W                    | NW            | W           |              | W                    |
| 29    | NW                      | W            | SE          | W             | NW                   | NW            | WSW         |              | W                    |
| 30    | NW                      | W            | SW          | W             | NW                   | W             | SW          |              | NW                   |
| 31    | NW                      | NW           | SE          | W             | NW                   | W             | W           |              | N                    |
| N     | 14                      | 7            | 23          | 6             | 3                    | 0             | 10'0        |              | 23                   |
| NE    | 5                       | 8            | 0           | 8             | 7                    | 0             | 10'5        |              | 5                    |
| E     | 11                      | 5            | 0           | 14            | 0                    | 0             | 12'0        |              | 6                    |
| SE    | 5                       | 1            | 0           | 3             | 0                    | 0             | 1'5         |              | 1                    |
| S     | 0                       | 8            | 21          | 1             | 1                    | 9             | 3'0         |              | 1                    |
| SW    | 12                      | 2            | 16          | 11            | 6                    | 62            | 18'0        |              | 2                    |
| W     | 9                       | 19           | 8           | 33            | 55                   | 14            | 26'5        |              | 40                   |
| NW    | 33                      | 23           | 17          | 17            | 21                   | 6             | 11'5        |              | 15                   |
| Ciszy | 4                       | 20           | 8           | —             | —                    | —             | —           |              | —                    |
| brak  | —                       | —            | —           | —             | —                    | 2             | —           |              | —                    |

Nie zapisywano spostrzeżeń.



nek wiatru  
kierunków wiatru i cisz.

| Tar-nów                                                   | Pilzno                                                | Iwo-nicz                                                     | Rze-szów                                           | Smol-nik                                                   | Sanok                                                    | Prze-myśl                                              | Lom-na                                                         | Chy-rów                                                 | Stare-miasto                                             |
|-----------------------------------------------------------|-------------------------------------------------------|--------------------------------------------------------------|----------------------------------------------------|------------------------------------------------------------|----------------------------------------------------------|--------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------------------|----------------------------------------------------------|
| SW<br>SE<br>W<br>SW<br>W<br>W<br>W<br>W<br>W              | NE<br>NW<br>W<br>NW<br>N<br>NW<br>NW<br>NW<br>E       | SW<br>S<br>S<br>SW<br>S<br>NE<br>SW<br>NW<br>NE              | S<br>E<br>W<br>W<br>W<br>N<br>N<br>W<br>W          | SE<br>S<br>S<br>S<br>S<br>W<br>N<br>N<br>E<br>N            | S<br>S<br>W<br>SW<br>SW<br>W<br>W<br>SW<br>SW<br>SW      | W<br>NW<br>W<br>W<br>NW<br>W<br>NE<br>NW<br>NW<br>N    | SW<br>SW<br>S<br>SW<br>SW<br>NW<br>NW<br>NW<br>NE              | SW<br>S<br>SE<br>SW<br>SW<br>SW<br>SW<br>SW<br>N        | S<br>S<br>S<br>SW<br>W<br>N<br>NE<br>NE                  |
| SE<br>SW<br>SW<br>SW<br>W<br>W<br>W<br>SW<br>W            | E<br>E<br>E<br>N<br>E<br>E<br>NE<br>E<br>NE           | NE<br>NE<br>NE<br>NE<br>NE<br>NW<br>NE<br>NE<br>SE           | W<br>E<br>E<br>E<br>E<br>E<br>W<br>W<br>W<br>S     | E<br>E<br>NE<br>NE<br>NE<br>NE<br>E<br>N<br>NW<br>NE<br>NE | S<br>NE<br>NE<br>NE<br>NE<br>NE<br>NW<br>S<br>SW<br>SE   | NE<br>E<br>SE<br>SE<br>SE<br>SE<br>NW<br>NW<br>W<br>NE | NE<br>NE<br>NE<br>SE<br>SE<br>SE<br>SE<br>SE<br>SE             | SE<br>E<br>E<br>E<br>E<br>SE<br>S<br>SW<br>SW           | E<br>E<br>E<br>E<br>N<br>S<br>S<br>NE<br>NE              |
| SW<br>SE<br>SW<br>W<br>SW<br>SW<br>W<br>SW<br>W<br>W<br>W | E<br>NE<br>SW<br>SW<br>S<br>N<br>NW<br>NW<br>NW<br>NW | NE<br>SE<br>NW<br>SW<br>W<br>NW<br>NE<br>NW<br>W<br>SW<br>NW | S<br>S<br>S<br>S<br>S<br>S<br>W<br>W<br>W<br>W     | NE<br>NE<br>E<br>SE<br>NE<br>N<br>N<br>N<br>N<br>W<br>W    | SE<br>E<br>E<br>E<br>SW<br>S<br>W<br>NW<br>NW<br>SW<br>W | NE<br>NE<br>W<br>W<br>W<br>NW<br>W<br>NW<br>NW<br>W    | SE<br>SE<br>SE<br>SE<br>SE<br>SE<br>SW<br>NE<br>NE<br>SW<br>SW | NE<br>SW<br>SW<br>SW<br>SW<br>SW<br>SW<br>SW<br>W<br>SW | NE<br>N<br>NE<br>W<br>SW<br>W<br>NW<br>N<br>N<br>N<br>NW |
| 0<br>0<br>1<br>8<br>1<br>24<br>42<br>—<br>17<br>—         | 10<br>16<br>22<br>2<br>5<br>5<br>7<br>26<br>—<br>—    | 0<br>28<br>0<br>7<br>10<br>17<br>13<br>18<br>—<br>—          | 12<br>0<br>18<br>0<br>26<br>0<br>37<br>0<br>—<br>— | 23<br>24<br>11<br>6<br>12<br>11<br>10<br>4<br>2<br>—       | 3<br>12<br>10<br>8<br>17<br>25<br>10<br>8<br>—<br>—      | 4<br>10<br>5<br>12<br>0<br>3<br>36<br>23<br>—<br>—     |                                                                |                                                         | 12<br>0<br>10<br>1<br>18<br>12<br>6<br>8<br>17<br>—      |

**Sredni kieru-  
oraz liczba dostrzeżonych**

*Lipiec 1899 roku.*

| Dzień | Sam-<br>bor | Doli-<br>na | Lwów | Du-<br>blany | Delatyn | Oży-<br>dów | Ober-<br>tyn | Tar-<br>nopol | Jagiel-<br>nica |
|-------|-------------|-------------|------|--------------|---------|-------------|--------------|---------------|-----------------|
| 1     | SW          | W           | SW   | SE           | SW      | W           | NE           | SW            | —               |
| 2     | SE          | W           | S    | SE           | SW      | E           | NE           | SE            | SW              |
| 3     | SE          | W           | SW   | SE           | SW      | W           | SW           | SE            | SW              |
| 4     | SW          | W           | SW   | W            | SW      | W           | SW           | SW            | NW              |
| 5     | SW          | W           | SW   | SW           | SW      | W           | SW           | S             | SW              |
| 6     | NW          | W           | SW   | SW           | SW      | W           | SW           | S             | NW              |
| 7     | NW          | W           | SW   | SW           | SW      | NW          | SW           | N             | E               |
| 8     | NE          | NE          | W    | NE           | SW      | W           | SW           | NE            | SE              |
| 9     | NE          | W           | N    | NW           | SW      | NW          | NE           | N             | W               |
| 10    | NE          | W           | E    | E            | SW      | NW          | NE           | NE            | SE              |
| 11    | E           | W           | E    | NE           | SW      | N           | NE           | NE            | SE              |
| 12    | SE          | W           | SE   | E            | SW      | NW          | NE           | NE            | SE              |
| 13    | SE          | W           | W    | NE           | SW      | N           | NE           | NE            | —               |
| 14    | E           | W           | E    | E            | SW      | N           | NE           | NE            | —               |
| 15    | SE          | W           | E    | E            | SW      | N           | NE           | NE            | —               |
| 16    | SW          | W           | S    | N            | SW      | E           | NE           | NE            | —               |
| 17    | SW          | W           | SW   | W            | SW      | NW          | NE           | N             | NW              |
| 18    | SW          | W           | W    | NW           | SW      | W           | NE           | SW            | —               |
| 19    | SW          | W           | W    | W            | SW      | W           | NE           | NW            | SE              |
| 20    | N           | W           | W    | W            | SW      | W           | SW           | NE            | —               |
| 21    | NE          | W           | N    | NW           | SW      | W           | SW           | NE            | W               |
| 22    | N           | W           | NE   | E            | SW      | NW          | NW           | NE            | W               |
| 23    | NW          | W           | N    | NE           | SW      | N           | NW           | SW            | —               |
| 24    | N           | W           | N    | NW           | SW      | W           | SW           | N             | S               |
| 25    | NW          | W           | SW   | W            | SW      | W           | SW           | NW            | NW              |
| 26    | NE          | W           | NW   | W            | SW      | W           | NW           | NW            | SE              |
| 27    | NE          | W           | W    | W            | NW      | SW          | NE           | W             | —               |
| 28    | NW          | NW          | NW   | W            | SW      | W           | NW           | NW            | SE              |
| 29    | NW          | W           | SW   | NW           | SW      | W           | NW           | NW            | W               |
| 30    | SE          | E           | SW   | W            | SW      | SW          | NE           | SW            | SW              |
| 31    | NW          | E           | W    | W            | SW      | W           | SW           | W             | W               |
| N     | 6           |             | 10   | 3            | 1       | 10          | 0            | 11            | 0               |
| NE    | 13          |             | 7    | 7            | 10      | 1           | 43           | 23            | 0               |
| E     | 4           |             | 4    | 12           | 2       | 10          | 0            | 3             | 1               |
| SE    | 21          |             | 7    | 7            | 0       | 0           | 0            | 6             | 11              |
| S     | 0           |             | 7    | 2            | 0       | 1           | 0            | 8             | 4               |
| SW    | 14          |             | 24   | 9            | 75      | 4           | 33           | 9             | 6               |
| W     | 4           |             | 16   | 25           | 2       | 45          | 0            | 4             | 9               |
| NW    | 24          |             | 13   | 21           | 3       | 10          | 17           | 16            | 9               |
| Ciszy | 7           |             | 5    | 7            | —       | 12          | —            | 13            | 53              |
| brak  | —           |             | —    | —            | —       | —           | —            | —             | —               |

## nek wiatru

kierunków wiatru i cisz.

Sierpień 1899 roku.

| Kami-<br>tzer<br>Platte                                 | Biol-<br>sko                                              | Ży-<br>wiec                                             | Wado-<br>wice                                      | Czer-<br>ni-<br>chów                                       | Zako-<br>pane                                             | Kra-<br>ków                                                       | Boch-<br>nia | Szczaw-<br>nica                                       |
|---------------------------------------------------------|-----------------------------------------------------------|---------------------------------------------------------|----------------------------------------------------|------------------------------------------------------------|-----------------------------------------------------------|-------------------------------------------------------------------|--------------|-------------------------------------------------------|
| W<br>NW<br>W<br>SW<br>SW<br>SW<br>NW<br>NW<br>NW        | NW<br>N<br>S<br>S<br>S<br>S<br>E<br>NE<br>—               | N<br>NE<br>NW<br>W<br>E<br>SE<br>SW<br>S<br>N<br>NW     | SW<br>E<br>E<br>E<br>SW<br>S<br>SW<br>NE<br>N<br>W | NW<br>W<br>W<br>W<br>W<br>W<br>NE<br>NE<br>NE<br>NE        | SW<br>SW<br>SW<br>SW<br>SW<br>SW<br>SW<br>W<br>NW         | W<br>WSW<br>NW<br>ENE<br>SE<br>NNE<br>SSW<br>NE<br>NE<br>NNW      |              | W<br>W<br>W<br>S<br>E<br>E<br>N<br>N<br>W<br>W        |
| W<br>NW<br>NW<br>N<br>NE<br>NW<br>W<br>W<br>NW<br>NW    | W<br>W<br>NW<br>S<br>NW<br>SW<br>W<br>W<br>W<br>W         | W<br>W<br>NW<br>SE<br>NE<br>SE<br>S<br>SW<br>SE<br>SW   | W<br>W<br>E<br>E<br>E<br>E<br>W<br>W<br>W<br>NW    | NW<br>NW<br>NW<br>NE<br>NW<br>NW<br>NW<br>NW<br>W          | W<br>SW<br>NW<br>SW<br>SW<br>SW<br>NW<br>NW               | WSW<br>W<br>SSE<br>WSW<br>NNE<br>SW<br>WSW<br>WNW<br>W            |              | W<br>SW<br>NW<br>SW<br>N<br>NW<br>W<br>NW<br>NW<br>NW |
| NW<br>NW<br>NW<br>NW<br>NW<br>W<br>NE<br>NW<br>NE<br>SW | NW<br>NW<br>NW<br>W<br>NW<br>NW<br>NW<br>S<br>S<br>W<br>S | W<br>NE<br>NW<br>W<br>N<br>W<br>W<br>N<br>SW<br>NW<br>W | W<br>E<br>W<br>W<br>W<br>NW<br>NW<br>W<br>W<br>SW  | W<br>W<br>E<br>NE<br>NW<br>N<br>NW<br>NW<br>NW<br>NW<br>NW | NW<br>SW<br>SW<br>SW<br>NE<br>W<br>N<br>SW<br>E<br>E<br>E | WNW<br>W<br>W<br>W<br>NW<br>W<br>W<br>NW<br>WSW<br>W<br>WSW       |              | W<br>W<br>N<br>W<br>W<br>W<br>W<br>NW<br>W<br>W<br>W  |
| 7<br>6<br>2<br>0<br>0<br>12<br>13<br>39<br>14<br>—      | 5<br>4<br>3<br>4<br>22<br>5<br>21<br>13<br>16<br>—        | 27<br>0<br>0<br>0<br>12<br>12<br>18<br>19<br>5<br>—     | 1<br>3<br>25<br>2<br>2<br>7<br>38<br>15<br>—<br>—  | 3<br>16<br>4<br>0<br>0<br>0<br>25<br>45<br>—<br>—          | 2<br>3<br>7<br>1<br>1<br>50<br>11<br>17<br>—<br>1         | 8.5<br>5.5<br>2.5<br>5.0<br>3.0<br>14.0<br>41.0<br>13.5<br>—<br>— |              | 22<br>4<br>6<br>0<br>2<br>5<br>42<br>12<br>—<br>—     |

Nie zapisywano spostrzeżeń.

**Sredni kieru-  
oraz liczba dostrzeżonych**

*Sierpień 1899 roku.*

| Dzień         | Tar-<br>nów | Pil-<br>zuo | Iwo-<br>nicz | Rze-<br>szów | Smol-<br>nik | Sanok | Prze-<br>myśl | Łom-<br>na | Chy-<br>rów |
|---------------|-------------|-------------|--------------|--------------|--------------|-------|---------------|------------|-------------|
| 1             | W           | NW          | SW           | S            | N            | N     | W             | NE         | SW          |
| 2             | —           | NW          | NE           | S            | E            | SE    | NW            | NE         | SW          |
| 3             | —           | W           | NE           | S            | E            | E     | NW            | SW         | SW          |
| 4             | S           | S           | W            | W            | SW           | SE    | N             | NE         | SW          |
| 5             | SW          | S           | W            | W            | S            | S     | E             | SE         | SW          |
| 6             | SW          | S           | W            | W            | W            | SE    | SW            | SW         | SW          |
| 7             | —           | SE          | SW           | W            | SW           | NE    | NW            | SW         | SW          |
| 8             | E           | NE          | NE           | W            | NE           | N     | NW            | NE         | SW          |
| 9             | NE          | E           | NE           | W            | SW           | N     | SW            | NE         | SE          |
| 10            | E           | N           | SE           | W            | N            | NW    | N             | SW         | NE          |
| 11            | NW          | W           | SE           | W            | NE           | NW    | NE            | NE         | N           |
| 12            | W           | W           | SW           | W            | NE           | NW    | N             | NW         | SW          |
| 13            | W           | N           | NE           | W            | N            | N     | N             | NW         | SW          |
| 14            | W           | NW          | W            | W            | N            | NE    | NW            | SW         | SW          |
| 15            | SW          | NW          | W            | S            | N            | NE    | NE            | NE         | SW          |
| 16            | W           | N           | S            | S            | S            | E     | W             | SW         | SW          |
| 17            | W           | E           | S            | S            | S            | S     | SW            | SW         | SW          |
| 18            | W           | W           | S            | S            | N            | SW    | W             | SW         | SW          |
| 19            | SW          | W           | S            | S            | N            | N     | W             | NW         | SW          |
| 20            | W           | NW          | SW           | S            | NW           | NW    | W             | SW         | SW          |
| 21            | W           | W           | SW           | W            | W            | W     | W             | NE         | SW          |
| 22            | —           | W           | NE           | W            | NE           | SW    | NW            | NE         | SW          |
| 23            | W           | NW          | NE           | W            | N            | NW    | W             | NE         | SW          |
| 24            | SW          | W           | NE           | W            | NE           | W     | NW            | NE         | SW          |
| 25            | NW          | NW          | NE           | W            | N            | N     | NW            | NE         | NE          |
| 26            | NW          | NW          | NE           | W            | W            | N     | NW            | NW         | N           |
| 27            | NW          | NW          | W            | W            | N            | NW    | W             | NW         | SW          |
| 28            | W           | NE          | NE           | W            | N            | NE    | NW            | NW         | SW          |
| 29            | W           | NE          | SW           | S            | S            | N     | W             | NW         | SW          |
| 30            | W           | W           | W            | S            | S            | S     | W             | N          | SW          |
| 31            | W           | SW          | W            | W            | S            | S     | S             | NW         | SW          |
| N             | 0           | 9           | 1            | 0            | 27           | 20    | 8             |            |             |
| NE            | 3           | 10          | 28           | 0            | 16           | 12    | 3             |            |             |
| E             | 6           | 4           | 0            | 0            | 6            | 8     | 4             |            |             |
| SE            | 1           | 3           | 4            | 0            | 1            | 9     | 2             |            |             |
| S             | 2           | 8           | 10           | 34           | 18           | 12    | 2             |            |             |
| SW            | 12          | 4           | 18           | 0            | 10           | 9     | 12            |            |             |
| W             | 32          | 27          | 18           | 59           | 6            | 6     | 36            |            |             |
| NW            | 11          | 28          | 14           | 0            | 5            | 17    | 26            |            |             |
| Ciszy<br>brak | 26          | —           | —            | —            | 4            | —     | —             |            |             |

# nek wiatru

kierunków wiatru i cisz.

| Stare-<br>miasto | Sam-<br>bor | Doli-<br>na | Lwów | Du-<br>blany | Delatyn | Oży-<br>dów | Ober-<br>tyn | Tar-<br>nopol | Jagiel-<br>nica |
|------------------|-------------|-------------|------|--------------|---------|-------------|--------------|---------------|-----------------|
| N                | NW          | W           | W    | W            | SW      | W           | SW           | NW            | W               |
| NE               | N           | W           | WSW  | W            | SW      | W           | NE           | N             | SE              |
| NE               | NW          | W           | W    | W            | SW      | W           | SE           | NW            | SW              |
| E                | N           | W           | N    | —            | NE      | N           | SE           | NE            | S               |
| S                | SW          | W           | SW   | SW           | NE      | SW          | SE           | S             | SE              |
| SW               | SW          | NW          | SW   | W            | SW      | NW          | SW           | SW            | E               |
| SW               | W           | W           | SW   | W            | SW      | W           | SW           | NW            | NW              |
| NE               | NW          | W           | N    | W            | NE      | W           | SW           | NW            | SW              |
| NE               | SW          | W           | E    | E            | NE      | E           | SW           | SE            | SW              |
| NW               | NW          | W           | N    | NE           | SW      | E           | SW           | NE            | W               |
| NE               | NE          | W           | N    | NE           | NE      | N           | NW           | NE            | SE              |
| W                | NW          | W           | W    | W            | SW      | NW          | NW           | W             | SE              |
| NW               | NW          | W           | W    | W            | SW      | W           | NW           | NW            | SE              |
| N                | N           | W           | W    | NW           | SW      | W           | SW           | NW            | NW              |
| N                | SE          | W           | NW   | W            | SW      | W           | SW           | NW            | N               |
| SW               | SE          | W           | SW   | S            | SW      | E           | NE           | N             | S               |
| SW               | NW          | W           | SW   | W            | SW      | SW          | SW           | SW            | S               |
| W                | NW          | W           | NW   | W            | SW      | W           | SW           | W             | N               |
| W                | NW          | W           | SW   | W            | SW      | SW          | NW           | W             | W               |
| W                | NW          | W           | SW   | W            | SW      | W           | NW           | W             | W               |
| W                | NW          | W           | SW   | W            | SW      | SW          | NW           | W             | SW              |
| W                | NW          | W           | SW   | W            | SW      | W           | NW           | W             | SW              |
| W                | NW          | W           | SW   | W            | SW      | SW          | SW           | SW            | E               |
| W                | NE          | W           | W    | W            | SW      | W           | NW           | NW            | E               |
| S                | NE          | W           | NW   | W            | SW      | W           | NW           | N             | E               |
| N                | NE          | W           | NW   | NW           | SW      | W           | NW           | N             | SE              |
| N                | N           | NW          | NW   | NW           | SW      | W           | NW           | W             | SW              |
| N                | NW          | NW          | W    | N            | SW      | W           | NW           | NW            | W               |
| N                | NW          | NW          | W    | W            | SW      | NW          | NW           | W             | N               |
| NW               | NW          | NW          | W    | W            | SW      | SW          | NW           | W             | NW              |
| S                | SW          | W           | SW   | W            | SW      | SW          | SW           | SW            | SW              |
| SW               | NW          | W           | SW   | W            | SW      | W           | SE           | W             | SW              |
| SW               | SW          | W           | W    | W            | SW      | W           | SE           | NW            | W               |
| 13               | 11          |             | 7    | 4            | 2       | 7           | 0            | 9             | 9               |
| 8                | 14          |             | 2    | 2            | 13      | 0           | 7            | 9             | 0               |
| 3                | 0           |             | 2    | 6            | 1       | 11          | 0            | 1             | 10              |
| 0                | 6           |             | 1    | 1            | 0       | 0           | 15           | 4             | 14              |
| 18               | 0           |             | 3    | 2            | 0       | 0           | 0            | 4             | 9               |
| 12               | 14          |             | 31   | 6            | 72      | 13          | 35           | 12            | 21              |
| 14               | 4           |             | 30   | 52           | 3       | 45          | 0            | 16            | 22              |
| 11               | 44          |             | 9    | 14           | 2       | 10          | 36           | 20            | 8               |
| 14               | —           |             | 8    | 6            | —       | 7           | —            | 18            | —               |
| —                | —           |             | —    | —            | —       | —           | —            | —             | —               |

Średni kieru-  
oraz liczba dostrzeżonych

Wrzesień 1899 roku.

| Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków | Boch-<br>nia | Szczaw-<br>nica |
|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|--------------|-----------------|
| W                       | SW           | SW          | S             | W                    | SE            | WSW         | W            | W               |
| W                       | W            | SW          | SW            | W                    | SE            | WSW         | W            | NW              |
| W                       | W            | SW          | SW            | NW                   | SW            | W           | W            | W               |
| W                       | NW           | W           | W             | NW                   | SW            | W           | NW           | W               |
| W                       | NW           | N           | W             | W                    | SW            | W           | W            | W               |
| W                       | W            | S           | W             | E                    | SW            | W           | E            | W               |
| W                       | W            | W           | NW            | W                    | SW            | WSW         | W            | W               |
| NW                      | N            | SE          | N             | W                    | SW            | ESE         | E            | N               |
| NW                      | NE           | N           | SE            | NE                   | SW            | ENE         | W            | NW              |
| NW                      | W            | NW          | W             | NW                   | NW            | W           | NW           | N               |
| NW                      | NW           | NW          | NW            | N                    | W             | W           | NW           | W               |
| SW                      | NE           | N           | W             | NE                   | SW            | WSW         | NW           | W               |
| SE                      | NE           | SW          | NE            | SE                   | SW            | SE          | SW           | NE              |
| E                       | W            | N           | NE            | E                    | SW            | W           | E            | W               |
| N                       | NW           | NW          | W             | NW                   | SW            | W           | NW           | SW              |
| SW                      | W            | SW          | SW            | NW                   | SW            | WSW         | NW           | E               |
| SW                      | W            | SW          | W             | NW                   | SW            | W           | SW           | E               |
| SW                      | W            | SW          | SW            | W                    | NW            | WSW         | W            | SW              |
| W                       | W            | SW          | SW            | W                    | W             | WSW         | W            | NW              |
| SW                      | SW           | SW          | SW            | W                    | NE            | W           | W            | W               |
| SW                      | W            | SW          | SW            | W                    | NE            | WSW         | W            | W               |
| SW                      | S            | S           | S             | W                    | NE            | SW          | W            | W               |
| NW                      | W            | SE          | W             | NW                   | SW            | W           | NW           | NE              |
| SW                      | W            | SW          | SW            | NW                   | NE            | W           | NW           | NW              |
| SW                      | W            | SW          | SW            | SW                   | SE            | WSW         | W            | W               |
| W                       | W            | SW          | SW            | W                    | NE            | SW          | W            | W               |
| SW                      | SW           | S           | S             | W                    | S             | W           | W            | SE              |
| SW                      | S            | S           | S             | E                    | SE            | NNE         | E            | E               |
| SW                      | NW           | NW          | W             | W                    | NE            | WNW         | SW           | E               |
| SW                      | S            | SW          | S             | SW                   | SE            | NW          | SW           | SE              |
| 2                       | 10           | 4           | 0             | 2                    | 3             | 4.5         | 0            | 16              |
| 2                       | 4            | 3           | 5             | 7                    | 20            | 3.0         | 0            | 8               |
| 3                       | 1            | 6           | 2             | 7                    | 5             | 6.0         | 14           | 13              |
| 2                       | 2            | 7           | 11            | 2                    | 14            | 3.0         | 0            | 6               |
| 2                       | 23           | 16          | 16            | 0                    |               | 4.0         | 0            | 1               |
| 32                      | 6            | 38          | 26            | 8                    | 33            | 19.5        | 9            | 3               |
| 25                      | 25           | 6           | 17            | 38                   | 4             | 40.0        | 42           | 28              |
| 16                      | 6            | 10          | 13            | 26                   | 7             | 10.0        | 25           | 14              |
| 6                       | 13           | —           | —             | —                    | —             | —           | —            | 1               |
| —                       | —            | —           | —             | —                    | 2             | —           | —            | —               |

## nek wiatru

kierunków wiatru i cisz.

| Tar-nów | Pil-zno | Iwo-nicz | Rze-szów | Smol-nik | Sanok | Prze-myśl | Łom-ża | Chy-rów |
|---------|---------|----------|----------|----------|-------|-----------|--------|---------|
| SW      | S       | W        | W        | N        | SW    | SW        | SW     | SW      |
| SE      | S       | SW       | S        | NE       | SW    | SW        | SW     | SW      |
| W       | W       | SW       | S        | SW       | SW    | W         | SW     | SW      |
| W       | NW      | NE       | S        | N        | SW    | NW        | SW     | SW      |
| —       | NW      | W        | S        | SW       | S     | W         | SW     | SW      |
| W       | SW      | S        | S        | S        | S     | W         | SE     | SW      |
| W       | SW      | NE       | S        | N        | SW    | NW        | SE     | S       |
| —       | W       | SW       | N        | NW       | NW    | N         | NE     | N       |
|         | W       | NW       | W        | NE       | SW    | NE        | NW     | W       |
| W       | W       | S        | W        | N        | SW    | NW        | NW     | W       |
| W       | N       | SE       | W        | NE       | W     | W         | NE     | E       |
| W       | NE      | S        | W        | NE       | NW    | W         | SE     | SE      |
| —       | E       | NW       | W        | N        | N     | W         | SE     | SW      |
| W       | NW      | SW       | W        | NE       | NW    | W         | SE     | SW      |
| W       | W       | S        | W        | W        | NE    | W         | SW     | SW      |
| W       | W       | S        | W        | W        | S     | W         | SE     | S       |
| NW      | SW      | W        | W        | NW       | W     | W         | SW     | E       |
| W       | W       | S        | W        | W        | S     | W         | SW     | SW      |
| SW      | W       | S        | W        | W        | S     | W         | SW     | SW      |
| W       | W       | W        | W        | W        | W     | W         | SW     | SW      |
| SW      | W       | SW       | W        | SW       | NW    | NW        | NW     | SW      |
| W       | S       | SW       | S        | SW       | SW    | W         | SW     | SW      |
| SW      | SE      | NE       | W        | SW       | SW    | W         | SW     | S       |
| W       | W       | NE       | W        | NW       | SW    | W         | NE     | SE      |
| SW      | W       | SW       | W        | W        | NE    | W         | SW     | SW      |
| W       | W       | SW       | S        | SW       | S     | SW        | SW     | SW      |
| E       | S       | S        | E        | SW       | SE    | SW        | S      | SW      |
| S       | S       | SW       | E        | S        | S     | SW        | SW     | SE      |
| S       | S       | SW       | E        | S        | S     | SW        | SW     | SW      |
| 0       | 3       | 0        | 11       | 16       | 7     | 3         |        |         |
| 0       | 3       | 9        | 0        | 12       | 5     | 3         |        |         |
| 1       | 3       | 0        | 11       | 0        | 0     | 0         |        |         |
| 2       | 3       | 3        | 0        | 5        | 6     | 3         |        |         |
| 10      | 18      | 26       | 25       | 10       | 32    | 0         |        |         |
| 9       | 13      | 26       | 0        | 24       | 24    | 23        |        |         |
| 40      | 34      | 17       | 43       | 13       | 6     | 48        |        |         |
| 6       | 13      | 9        | 0        | 9        | 10    | 10        |        |         |
| 22      | —       | —        | —        | —        | —     | —         |        |         |
| —       | —       | —        | —        | —        | —     | —         |        |         |

**Sredni kieru-  
oraz liczba dostrzeżonych**

*Wrzesień 1899 roku.*

| Dzień | Stare-<br>miasto | Sam-<br>bor | Doli-<br>na | Lwów | Du-<br>blany | Delatyn | Oży-<br>dów | Ober-<br>tyn | Tarno-<br>pol | Jagiel-<br>nica |
|-------|------------------|-------------|-------------|------|--------------|---------|-------------|--------------|---------------|-----------------|
| 1     | NW               | NW          | W           | W    | W            | SW      | W           |              | SW            | W               |
| 2     | S                | SW          | W           | W    | W            | SW      | W           |              | W             | NW              |
| 3     | W                | NW          | W           | W    | W            | SW      | W           |              | W             | S               |
| 4     | NW               | NW          | W           | W    | W            | SW      | W           |              | W             | SE              |
| 5     | W                | W           | NW          | W    | NW           | SW      | W           |              | NW            | W               |
| 6     | S                | SW          | W           | W    | W            | SW      | W           |              | W             | W               |
| 7     | W                | W           | W           | W    | W            | SW      | NW          |              | SW            | W               |
| 8     | N                | NW          | W           | W    | NW           | SW      | NW          |              | W             | —               |
| 9     | N                | NW          | W           | NE   | E            | W       | NW          |              | NE            | SW              |
| 10    | N                | NW          | W           | SE   | E            | N       | E           |              | SE            | E               |
| 11    | NW               | NE          | W           | NE   | E            | W       | E           |              | E             | E               |
| 12    | NE               | NE          | W           | SW   | W            | W       | N           |              | E             | E               |
| 13    | SW               | SE          | W           | SE   | SW           | SW      | E           |              | E             | W               |
| 14    | SE               | NE          | W           | S    | S            | SW      | E           |              | S             | W               |
| 15    | S                | N           | NW          | W    | NW           | SW      | NE          |              | N             | —               |
| 16    | SW               | W           | W           | W    | W            | S       | NE          |              | W             | —               |
| 17    | SW               | NE          | W           | S    | SW           | SW      | S           |              | SE            | S               |
| 18    | S                | NE          | W           | W    | W            | W       | S           |              | SE            | —               |
| 19    | SW               | NW          | W           | SW   | W            | SW      | SW          |              | W             | —               |
| 20    | SW               | SW          | W           | SW   | W            | SW      | W           |              | S             | —               |
| 21    | W                | NW          | W           | W    | NW           | SW      | SW          |              | NW            | W               |
| 22    | SW               | W           | W           | SW   | SW           | SW      | SW          |              | W             | NW              |
| 23    | W                | SW          | W           | SW   | SW           | SW      | E           |              | SE            | —               |
| 24    | NW               | NW          | W           | W    | W            | SW      | S           |              | SE            | —               |
| 25    | SW               | NW          | NW          | W    | W            | SW      | W           |              | W             | W               |
| 26    | SW               | SW          | W           | SW   | W            | NE      | W           |              | W             | —               |
| 27    | SW               | SW          | W           | SW   | SW           | NE      | SW          |              | SE            | —               |
| 28    | SE               | SW          | W           | SE   | SE           | SW      | SE          |              | SE            | E               |
| 29    | E                | SE          | W           | S    | SE           | NE      | SE          |              | SE            | SE              |
| 30    | S                | SE          | W           | S    | SE           | SW      | S           |              | SE            | E               |
| N     | 11               | 3           |             | 1    | 0            | 19      | 1           |              | 3             | 0               |
| NE    | 2                | 12          |             | 3    | 1            | 0       | 4           |              | 2             | 0               |
| E     | 3                | 1           |             | 2    | 10           | 0       | 17          |              | 5             | 14              |
| SE    | 6                | 9           |             | 7    | 9            | 0       | 3           |              | 21            | 5               |
| S     | 12               | 0           |             | 14   | 3            | 2       | 19          |              | 8             | 2               |
| SW    | 33               | 20          |             | 26   | 19           | 49      | 12          |              | 5             | 1               |
| W     | 10               | 10          |             | 22   | 31           | 18      | 25          |              | 15            | 11              |
| NW    | 8                | 30          |             | 4    | 13           | 2       | 6           |              | 10            | 3               |
| Ciszy | 5                | 4           |             | 11   | 4            | —       | 13          |              | 21            | 54              |
| brak  | —                | 1           |             | —    | —            | —       | —           |              | —             | —               |

Nie zapisywano spostrzeżeń.



## nek wiatru

kierunków wiatru i cisz.

Październik 1899 roku.

| Kami-<br>tzer<br>Platte                                | Biel-<br>sko                                             | Ży-<br>wiec                                            | Wado-<br>wice                                             | Czer-<br>ni-<br>chów                                         | Zako-<br>pane                                                 | Kra-<br>ków                                                        | Boch-<br>nia                                               | Szczaw-<br>nica                                         |
|--------------------------------------------------------|----------------------------------------------------------|--------------------------------------------------------|-----------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------|--------------------------------------------------------------------|------------------------------------------------------------|---------------------------------------------------------|
| SW<br>S<br>NW<br>SW<br>SW<br>NW<br>N<br>NW<br>W<br>SW  | W<br>S<br>W<br>S<br>W<br>N<br>NE<br>NW<br>W<br>S         | S<br>SW<br>S<br>S<br>SW<br>W<br>NW<br>W<br>W<br>SW     | S<br>SE<br>SW<br>SW<br>S<br>W<br>NE<br>W<br>NW<br>SW      | SW<br>SW<br>SW<br>SW<br>NW<br>W<br>N<br>NW<br>NW<br>W        | NE<br>SW<br>NW<br>NE<br>SE<br>S<br>NE<br>E<br>SE              | E<br>WNW<br>W<br>WSW<br>W<br>NE<br>NE<br>WNW<br>W<br>W             | SW<br>SW<br>NW<br>W<br>SE<br>NW<br>E<br>NW<br>W<br>E       | W<br>S<br>NW<br>NW<br>W<br>N<br>S<br>W<br>W<br>SW       |
| S<br>SW<br>SW<br>NW<br>NW<br>NW<br>NW<br>NW<br>SW<br>W | S<br>W<br>SW<br>W<br>NW<br>S<br>NW<br>NW<br>NW<br>W      | SE<br>SW<br>SW<br>SW<br>N<br>SW<br>NW<br>NE<br>SW      | SW<br>S<br>S<br>W<br>NW<br>W<br>W<br>W<br>NW              | NW<br>W<br>W<br>NW<br>NW<br>NW<br>NW<br>NW<br>NW             | NE<br>SW<br>W<br>W<br>W<br>SW<br>W<br>SE<br>W                 | W<br>ESE<br>NW<br>W<br>WNW<br>WSW<br>WSW<br>W<br>W                 | W<br>E<br>W<br>E<br>W<br>NW<br>NW<br>W<br>W<br>NE          | NW<br>S<br>SW<br>W<br>W<br>NW<br>NW<br>N<br>W<br>NE     |
| NE<br>E<br>SW<br>W<br>NW<br>W<br>SW<br>W<br>SW<br>W    | SW<br>N<br>W<br>S<br>NW<br>NW<br>S<br>W<br>W<br>SW<br>SW | W<br>NW<br>SW<br>SW<br>W<br>NW<br>SW<br>SW<br>SW<br>SW | SW<br>E<br>NE<br>SW<br>W<br>W<br>N<br>S<br>SW<br>SW<br>SW | NW<br>NW<br>E<br>W<br>NW<br>NW<br>NW<br>NW<br>NW<br>NW<br>NW | W<br>NE<br>SW<br>NE<br>NE<br>NE<br>NE<br>SW<br>NE<br>SW<br>NE | WSW<br>W<br>WSW<br>WNW<br>NW<br>WNW<br>E<br>WNW<br>W<br>WSW<br>WNW | NE<br>W<br>W<br>W<br>NE<br>NW<br>NW<br>SE<br>SW<br>SW<br>W | S<br>N<br>W<br>SE<br>E<br>W<br>SW<br>NE<br>W<br>N<br>SW |
| 2<br>3<br>3<br>3<br>2<br>27<br>14<br>29<br>10<br>—     | 10<br>2<br>2<br>4<br>25<br>7<br>17<br>12<br>14<br>—      | 9<br>0<br>0<br>0<br>16<br>36<br>13<br>13<br>6<br>—     | 2<br>7<br>2<br>8<br>10<br>29<br>23<br>12<br>—<br>—        | 2<br>2<br>3<br>0<br>0<br>15<br>12<br>59<br>—<br>—            | 4<br>33<br>5<br>12<br>2<br>15<br>20<br>2<br>—<br>2            | 2.5<br>5.0<br>5.5<br>2.0<br>0.5<br>16.0<br>45.5<br>16.0<br>—<br>—  | 1<br>9<br>11<br>6<br>0<br>12<br>24<br>20<br>—<br>—         | 12<br>6<br>13<br>3<br>10<br>7<br>27<br>15<br>—<br>—     |



## nek wiatru

kierunków wiatru i cisz.

| Stare-<br>miasto                                      | Sam-<br>bor                                                    | Doli-<br>na                                 | Lwów                                                 | Du-<br>blany                                             | Dela-<br>tyn                                             | Oży-<br>dów                                         | Ober-<br>tyn | Tar-<br>nopol                                        | Jagiel-<br>nica                                           |
|-------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------|------------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------|-----------------------------------------------------|--------------|------------------------------------------------------|-----------------------------------------------------------|
| SW<br>S<br>W<br>SW<br>SW<br>W<br>SE<br>NW<br>NW<br>SW | SW<br>SE<br>W<br>SE<br>SW<br>SW<br>SE<br>SE<br>NE<br>NW        | W<br>W<br>W<br>W<br>W<br>E<br>NW<br>NW<br>W | S<br>S<br>W<br>S<br>W<br>W<br>E<br>W<br>W<br>SW      | SW<br>S<br>W<br>SE<br>W<br>W<br>E<br>NW<br>NW<br>W       | SW<br>SW<br>SW<br>SW<br>SW<br>SW<br>SW<br>SW<br>SW<br>SW | S<br>S<br>E<br>E<br>E<br>S<br>NW<br>NW<br>N<br>NW   |              | E<br>SE<br>S<br>NE<br>NW<br>SW<br>NE<br>NW<br>N<br>S | —<br>—<br>N<br>E<br>—<br>—<br>—<br>SE<br>NW<br>—          |
| NW<br>SW<br>S<br>W<br>W<br>W<br>NW<br>NE<br>W<br>SW   | NW<br>SW<br>SW<br>NW<br>NW<br>NW<br>NW<br>NW<br>NW<br>NW       | W<br>W<br>W<br>N<br>N<br>NW<br>W<br>NW<br>W | W<br>SE<br>SE<br>W<br>W<br>W<br>NE<br>W<br>W         | W<br>S<br>SE<br>NW<br>W<br>W<br>W<br>N<br>W<br>SW        | SW<br>SW<br>SW<br>SW<br>SW<br>SW<br>SW<br>SW<br>SW<br>SW | SW<br>E<br>E<br>W<br>W<br>NW<br>W<br>W<br>W         |              | W<br>SE<br>SE<br>N<br>SW<br>W<br>W<br>W<br>W<br>NW   | —<br>E<br>SE<br>W<br>W<br>W<br>W<br>—<br>W<br>N           |
| W<br>N<br>S<br>SW<br>NW<br>W<br>SW<br>SW<br>SW<br>SW  | NW<br>NE<br>NE<br>SW<br>NW<br>NW<br>SW<br>SW<br>NW<br>SW<br>SW | NW<br>NW<br>W<br>W<br>W<br>W<br>W<br>W<br>W | W<br>NW<br>S<br>SW<br>W<br>NW<br>W<br>SW<br>SW<br>SW | W<br>NW<br>W<br>W<br>W<br>NW<br>SW<br>W<br>W<br>SW<br>SW | SW<br>N<br>SW<br>SW<br>SW<br>SW<br>SW<br>SW<br>SW<br>SW  | W<br>NW<br>NW<br>SW<br>W<br>NW<br>W<br>W<br>W<br>SW |              | W<br>NW<br>S<br>SW<br>W<br>W<br>SW<br>W<br>SW<br>SW  | NE<br>E<br>W<br>W<br>W<br>NW<br>SE<br>SW<br>—<br>SE<br>SE |
| 7<br>3<br>1<br>2<br>11<br>37<br>11<br>19<br>2<br>—    | 2<br>6<br>0<br>10<br>0<br>28<br>2<br>37<br>8<br>—              |                                             | 1<br>2<br>1<br>5<br>11<br>27<br>31<br>8<br>7<br>—    | 4<br>0<br>1<br>7<br>4<br>15<br>43<br>15<br>4<br>—        | 4<br>13<br>0<br>2<br>1<br>71<br>1<br>1<br>—<br>—         | 4<br>0<br>7<br>2<br>8<br>8<br>36<br>16<br>12<br>—   |              | 3<br>5<br>3<br>8<br>7<br>20<br>23<br>12<br>12<br>—   | 5<br>1<br>10<br>10<br>0<br>0<br>23<br>4<br>40<br>—        |

Nie zapisywano spostrzeżeń.

**Sredni kieru-  
oraz liczba dostrzeżonych**

*Listopad 1899 roku.*

| Dzień         | Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków | Boch-<br>nia | Szeraw-<br>nica |
|---------------|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|--------------|-----------------|
| 1             | W                       | W            | SW          | SW            | NW                   | E             | W           | W            | NW              |
| 2             | SW                      | S            | SW          | E             | NW                   | E             | WNW         | SE           | E               |
| 3             | SE                      | S            | SW          | S             | NW                   | E             | NW          | SE           | E               |
| 4             | W                       | E            | SW          | S             | W                    | NE            | NW          | W            | W               |
| 5             | —                       | S            | NW          | S             | W                    | S             | WNW         | W            | W               |
| 6             | —                       | S            | NW          | NE            | W                    | E             | W           | NE           | E               |
| 7             | SW                      | N            | SW          | SW            | W                    | NE            | NW          | E            | E               |
| 8             | SW                      | N            | S           | E             | W                    | NE            | E           | SE           | E               |
| 9             | NW                      | NW           | NW          | W             | W                    | SW            | W           | W            | NW              |
| 10            | W                       | W            | W           | W             | NW                   | NW            | W           | W            | W               |
| 11            | NW                      | W            | W           | NW            | NW                   | NW            | W           | W            | N               |
| 12            | W                       | W            | W           | SW            | NW                   | NW            | WSW         | NW           | N               |
| 13            | NW                      | NW           | W           | W             | NW                   | SW            | W           | NW           | NW              |
| 14            | NW                      | N            | E           | NW            | NW                   | SW            | W           | NE           | W               |
| 15            | W                       | W            | W           | W             | NW                   | SW            | W           | NW           | SW              |
| 16            | NW                      | W            | NW          | W             | N                    | NE            | NNW         | NE           | W               |
| 17            | NE                      | S            | W           | SW            | N                    | SE            | SW          | NW           | W               |
| 18            | E                       | N            | SW          | SW            | NW                   | NW            | SW          | NW           | N               |
| 19            | —                       | W            | SE          | SW            | W                    | NW            | WSW         | NW           | SW              |
| 20            | SW                      | S            | SE          | W             | NN                   | NW            | SE          | NW           | S               |
| 21            | SW                      | N            | NE          | N             | NW                   | NE            | N           | N            | W               |
| 22            | W                       | SW           | SW          | SW            | NW                   | SE            | WNW         | NW           | NW              |
| 23            | SW                      | W            | SW          | SW            | NW                   | NW            | WSW         | NW           | NW              |
| 24            | SW                      | W            | SW          | S             | NW                   | NE            | W           | NW           | W               |
| 25            | W                       | W            | W           | SW            | NN                   | SW            | W           | NW           | W               |
| 26            | W                       | —            | SW          | NE            | NW                   | SE            | W           | N            | SW              |
| 27            | SW                      | NW           | SW          | SW            | NW                   | SW            | W           | NW           | W               |
| 28            | NW                      | W            | W           | W             | NW                   | NW            | W           | W            | SW              |
| 29            | NW                      | W            | SW          | W             | NW                   | NW            | W           | W            | W               |
| 30            | W                       | W            | W           | NW            | NW                   | NW            | W           | W            | NW              |
| N             | 0                       | 15           | 1           | 3             | 7                    | 1             | 6.0         | 6            | 15              |
| NE            | 3                       | 4            | 3           | 8             | 0                    | 16            | 2.0         | 9            | 2               |
| E             | 1                       | 1            | 5           | 2             | 1                    | 6             | 3.5         | 3            | 18              |
| SE            | 2                       | 3            | 6           | 5             | 0                    | 10            | 0.5         | 8            | 1               |
| S             | 0                       | 17           | 7           | 6             | 0                    | 3             | 2.0         | 0            | 4               |
| SW            | 19                      | 3            | 34          | 30            | 0                    | 26            | 8.0         | 0            | 6               |
| W             | 25                      | 26           | 21          | 26            | 23                   | 4             | 43.5        | 26           | 34              |
| NW            | 24                      | 11           | 13          | 10            | 59                   | 24            | 24.5        | 38           | 10              |
| Ciszy<br>brak | 16                      | 10           | —           | —             | —                    | —             | —           | —            | —               |

## nek wiatru

kierunków wiatru i cisz.

| Tarnów | Pilzno | Iwonicz | Rzeszów | Smolnik | Sanok | Przemysł | Łomna | Chyrow | Staremiasto |
|--------|--------|---------|---------|---------|-------|----------|-------|--------|-------------|
| W      | W      | S       | W       | NW      | NE    | W        | SW    | SW     | SW          |
| SE     | S      | S       | S       | S       | SE    | W        | SW    | S      | SW          |
| W      | S      | SW      | S       | S       | S     | W        | SW    | S      | S           |
| —      | SE     | S       | S       | S       | S     | NW       | SE    | SW     | SW          |
| —      | SE     | SW      | S       | S       | S     | N        | SW    | SW     | SW          |
| W      | SE     | W       | S       | SE      | E     | SE       | SW    | S      | E           |
| —      | SE     | SW      | S       | S       | NE    | S        | SW    | SE     | NE          |
| —      | SW     | S       | W       | S       | W     | SW       | SE    | SE     | NE          |
| W      | W      | NW      | W       | NW      | NW    | NW       | N     | SW     | SW          |
| W      | W      | SW      | W       | S       | SW    | W        | SW    | SW     | SW          |
| W      | W      | S       | W       | SW      | N     | W        | SE    | SW     | SW          |
| W      | W      | S       | W       | SW      | W     | W        | SW    | W      | SW          |
| W      | W      | SE      | W       | SW      | NW    | NW       | SE    | W      | N           |
| NW     | W      | S       | W       | SW      | NE    | W        | NE    | W      | NW          |
| NW     | NW     | S       | W       | NW      | NW    | NW       | NW    | NE     | N           |
| —      | N      | S       | W       | NE      | N     | NE       | SE    | N      | NE          |
| —      | NW     | S       | S       | SW      | NW    | W        | SE    | SW     | SW          |
| NW     | NE     | S       | S       | S       | N     | SW       | SW    | SW     | SW          |
| NW     | NE     | NE      | S       | S       | N     | SW       | SW    | SW     | SW          |
| W      | W      | SE      | S       | N       | NE    | NW       | NE    | E      | N           |
| W      | W      | S       | W       | SE      | SE    | W        | NE    | SW     | SW          |
| W      | W      | W       | S       | W       | NW    | W        | SW    | SW     | W           |
| W      | W      | S       | W       | S       | SW    | SW       | SW    | SW     | SW          |
| W      | N      | S       | W       | W       | SW    | W        | SW    | SW     | W           |
| W      | NW     | NE      | W       | S       | NE    | NW       | NE    | SW     | NW          |
| W      | NW     | SW      | W       | S       | W     | W        | SW    | SW     | SW          |
| W      | SW     | SW      | W       | W       | SW    | NW       | NE    | SW     | SW          |
| W      | SW     | NW      | W       | NW      | SW    | NW       | NE    | SW     | W           |
| W      | SW     | NW      | W       | W       | SW    | NW       | SW    | SW     | NW          |
| 2      | 5      | 0       | 0       | 3       | 10    | 2        |       |        | 8           |
| 0      | 6      | 0       | 0       | 2       | 12    | 3        |       |        | 5           |
| 0      | 0      | 0       | 0       | 1       | 8     | 0        |       |        | 1           |
| 0      | 12     | 7       | 0       | 9       | 7     | 4        |       |        | 0           |
| 2      | 11     | 39      | 35      | 32      | 12    | 3        |       |        | 8           |
| 0      | 8      | 24      | 0       | 16      | 22    | 12       |       |        | 46          |
| 44     | 31     | 5       | 55      | 12      | 8     | 38       |       |        | 8           |
| 8      | 17     | 6       | 0       | 13      | 11    | 28       |       |        | 10          |
| 34     | —      | —       | —       | 2       | —     | —        |       |        | 4           |
| —      | —      | —       | —       | —       | —     | —        |       |        | —           |

Sredni kieru-  
oraz liczba dostrzeżonych

Listopad 1899 roku.

| Dzień | Sam-<br>bor | Doli-<br>na | Lwów | Du-<br>blany | Delatyn | Oży-<br>dów | Ober-<br>tyn | Tar-<br>nopol | Jagiel-<br>nica |
|-------|-------------|-------------|------|--------------|---------|-------------|--------------|---------------|-----------------|
| 1     | NW          | W           | W    | W            | SW      | W           |              | NW            | E               |
| 2     | SW          | W           | SW   | SW           | SW      | W           |              | S             | E               |
| 3     | SW          | W           | SW   | SW           | SW      | W           |              | S             | —               |
| 4     | SW          | W           | SW   | SW           | SW      | S           |              | S             | E               |
| 5     | SW          | W           | SW   | W            | SW      | —           |              | S             | E               |
| 6     | SE          | W           | SE   | E            | SW      | E           |              | SE            | E               |
| 7     | SE          | W           | S    | SE           | SW      | E           |              | SE            | E               |
| 8     | SE          | W           | SE   | S            | SW      | E           |              | SE            | —               |
| 9     | NW          | W           | S    | SE           | SW      | SE          |              | SE            | E               |
| 10    | N           | W           | W    | W            | SW      | SW          |              | NW            | —               |
| 11    | SW          | W           | SW   | W            | SW      | W           |              | S             | W               |
| 12    | SW          | W           | SW   | W            | SW      | W           |              | SW            | —               |
| 13    | SW          | W           | W    | W            | W       | SW          |              | SW            | —               |
| 14    | N           | W           | NW   | NW           | SW      | W           |              | NW            | —               |
| 15    | NW          | W           | W    | W            | W       | W           |              | W             | W               |
| 16    | NW          | W           | N    | NE           | NE      | W           |              | NE            | —               |
| 17    | NE          | W           | W    | W            | SW      | S           |              | NW            | W               |
| 18    | SW          | W           | SW   | W            | SW      | NW          |              | SW            | W               |
| 19    | NW          | W           | W    | W            | NW      | SW          |              | SW            | W               |
| 20    | SW          | W           | SW   | W            | NW      | SW          |              | SW            | W               |
| 21    | NW          | W           | NW   | NW           | W       | W           |              | NW            | W               |
| 22    | SW          | NW          | SW   | W            | SW      | SW          |              | S             | W               |
| 23    | NW          | NW          | W    | W            | W       | NW          |              | W             | W               |
| 24    | SW          | NW          | W    | W            | W       | NW          |              | SW            | W               |
| 25    | NW          | NW          | W    | W            | W       | NW          |              | NW            | W               |
| 26    | NW          | NW          | W    | W            | SW      | NW          |              | NW            | W               |
| 27    | NW          | W           | SW   | W            | SW      | NW          |              | SW            | W               |
| 28    | NW          | W           | W    | W            | SW      | W           |              | NW            | W               |
| 29    | NW          | W           | W    | W            | SW      | W           |              | W             | W               |
| 30    | NW          | W           | W    | W            | SW      | W           |              | W             | W               |
| N     | 5           |             | 3    | 1            | 6       | 1           |              | 1             | 0               |
| NE    | 3           |             | 1    | 2            | 9       | 0           |              | 2             | 0               |
| E     | 0           |             | 0    | 3            | 0       | 8           |              | 0             | 17              |
| SE    | 9           |             | 6    | 5            | 1       | 2           |              | 11            | 0               |
| S     | 0           |             | 7    | 3            | 0       | 5           |              | 10            | 0               |
| SW    | 33          |             | 31   | 11           | 53      | 11          |              | 19            | 0               |
| W     | 2           |             | 32   | 53           | 19      | 36          |              | 21            | 39              |
| NW    | 35          |             | 8    | 10           | 2       | 17          |              | 16            | 0               |
| Ciszy | 3           |             | 2    | 2            | —       | 10          |              | 10            | 34              |
| brak  | —           |             | —    | —            | —       | —           |              | —             | —               |

Nie zapisywano spostrzeżeń.

## nek wiatru

kierunków wiatru i cisz.

Grudzień 1899 roku.

| Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków | Boch-<br>nia | Szczaw-<br>nica |
|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|--------------|-----------------|
| W                       | W            | SW          | NW            | NW                   | SE            | WSW         | NW           | S               |
| W                       | W            | SW          | SW            | NW                   | SW            | W           | NW           | N               |
| NW                      | NW           | NW          | W             | NW                   | NW            | NNW         | NW           | N               |
| SW                      | W            | SW          | W             | NW                   | SW            | WNW         | NW           | N               |
| W                       | W            | W           | W             | NW                   | SW            | WSW         | NW           | NW              |
| NW                      | NW           | W           | W             | NW                   | SW            | WNW         | NW           | W               |
| W                       | N            | NE          | NW            | NW                   | SE            | NNW         | NW           | N               |
| SE                      | S            | W           | NE            | E                    | SW            | NNE         | NW           | W               |
| SE                      | NE           | NE          | NE            | E                    | SW            | NNE         | E            | N               |
| SW                      | N            | NE          | SE            | SE                   | NE            | ENE         | NE           | SW              |
| —                       | NE           | W           | SW            | E                    | SW            | ENE         | E            | W               |
| E                       | NE           | W           | SE            | SE                   | E             | ENE         | NW           | NW              |
| SE                      | NE           | SW          | SE            | SE                   | SE            | ENE         | E            | NE              |
| SW                      | N            | NE          | S             | SW                   | SE            | NE          | NW           | E               |
| SW                      | NW           | NW          | SW            | SW                   | SE            | WSW         | W            | E               |
| SW                      | N            | SW          | SW            | SW                   | NE            | W           | W            | W               |
| E                       | NE           | W           | SW            | SW                   | SE            | ESE         | NW           | W               |
| E                       | NE           | SW          | SW            | NW                   | SE            | ESE         | W            | W               |
| —                       | NE           | E           | NW            | E                    | E             | ESE         | SE           | NE              |
| SW                      | E            | NE          | E             | E                    | SE            | E           | SE           | E               |
| SE                      | E            | W           | NE            | E                    | SE            | E           | SE           | E               |
| SE                      | NE           | E           | NE            | E                    | NE            | E           | W            | W               |
| E                       | N            | E           | SE            | E                    | NE            | E           | E            | W               |
| SE                      | NW           | SW          | NE            | E                    | SE            | W           | SE           | E               |
| W                       | W            | SW          | W             | E                    | SE            | W           | NW           | E               |
| SW                      | S            | SW          | W             | W                    | NW            | W           | NW           | E               |
| SW                      | S            | SW          | W             | W                    | NE            | W           | W            | NE              |
| SW                      | S            | S           | SW            | E                    | NE            | W           | SW           | E               |
| SW                      | S            | SW          | W             | SW                   | NW            | WNW         | SW           | SW              |
| SW                      | S            | SW          | W             | SW                   | NE            | NNW         | SW           | E               |
| 0                       | 23           | 2           | 4             | 0                    | 1             | 7°0         | 0            | 17              |
| 0                       | 12           | 16          | 11            | 0                    | 21            | 11°5        | 2            | 12              |
| 6                       | 8            | 14          | 5             | 40                   | 8             | 30°0        | 13           | 30              |
| 17                      | 0            | 2           | 15            | 12                   | 27            | 2°5         | 13           | 0               |
| 3                       | 17           | 8           | 2             | 0                    | 1             | 1°0         | 0            | 3               |
| 27                      | 0            | 25          | 18            | 12                   | 20            | 5°0         | 9            | 5               |
| 14                      | 15           | 20          | 23            | 7                    | 0             | 26°0        | 14           | 19              |
| 9                       | 7            | 6           | 15            | 22                   | 15            | 10°0        | 42           | 7               |
| 17                      | 11           | —           | —             | —                    | —             | —           | —            | —               |
| —                       | —            | —           | —             | —                    | —             | —           | —            | —               |





## nek wiatru

kierunków wiatru i cisz.

| Stare-<br>miasto                                         | Sam-<br>bor                                              | Doli-<br>na                                     | Lwów                                                        | Du-<br>blany                                      | Dela-<br>tyn                                             | Oży-<br>dów                                        | Horo-<br>denka                                     | Tar-<br>nopól                                      | Jagiel-<br>nica                                     |
|----------------------------------------------------------|----------------------------------------------------------|-------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------|----------------------------------------------------------|----------------------------------------------------|----------------------------------------------------|----------------------------------------------------|-----------------------------------------------------|
| NW<br>SW<br>NW<br>NW<br>W<br>NW<br>N<br>N<br>E<br>E      | NW<br>SW<br>NW<br>NW<br>SW<br>NW<br>NW<br>NW<br>E<br>SE  | W<br>W<br>W<br>W<br>W<br>W<br>W<br>W<br>NE<br>E | W<br>SW<br>NW<br>W<br>W<br>NW<br>W<br>W<br>E<br>E           | W<br>W<br>W<br>NW<br>W<br>NW<br>W<br>NE<br>E      | N<br>SW<br>SW<br>SW<br>SW<br>SW<br>SW<br>SW<br>SW<br>SW  | W<br>SW<br>W<br>W<br>W<br>NW<br>W<br>E<br>E        | SW<br>NW<br>NW<br>NW<br>NW<br>NW<br>NW<br>NW<br>SE | NW<br>SW<br>W<br>W<br>SW<br>W<br>W<br>E<br>SE      | W<br>W<br>NW<br>W<br>NW<br>NW<br>NW<br>NW<br>E<br>E |
| E<br>E<br>E<br>SW<br>S<br>SW<br>NW<br>E<br>E<br>NE       | SE<br>SE<br>SE<br>SE<br>SE<br>SE<br>SE<br>SE<br>SE<br>SE | E<br>E<br>E<br>W<br>W<br>E<br>E<br>E<br>E<br>E  | E<br>SE<br>E<br>S<br>SE<br>SE<br>SE<br>SE<br>E<br>E         | E<br>E<br>SE<br>SE<br>E<br>E<br>E<br>SE<br>E      | SW<br>SW<br>SW<br>SW<br>N<br>NE<br>NE<br>NE<br>NE        | NE<br>NE<br>E<br>SE<br>E<br>E<br>E<br>E<br>E       | SE<br>SE<br>SE<br>SW<br>SW<br>SE<br>SE<br>SE<br>SE | SE<br>E<br>SE<br>SE<br>SE<br>E<br>E<br>SE<br>E     | E<br>E<br>E<br>E<br>E<br>E<br>SE<br>E<br>E          |
| E<br>SW<br>S<br>E<br>SW<br>SW<br>E<br>N<br>S<br>SW<br>SW | SE<br>SE<br>SE<br>E<br>SE<br>SE<br>SE<br>SW<br>SW<br>SW  | E<br>E<br>E<br>E<br>E<br>E<br>W<br>W<br>W       | E<br>NE<br>SE<br>SE<br>S<br>SE<br>SE<br>SE<br>SE<br>SW<br>S | E<br>E<br>SE<br>E<br>SE<br>SE<br>S<br>S<br>S      | NE<br>NE<br>SW<br>NE<br>SW<br>SW<br>SW<br>SW<br>SW<br>SW | E<br>E<br>E<br>SE<br>SE<br>S<br>SE<br>S<br>S       | SE<br>SW<br>SW<br>SE<br>SW<br>SW<br>SW<br>SW<br>SW | NE<br>NE<br>SE<br>SE<br>SE<br>SE<br>SE<br>SE<br>SE | NE<br>S<br>E<br>E<br>S<br>E<br>E<br>E<br>E<br>—     |
| 8<br>5<br>24<br>3<br>12<br>21<br>4<br>12<br>4<br>—       | 0<br>0<br>4<br>54<br>0<br>17<br>1<br>16<br>1<br>—        |                                                 | 1<br>4<br>17<br>30<br>13<br>8<br>9<br>9<br>2<br>—           | 0<br>2<br>24<br>34<br>6<br>3<br>15<br>8<br>1<br>— | 6<br>18<br>1<br>0<br>0<br>62<br>3<br>3<br>—<br>—         | 0<br>6<br>28<br>15<br>14<br>4<br>17<br>3<br>6<br>— | 0<br>0<br>0<br>29<br>0<br>40<br>0<br>24<br>—<br>—  | 0<br>5<br>15<br>45<br>2<br>6<br>13<br>4<br>3<br>—  | 3<br>6<br>45<br>5<br>5<br>4<br>10<br>5<br>10<br>—   |

Stan zachmu-  
Średnie

*Styczeń 1899 roku.*

| Dzień          | Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków | Boch-<br>nia | Szczaw-<br>nica |
|----------------|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|--------------|-----------------|
| 1              | 7·3                     | 10·0         | 7·7         | 10·0          | 10·0                 | 10·0          | 10·0        | 8·3          | 7·3             |
| 2              | 9·7                     | 7·0          | 8·7         | 10·0          | 8·3                  | 5·3           | 7·3         | 6·3          | 5·3             |
| 3              | 10·0                    | 10·0         | 10·0        | 10·0          | 10·0                 | 10·0          | 10·0        | 10·0         | 10·0            |
| 4              | 9·3                     | 8·3          | 10·0        | 10·0          | 10·0                 | 10·0          | 7·7         | 10·0         | 10·0            |
| 5              | 1·3                     | 3·3          | 5·3         | 6·0           | 3·7                  | 6·0           | 6·0         | 3·3          | 10·0            |
| 6              | 3·3                     | 9·0          | 6·3         | 10·0          | 9·3                  | 9·3           | 9·7         | 7·7          | 8·7             |
| 7              | 4·3                     | 0·0          | 2·3         | 4·0           | 3·3                  | 0·3           | 4·3         | 7·7          | 3·3             |
| 8              | 10·0                    | 10·0         | 10·0        | 10·0          | 8·7                  | 9·7           | 8·3         | 8·7          | 8·7             |
| 9              | 2·3                     | 2·7          | 3·0         | 6·0           | 4·0                  | 1·0           | 3·3         | 5·0          | 4·0             |
| 10             | 6·3                     | 3·3          | 2·3         | 4·0           | 4·0                  | 0·7           | 3·7         | 2·7          | 5·0             |
| 11             | 5·7                     | 4·0          | 3·3         | 4·0           | 6·3                  | 5·3           | 4·0         | 3·3          | 4·0             |
| 12             | 8·3                     | 6·7          | 5·3         | 7·0           | 7·0                  | —             | 6·0         | 2·3          | 5·3             |
| 13             | 9·0                     | 7·7          | 8·3         | 10·0          | 10·0                 | 10·0          | 10·0        | 10·0         | 10·0            |
| 14             | 10·0                    | 10·0         | 10·0        | 10·0          | 10·0                 | 10·0          | 10·0        | 9·3          | 10·0            |
| 15             | 10·0                    | 10·0         | 7·3         | 10·0          | 10·0                 | 8·3           | 10·0        | 6·7          | 6·7             |
| 16             | 10·0                    | 8·7          | 9·7         | 10·0          | 10·0                 | 10·0          | 10·0        | 9·3          | 10·0            |
| 17             | 9·7                     | 8·3          | 8·7         | 7·0           | 10·0                 | 10·0          | 7·3         | 7·7          | 9·3             |
| 18             | 6·7                     | 5·3          | 8·3         | 6·0           | 4·7                  | 4·3           | 7·7         | 3·3          | 7·3             |
| 19             | 7·3                     | 8·0          | 8·3         | 10·0          | 7·3                  | 9·0           | 7·7         | 7·3          | 9·3             |
| 20             | 6·7                     | 5·3          | 8·3         | 10·0          | 9·3                  | 8·3           | 9·3         | 6·0          | 7·7             |
| 21             | 7·0                     | 7·7          | 8·0         | 10·0          | 8·7                  | 7·7           | 10·0        | 0·0          | 10·0            |
| 22             | 2·0                     | 0·0          | 2·3         | 0·0           | 0·0                  | 0·3           | 1·0         | 0·0          | 0·0             |
| 23             | 1·0                     | 1·3          | 0·3         | 0·0           | 3·3                  | 0·0           | 3·3         | 7·7          | 0·0             |
| 24             | 5·0                     | 8·3          | 5·3         | 7·0           | 9·7                  | 2·0           | 9·3         | 3·7          | 2·7             |
| 25             | 8·3                     | 10·0         | 10·0        | 10·0          | 10·0                 | 10·0          | 10·0        | 10·0         | 10·0            |
| 26             | 1·7                     | 2·3          | 2·7         | 4·0           | 6·0                  | 3·3           | 4·7         | 6·0          | 4·0             |
| 27             | 1·0                     | 0·3          | 0·7         | 0·0           | 3·3                  | 0·0           | 3·7         | 0·0          | 0·0             |
| 28             | 3·3                     | 3·7          | 3·7         | 3·0           | 0·0                  | 0·7           | 3·3         | 0·0          | 1·0             |
| 29             | 6·3                     | 9·3          | 8·7         | 10·0          | 10·0                 | 7·7           | 10·0        | 7·0          | 9·7             |
| 30             | 3·3                     | 1·3          | 9·0         | 3·0           | 7·3                  | 10·0          | 4·3         | 6·0          | 6·0             |
| 31             | 3·3                     | 4·0          | 6·7         | 4·0           | 3·3                  | 0·3           | 4·0         | —            | 1·0             |
| Śred.<br>mies. | 6·1                     | 6·0          | 6·5         | 6·9           | 7·0                  | 5·8           | 7·0         | 5·8          | 6·3             |

rzenia nieba.  
dzienne.

| Kry-<br>nica | Tar-<br>nów | Pilzno | Iwo-<br>nicz | Rze-<br>szów | Smol-<br>nik | Sanok | Prze-<br>myśl | Stare-<br>miasto |
|--------------|-------------|--------|--------------|--------------|--------------|-------|---------------|------------------|
| 10'0         | 8'0         | 7'3    | 2'3          | 10'0         | 10'0         | 9'0   | 5'3           | 4'0              |
| 6'7          | 8'7         | 9'0    | 5'7          | 6'7          | 9'0          | 7'0   | 7'3           | 5'0              |
| 10'0         | 10'0        | 10'0   | 10'0         | 10'0         | 10'0         | 10'0  | 7'7           | 5'7              |
| 10'0         | 10'0        | 10'0   | 10'0         | 10'0         | 10'0         | 10'0  | 8'0           | 10'0             |
| 4'3          | 5'3         | 10'0   | 7'3          | 5'0          | 6'7          | 7'0   | 6'0           | 4'0              |
| 10'0         | 7'0         | 5'0    | 2'7          | 0'0          | 7'7          | 10'0  | 6'0           | 5'7              |
| 6'3          | 8'7         | 5'0    | 6'3          | 3'3          | 6'3          | 7'0   | 2'0           | 4'0              |
| 10'0         | 10'0        | 8'0    | 8'3          | 3'3          | 10'0         | 8'0   | 1'7           | 5'3              |
| 10'0         | 5'0         | 5'7    | 10'0         | 5'0          | 10'0         | 6'0   | 4'3           | 3'3              |
| 4'3          | 1'3         | 2'0    | 3'0          | 5'0          | 6'7          | 4'0   | 0'0           | 0'0              |
| 5'0          | 2'3         | 6'3    | 2'3          | 5'0          | 6'3          | 2'0   | 2'7           | 3'0              |
| 8'3          | 2'7         | 6'7    | 4'0          | 5'0          | 7'7          | 2'0   | 1'3           | 1'0              |
| 10'0         | 10'0        | 10'0   | 5'0          | 10'0         | 10'0         | 10'0  | 6'7           | 6'3              |
| 10'0         | 7'0         | 10'0   | 10'0         | 10'0         | 10'0         | 10'0  | 8'7           | 9'7              |
| 10'0         | 10'0        | 8'3    | 5'7          | 10'0         | 10'0         | 8'0   | 7'3           | 7'0              |
| 10'0         | 10'0        | 10'0   | 8'0          | 10'0         | 10'0         | 10'0  | 7'0           | 6'3              |
| 10'0         | 8'0         | 9'3    | 10'0         | 10'0         | 9'3          | 10'0  | 6'7           | 4'7              |
| 4'3          | 3'3         | 6'0    | 3'3          | 6'7          | 9'0          | 6'0   | 6'3           | 8'0              |
| 10'0         | 7'0         | 9'3    | 5'0          | 10'0         | 9'3          | 8'0   | 3'7           | 4'0              |
| 10'0         | 5'3         | 9'7    | 8'7          | 10'0         | 9'0          | 8'0   | 3'7           | 4'3              |
| 10'0         | 6'3         | 10'0   | 8'3          | 10'0         | 10'0         | 8'0   | 6'0           | 5'0              |
| 10'0         | 5'0         | 1'0    | 2'3          | 1'7          | 4'0          | 0'0   | 0'0           | 0'0              |
| 6'7          | 1'3         | 1'0    | 2'3          | 0'0          | 9'3          | 0'0   | 0'0           | 6'0              |
| 3'3          | 8'3         | 4'7    | 2'7          | 0'0          | 6'3          | 2'0   | 2'7           | 1'3              |
| 10'0         | 10'0        | 10'0   | 10'0         | 10'0         | 9'7          | 10'0  | 0'3           | 10'0             |
| 3'3          | 4'0         | 3'0    | 2'0          | 0'0          | 1'7          | 3'0   | 1'0           | 4'7              |
| 0'0          | 0'7         | 0'0    | 2'0          | 0'0          | 0'3          | 0'0   | 0'0           | 0'0              |
| 0'0          | 1'0         | 5'0    | 2'7          | 0'0          | 0'7          | 1'0   | 0'0           | 0'0              |
| 10'0         | 4'7         | 10'0   | 5'0          | 1'7          | 10'0         | 10'0  | 7'3           | 5'0              |
| 8'0          | 7'0         | 9'7    | 5'7          | 5'3          | 8'3          | 7'0   | 5'3           | 7'3              |
| 1'0          | 10'0        | 5'7    | 4'7          | 5'0          | 3'7          | 4'0   | 1'7           | 1'3              |
| 7'5          | 6'4         | 7'0    | 5'7          | 5'8          | 7'8          | 6'4   | 4'4           | 4'4              |

Stan zachmu-  
Średnie

*Styczeń 1899 roku.*

| Dzień          | Sam-<br>bor | Lwów | Du-<br>blany | Delatyn | Oży-<br>dów | Krzywo-<br>równia | Ober-<br>tyn | Tarno-<br>pol | Jagiel-<br>uica |
|----------------|-------------|------|--------------|---------|-------------|-------------------|--------------|---------------|-----------------|
| 1              | 7·3         | 9·7  | 10·0         | 6·3     | 10·0        | —                 | 7·3          | 9·0           | 7·7             |
| 2              | 5·7         | 5·3  | 7·0          | 6·7     | 6·7         | 10·0              | 10·0         | 7·3           | 5·0             |
| 3              | 9·0         | 8·7  | 9·0          | 7·7     | 7·7         | 10·0              | 8·7          | 9·0           | 6·0             |
| 4              | 10·0        | 10·0 | 10·0         | 10·0    | 8·7         | 5·3               | 10·0         | 10·0          | 10·0            |
| 5              | 5·0         | 10·0 | 10·0         | 6·7     | 10·0        | 0·0               | 10·0         | 10·0          | 6·7             |
| 6              | 10·0        | 10·0 | 10·0         | 6·0     | 9·7         | 5·3               | 8·0          | 8·3           | 10·0            |
| 7              | 6·3         | 7·7  | 9·7          | 8·3     | 9·7         | 0·0               | 10·0         | 10·0          | 10·0            |
| 8              | 9·3         | 9·3  | 9·0          | 7·7     | 8·7         | 1·0               | 9·7          | 10·0          | 10·0            |
| 9              | 5·7         | 9·7  | 10·0         | 5·3     | 9·7         | 0·0               | 10·0         | 10·0          | 10·0            |
| 10             | 2·7         | 0·7  | 0·3          | 0·7     | 3·0         | 0·0               | 1·3          | 5·3           | 4·0             |
| 11             | 5·3         | 2·7  | 4·3          | 3·7     | 3·3         | 0·0               | 7·3          | 7·3           | 8·7             |
| 12             | 9·3         | 5·0  | 5·7          | 9·3     | 9·3         | 6·7               | 10·0         | 8·7           | 10·0            |
| 13             | 8·0         | 7·7  | 7·7          | 8·3     | 8·3         | 10·0              | 8·0          | 8·7           | 10·0            |
| 14             | 10·0        | 10·0 | 10·0         | 10·0    | 10·0        | 10·0              | 9·3          | 6·7           | 10·0            |
| 15             | 10·0        | 10·0 | 10·0         | 10·0    | 10·0        | 9·0               | 9·7          | 10·0          | 10·0            |
| 16             | 9·7         | 7·7  | 7·7          | 7·3     | 8·7         | 0·0               | 6·7          | 9·0           | 10·0            |
| 17             | 9·3         | 9·7  | 9·7          | 7·3     | 9·3         | 7·0               | 9·3          | 8·3           | 7·7             |
| 18             | 4·3         | 9·7  | 10·0         | 5·7     | 6·3         | 5·0               | 9·3          | 9·0           | 9·3             |
| 19             | 7·7         | 8·7  | 9·7          | 3·3     | 8·3         | 6·0               | 7·0          | 8·7           | 9·3             |
| 20             | 6·7         | 6·7  | 9·0          | 4·3     | 7·0         | 0·0               | 6·7          | 9·0           | 9·3             |
| 21             | 5·7         | 9·3  | 10·0         | 7·3     | 10·0        | 0·0               | 10·0         | 10·0          | 10·0            |
| 22             | 0·0         | 0·7  | 0·3          | 3·0     | 2·3         | 0·0               | 0·7          | 1·3           | 2·7             |
| 23             | 0·0         | 0·3  | 0·0          | 0·3     | 0·7         | 0·0               | 0·0          | 0·0           | 0·3             |
| 24             | 2·0         | 4·3  | 4·3          | 9·7     | 7·0         | 2·3               | 10·0         | 8·0           | 7·0             |
| 25             | 10·0        | 10·0 | 10·0         | 10·0    | 9·3         | 10·0              | 10·0         | 10·0          | 10·0            |
| 26             | 6·3         | 0·7  | 0·0          | 8·7     | 0·3         | 3·3               | 6·3          | 2·7           | 3·0             |
| 27             | 1·7         | 0·7  | 0·0          | 0·3     | 0·0         | 0·0               | 0·0          | 0·0           | 0·0             |
| 28             | 2·3         | 1·3  | 1·7          | 2·0     | 1·7         | 0·0               | 1·0          | 3·3           | 0·7             |
| 29             | 9·3         | 9·3  | 9·7          | 3·7     | 9·7         | 4·7               | 7·0          | 10·0          | 3·3             |
| 30             | 5·0         | 0·3  | 7·0          | 10·0    | 7·0         | 0·0               | 9·3          | 6·7           | 0·7             |
| 31             | 2·3         | 3·7  | 4·0          | 4·3     | 6·3         | 3·3               | 4·0          | 7·0           | 3·3             |
| Śred.<br>mies. | 6·3         | 6·6  | 7·0          | 6·3     | 7·1         | 3·6               | 7·3          | 7·5           | 6·9             |

rzenia nieba  
dzienne.

Luty 1899 roku.

| Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków | Boch-<br>nia | Szczaw-<br>nica |
|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|--------------|-----------------|
| 9·7                     | 10·0         | 10·0        | 10·0          | 10·0                 | 8·0           | 10·0        | 10·0         | 9·0             |
| 9·0                     | 8·7          | 7·3         | 10·0          | 4·0                  | 6·0           | 9·3         | 9·3          | 7·0             |
| 10·0                    | 10·0         | 10·0        | 10·0          | 10·0                 | 10·0          | 10·0        | 10·0         | 10·0            |
| 8·0                     | 8·3          | 10·0        | 7·0           | 10·0                 | 4·0           | 9·7         | 8·3          | 7·7             |
| 7·0                     | 4·3          | 2·3         | 4·0           | 7·3                  | 3·3           | 7·7         | 5·7          | 4·7             |
| 9·0                     | 4·3          | 4·7         | 6·0           | 3·7                  | 5·0           | 3·3         | 4·0          | 6·7             |
| 10·0                    | 10·0         | 10·0        | 10·0          | 10·0                 | 9·7           | 6·7         | 6·7          | 8·7             |
| 9·7                     | 8·3          | 7·3         | 10·0          | 10·0                 | 6·7           | 10·0        | 10·0         | 7·0             |
| 9·0                     | 9·7          | 7·0         | 10·0          | 10·0                 | 9·3           | 8·3         | 8·7          | 5·7             |
| 6·7                     | 7·0          | 5·3         | 7·0           | 9·7                  | 5·0           | 7·3         | 8·0          | 5·3             |
| 1·0                     | 0·0          | 0·0         | 0·0           | 0·0                  | 0·0           | 0·0         | 0·0          | 0·0             |
| 4·3                     | 3·3          | 6·0         | 9·0           | 7·3                  | 3·7           | 6·7         | 4·0          | 3·0             |
| 9·7                     | 8·7          | 7·7         | 9·0           | 9·3                  | 8·0           | 7·0         | 6·7          | 6·3             |
| 5·7                     | 4·0          | 4·7         | 7·0           | 7·3                  | 5·0           | 5·7         | 2·7          | 3·7             |
| 7·7                     | 4·7          | 4·3         | 7·0           | 4·3                  | 6·0           | 5·7         | 2·7          | 4·0             |
| 4·7                     | 3·3          | 2·3         | 5·0           | 1·7                  | 1·7           | 2·7         | 1·7          | 2·3             |
| 10·0                    | 10·0         | 10·0        | 10·0          | 10·0                 | 10·0          | 10·0        | 8·7          | 10·0            |
| 6·0                     | 4·0          | 3·3         | 10·0          | 9·3                  | 4·0           | 10·0        | 6·0          | 9·3             |
| 3·0                     | 0·3          | 1·7         | 3·0           | 3·3                  | 3·7           | 3·3         | 0·7          | 2·3             |
| 6·3                     | 4·7          | 4·7         | 6·0           | 3·7                  | 2·0           | 3·7         | 2·7          | 5·7             |
| 10·0                    | 10·0         | 10·0        | 10·0          | 10·0                 | 9·7           | 9·7         | 9·3          | 10·0            |
| 10·0                    | 10·0         | 9·7         | 10·0          | 10·0                 | 10·0          | 10·0        | 8·3          | 10·0            |
| 10·0                    | 9·0          | 10·0        | 10·0          | 10·0                 | 10·0          | 10·0        | 5·0          | 10·0            |
| 10·0                    | 9·7          | 10·0        | 10·0          | 9·7                  | 7·3           | 10·0        | 4·0          | 8·7             |
| 9·0                     | 6·0          | 10·0        | 10·0          | 10·0                 | 9·3           | 10·0        | 10·0         | 9·7             |
| 9·7                     | 8·3          | 9·3         | 10·0          | 2·3                  | 9·3           | 6·7         | 1·7          | 9·3             |
| 10·0                    | 10·0         | 10·0        | 10·0          | 10·0                 | 10·0          | 10·0        | 10·0         | 10·0            |
| 10·0                    | 10·0         | 10·0        | 10·0          | 10·0                 | 10·0          | 10·0        | 10·0         | 10·0            |
| 8·0                     | 7·0          | 7·1         | 8·2           | 7·6                  | 6·7           | 7·6         | 6·2          | 7·0             |

Stan zachmu-  
Średnie

*Luty 1899 roku.*

| Dzień          | Kry-<br>nica | Tar-<br>nów | Pilzno | Iwo-<br>niec | Rze-<br>szów | Smol-<br>nik | Sanok | Prze-<br>myśl | Stare-<br>miasto |
|----------------|--------------|-------------|--------|--------------|--------------|--------------|-------|---------------|------------------|
| 1              | 10'0         | 10'0        | 9'7    | 5'7          | 10'0         | 10'0         | 10'0  | 6'7           | 6'0              |
| 2              | 9'0          | 7'3         | 9'3    | 4'7          | 10'0         | 4'3          | 9'0   | 3'3           | 1'0              |
| 3              | 5'0          | 10'0        | 10'0   | 10'0         | 8'3          | 10'0         | 10'0  | 6'3           | 10'0             |
| 4              | 9'0          | 10'0        | 9'3    | 10'0         | 1'7          | 9'7          | 10'0  | 4'0           | 5'0              |
| 5              | 8'3          | 6'0         | 2'7    | 4'7          | 6'7          | 4'7          | 2'0   | 0'0           | 2'0              |
| 6              | 6'7          | 3'7         | 3'7    | 5'0          | 3'3          | 6'7          | 4'0   | 4'3           | 4'7              |
| 7              | 10'0         | 10'0        | 9'7    | 7'3          | 3'3          | 10'0         | 6'0   | 4'7           | 5'0              |
| 8              | 10'0         | 10'0        | 10'0   | 10'0         | 10'0         | 10'0         | 10'0  | 8'0           | 5'0              |
| 9              | 10'0         | 7'7         | 10'0   | 10'0         | 10'0         | 10'0         | 9'0   | 5'3           | 4'0              |
| 10             | 7'7          | 6'7         | 10'0   | 7'3          | 6'7          | 6'7          | 7'0   | 3'3           | 1'0              |
| 11             | 7'7          | 4'0         | 0'0    | 2'3          | 0'0          | 2'3          | 0'1   | 0'0           | 1'0              |
| 12             | 8'3          | 3'3         | 5'7    | 2'7          | 0'0          | 2'3          | 1'0   | 0'0           | 1'3              |
| 13             | 6'7          | 2'7         | 9'0    | 5'7          | 0'0          | 9'0          | 6'0   | 4'0           | 4'0              |
| 14             | 5'0          | 3'3         | 6'0    | 3'0          | 0'0          | 3'3          | 5'0   | 4'7           | 3'0              |
| 15             | 5'0          | 3'0         | 5'7    | 3'3          | 0'0          | 4'0          | 4'0   | 1'3           | 1'0              |
| 16             | 2'7          | 3'3         | 4'9    | 2'7          | 0'0          | 2'7          | 3'0   | 1'7           | 1'0              |
| 17             | 10'0         | 10'0        | 10'0   | 8'0          | 10'0         | 10'0         | 10'0  | 6'7           | 7'3              |
| 18             | 10'0         | 7'7         | 10'0   | 7'7          | 0'0          | 10'0         | 9'0   | 7'0           | 8'0              |
| 19             | 3'3          | 1'0         | 4'0    | 2'7          | 0'0          | 4'0          | 1'0   | 2'3           | 3'0              |
| 20             | 5'7          | 7'7         | 5'3    | 2'7          | 0'0          | 8'7          | 4'0   | 2'0           | 2'3              |
| 21             | 10'0         | 10'0        | 10'0   | 10'0         | 10'0         | 10'0         | 10'0  | 7'3           | 9'3              |
| 22             | 10'0         | 10'0        | 10'0   | 10'0         | 6'7          | 9'7          | 10'0  | 5'3           | 10'0             |
| 23             | 10'0         | 10'0        | 10'0   | 6'0          | 5'0          | 10'0         | 9'0   | 5'7           | 9'3              |
| 24             | 10'0         | 7'3         | 9'7    | 7'3          | 5'0          | 9'7          | 10'0  | 4'0           | 9'0              |
| 25             | 10'0         | 6'3         | 6'3    | 2'9          | 0'0          | 6'7          | 4'0   | 1'7           | 6'0              |
| 26             | 6'7          | 4'7         | 6'0    | 7'3          | 0'0          | 6'7          | 1'0   | 1'0           | 4'7              |
| 27             | 10'0         | 10'0        | 10'0   | 10'0         | 6'7          | 10'0         | 10'0  | 6'7           | 10'0             |
| 28             | 10'0         | 10'0        | 10'0   | 10'0         | 10'0         | 10'0         | 10'0  | 8'0           | 8'0              |
| Śred.<br>mies. | 8'1          | 7'0         | 7'7    | 6'4          | 4'4          | 7'5          | 6'6   | 4'1           | 5'1              |

rzienia nieba.  
dzienne.

| Sam-<br>bor | Lwów | Du-<br>blany | Delatyn | Oży-<br>dów | Krzywo-<br>równia | Ober-<br>tyn | Tar-<br>nopol | Ja-<br>giel-<br>nica |
|-------------|------|--------------|---------|-------------|-------------------|--------------|---------------|----------------------|
| 5·3         | 8·0  | 9·3          | 6·0     | 9·0         | 8·0               | 10·0         | 10·0          | 9·0                  |
| 7·3         | 6·3  | 6·3          | 3·3     | 9·3         | 2·0               | 1·7          | 6·7           | 3·0                  |
| 10·0        | 10·0 | 10·0         | 10·0    | 10·0        | 9·0               | 10·0         | 10·0          | 8·0                  |
| 7·3         | 6·0  | 8·7          | 8·0     | 6·0         | 10·0              | 7·7          | 9·7           | 10·0                 |
| 2·7         | 1·7  | 2·7          | 0·3     | 0·3         | 0·0               | 0·0          | 4·0           | 3·0                  |
| 4·7         | 5·7  | 6·0          | 6·7     | 6·0         | 10·0              | 4·0          | 6·3           | 4·3                  |
| 6·3         | 6·7  | 6·7          | 1·0     | 6·0         | 5·7               | 6·7          | 6·7           | 5·6                  |
| 9·3         | 10·0 | 10·0         | 6·7     | 10·0        | 0·0               | 10·0         | 10·0          | 10·0                 |
| 7·7         | 10·0 | 10·0         | 8·3     | 10·0        | 5·7               | 10·0         | 10·0          | 10·0                 |
| 6·0         | 6·0  | 5·7          | 8·0     | 9·0         | 2·0               | 7·0          | 10·0          | 10·0                 |
| 2·7         | 0·3  | 0·3          | 0·0     | 0·3         | 0·0               | 0·0          | 0·3           | 0·0                  |
| 4·3         | 2·3  | 3·0          | 1·7     | 5·0         | 0·0               | 6·7          | 4·3           | 3·3                  |
| 7·0         | 9·7  | 10·0         | 4·3     | 9·0         | 8·0               | 7·0          | 9·3           | 5·0                  |
| 4·7         | 3·7  | 4·0          | 3·0     | 7·3         | 5·3               | 6·7          | 6·7           | 5·7                  |
| 5·0         | 4·3  | 5·0          | 7·3     | 4·7         | 5·3               | 7·3          | 7·7           | 5·0                  |
| 4·0         | 2·3  | 2·3          | 2·0     | 2·0         | 5·7               | 3·3          | 3·7           | 10·0                 |
| 4·0         | 8·7  | 10·0         | 10·0    | 9·7         | 10·0              | 7·7          | 10·0          | 10·0                 |
| 9·7         | 10·0 | 10·0         | 10·0    | 10·0        | 5·7               | 10·0         | 10·0          | 10·0                 |
| 6·7         | 6·0  | 6·7          | 6·3     | 6·0         | 2·0               | 6·7          | 10·0          | 10·0                 |
| 3·0         | 4·7  | 4·7          | 1·7     | 1·3         | 10·0              | 3·0          | 5·0           | 2·3                  |
| 9·7         | 9·3  | 9·7          | 9·3     | 9·7         | 10·0              | 10·0         | 10·0          | 6·7                  |
| 10·0        | 9·3  | 10·0         | 9·0     | 8·7         | 9·0               | 10·0         | 10·0          | 10·0                 |
| 9·7         | 8·7  | 9·3          | 9·3     | 9·0         | 10·0              | 7·7          | 9·0           | 10·0                 |
| 4·7         | 8·0  | 7·3          | 10·0    | 7·3         | 10·0              | 10·0         | 9·0           | 8·3                  |
| 7·3         | 8·7  | 8·3          | 10·0    | 8·0         | 10·0              | 10·0         | 10·0          | 10·0                 |
| 2·0         | 6·3  | 7·0          | 8·3     | 6·7         | 10·0              | 10·0         | 9·0           | 10·0                 |
| 10·0        | 10·0 | 10·0         | 9·3     | 9·7         | 10·0              | 10·0         | 9·7           | 9·0                  |
| 10·0        | 10·0 | 10·0         | 9·0     | 10·0        | 10·0              | 10·0         | 10·0          | 10·0                 |
| 6·5         | 6·9  | 7·2          | 6·4     | 7·1         | 6·5               | 7·3          | 8·1           | 7·4                  |

Stan zachmu-  
Średnie

Marzec 1899 roku.

| Dzień          | Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków | Boch-<br>nia | Szczaw-<br>nica |
|----------------|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|--------------|-----------------|
| 1              | 10'0                    | 10'0         | 10'0        | 10'0          | 10'0                 | 10'0          | 10'0        | 10'0         | 10'0            |
| 2              | 10'0                    | 9'3          | 10'0        | 10'0          | 10'0                 | 10'0          | 10'0        | 10'0         | 10'0            |
| 3              | 9'7                     | 8'7          | 8'3         | 10'0          | 10'0                 | 10'0          | 10'0        | 6'3          | 10'0            |
| 4              | 9'3                     | 6'7          | 7'3         | 10'0          | 10'0                 | 7'3           | 10'0        | 8'7          | 5'3             |
| 5              | 9'0                     | 6'3          | 9'7         | 10'0          | 10'0                 | 10'0          | 9'7         | 7'7          | 9'0             |
| 6              | 2'7                     | 0'0          | 4'0         | 3'0           | 0'0                  | 3'3           | 0'0         | 0'0          | 3'3             |
| 7              | 2'0                     | 0'0          | 2'3         | 2'0           | 0'7                  | 0'3           | 2'0         | 0'0          | 0'0             |
| 8              | 3'7                     | 3'0          | 1'7         | 8'0           | 2'0                  | 3'7           | 6'3         | 1'3          | 1'7             |
| 9              | 2'3                     | 1'0          | 0'3         | 5'0           | 2'3                  | 3'3           | 2'0         | 2'7          | 3'0             |
| 10             | 3'0                     | 0'0          | 8'3         | 3'0           | 0'7                  | 1'7           | 0'3         | 0'7          | 1'0             |
| 11             | 7'0                     | 10'0         | 8'3         | 10'0          | 10'0                 | 3'3           | 8'0         | 8'0          | 6'7             |
| 12             | 6'3                     | 7'7          | 4'7         | 9'0           | 6'7                  | —             | 6'7         | 5'0          | 6'0             |
| 13             | 4'3                     | 1'0          | 1'7         | 1'0           | 0'3                  | 3'3           | 1'7         | 0'7          | 3'3             |
| 14             | 1'0                     | 0'3          | 7'0         | 0'0           | 0'0                  | 1'7           | 1'3         | 0'7          | 0'0             |
| 15             | 6'0                     | 6'7          | 7'3         | 7'0           | 6'7                  | —             | 6'3         | 6'7          | 6'7             |
| 16             | 8'0                     | 3'0          | 9'0         | 9'0           | 6'7                  | —             | 8'3         | 4'3          | 4'3             |
| 17             | 10'0                    | 9'7          | 4'3         | 10'0          | 10'0                 | —             | 10'0        | 8'3          | 9'0             |
| 18             | 5'7                     | 4'0          | 6'0         | 3'0           | 6'7                  | 3'7           | 6'7         | 6'0          | 6'7             |
| 19             | 7'7                     | 6'0          | 7'0         | 7'0           | 5'7                  | 2'7           | 6'3         | 5'0          | 3'0             |
| 20             | 7'7                     | 8'3          | 8'0         | 7'0           | 5'0                  | 2'0           | 6'3         | 3'0          | 3'0             |
| 21             | 9'7                     | 10'0         | 10'0        | 10'0          | 8'0                  | 10'0          | 9'7         | 4'3          | 8'0             |
| 22             | 3'0                     | 1'0          | 1'7         | 2'0           | 0'0                  | 0'0           | 2'0         | 1'3          | 0'3             |
| 23             | 8'3                     | 7'7          | 6'7         | 10'0          | 9'3                  | 3'7           | 6'3         | 0'7          | 6'3             |
| 24             | 4'7                     | 5'7          | 4'7         | 6'0           | 6'7                  | 10'0          | 6'0         | 6'7          | 9'0             |
| 25             | 10'0                    | 10'0         | 10'0        | 10'0          | 10'0                 | 10'0          | 10'0        | 8'3          | 10'0            |
| 26             | 3'3                     | 3'3          | 0'7         | 2'0           | 0'0                  | 3'3           | 5'3         | 0'7          | 3'3             |
| 27             | 7'7                     | 9'7          | 4'7         | 10'0          | 5'3                  | 7'3           | 9'3         | 6'0          | 7'7             |
| 28             | 2'0                     | 7'0          | 4'7         | 8'0           | 10'0                 | 10'0          | 10'0        | 5'0          | 6'7             |
| 29             | 7'3                     | 7'3          | 5'7         | 6'0           | 3'7                  | 2'3           | 7'3         | 0'0          | 3'3             |
| 30             | 10'0                    | 10'0         | 8'3         | 10'0          | 9'7                  | 8'7           | 9'7         | 6'7          | 9'0             |
| 31             | 8'3                     | 7'0          | 4'0         | 10'0          | 9'3                  | 10'0          | 5'7         | 7'7          | 10'0            |
| Śred.<br>mies. | 6'4                     | 5'8          | 6'0         | 7'0           | 6'0                  | 5'8           | 6'6         | 4'6          | 5'7             |



rzenia nieba.  
dzienne.

| Kry-<br>nica | Tar-<br>nów | Pil-<br>zno | Iwo-<br>nicz | Rze-<br>szów | Smol-<br>nik | Sanok | Prze-<br>myśl | Stare-<br>miasto |
|--------------|-------------|-------------|--------------|--------------|--------------|-------|---------------|------------------|
| 10'0         | 10'0        | 10'0        | 10'0         | 10'0         | 9'7          | 10'0  | 4'7           | 8'0              |
| 10'0         | 10'0        | 10'0        | 9'3          | 10'0         | 10'0         | 9'0   | 6'0           | 7'0              |
| 10'0         | 10'0        | 10'0        | 10'0         | 8'3          | 10'0         | 10'0  | 8'0           | 7'0              |
| 9'0          | 9'0         | 9'7         | 3'3          | 5'0          | 7'0          | 10'0  | 2'7           | 5'0              |
| 7'3          | 10'0        | 7'3         | 3'0          | 5'0          | 7'0          | 6'0   | 3'7           | 5'3              |
| 3'3          | 5'0         | 0'3         | 2'0          | 5'0          | 1'3          | 0'0   | 0'0           | 0'0              |
| 0'0          | 1'7         | 0'0         | 3'7          | 0'0          | 0'3          | 0'0   | 0'0           | 0'0              |
| 2'0          | 1'3         | 0'7         | 2'0          | 0'0          | 1'0          | 0'0   | 0'0           | 1'0              |
| 2'0          | 1'7         | 2'0         | 2'0          | 0'0          | 3'0          | 2'0   | 1'0           | 1'3              |
| 1'0          | 0'7         | 0'3         | 1'7          | 0'0          | 5'0          | 0'0   | 0'0           | 0'0              |
| 8'3          | 9'7         | 7'7         | 4'0          | 0'0          | 6'7          | 0'0   | 0'0           | 2'9              |
| 9'0          | 6'0         | 6'7         | 7'0          | 0'0          | 5'0          | 4'0   | 2'7           | 3'0              |
| 3'3          | 1'3         | 0'0         | 3'0          | 0'0          | 3'7          | 0'0   | 1'3           | 1'0              |
| 0'0          | 0'3         | 0'7         | 1'7          | 0'0          | 0'7          | 0'0   | 0'0           | 0'0              |
| 6'7          | 4'3         | 4'7         | 5'3          | 10'0         | 6'3          | 4'0   | 3'3           | 3'3              |
| 5'7          | 5'0         | 10'0        | 8'3          | 0'0          | 6'7          | 8'0   | 4'7           | 6'3              |
| 8'3          | 5'0         | 9'7         | 5'7          | 0'0          | 10'0         | 8'0   | 6'7           | 6'3              |
| 3'3          | 8'0         | 6'3         | 4'7          | 3'3          | 9'7          | 4'0   | 5'0           | 4'0              |
| 6'7          | 6'0         | 6'3         | 4'7          | 10'0         | 3'7          | 4'0   | 1'7           | 4'3              |
| 0'0          | 3'3         | 3'3         | 2'0          | 0'0          | 3'3          | 2'0   | 0'7           | 1'3              |
| 5'3          | 1'7         | 6'3         | 3'0          | 6'7          | 7'0          | 8'0   | 4'3           | 5'0              |
| 0'0          | 1'7         | 0'7         | 2'0          | 0'0          | 4'0          | 0'0   | 1'7           | 1'3              |
| 6'7          | 6'3         | 6'0         | 4'7          | 0'0          | 4'3          | 2'0   | 1'7           | 1'3              |
| 10'0         | 10'0        | 7'0         | 8'0          | 0'0          | 10'0         | 9'0   | 5'0           | 7'0              |
| 10'0         | 10'0        | 10'0        | 10'0         | 10'0         | 10'0         | 9'0   | 6'3           | 8'7              |
| 3'3          | 6'3         | 3'3         | 7'3          | 10'0         | 4'3          | 3'0   | 2'0           | 3'7              |
| 6'7          | 9'0         | 10'0        | 10'0         | 5'0          | 9'7          | 8'0   | 4'3           | 3'0              |
| 8'3          | 6'0         | 8'3         | 2'7          | 0'0          | 10'0         | 3'0   | 2'7           | 3'0              |
| 3'3          | 1'3         | 0'7         | 2'0          | 1'7          | 1'0          | 1'0   | 0'0           | 2'0              |
| 8'3          | 6'7         | 10'0        | 7'3          | 10'0         | 8'7          | 6'0   | 1'7           | 4'3              |
| 10'0         | 4'3         | 4'0         | 10'0         | 10'0         | 10'0         | 8'0   | 2'7           | 6'0              |
| 5'7          | 5'5         | 5'5         | 5'2          | 3'9          | 6'1          | 4'5   | 2'7           | 3'6              |

**Stan zachmu-  
Średnie**

*Marzec 1899 roku.*

| Dzień          | Sam-<br>bor | Lwów | Du-<br>blany | Delatyn | Oży-<br>dów | Krzywo-<br>równia | Ober-<br>tyn | Tar-<br>nopol | Jagiel-<br>nica |
|----------------|-------------|------|--------------|---------|-------------|-------------------|--------------|---------------|-----------------|
| 1              | 10·0        | 9·7  | 10·0         | 10·0    | 10·0        | 10·0              | 10·0         | 10·0          | 10·0            |
| 2              | 6·7         | 7·0  | 7·0          | 8·3     | 6·3         | 6·7               | 6·7          | 6·7           | 5·7             |
| 3              | 8·7         | 10·0 | 10·0         | 9·3     | 10·0        | 9·0               | 10·0         | 9·3           | 10·0            |
| 4              | 5·7         | 9·0  | 8·0          | 8·7     | 10·0        | 7·3               | 7·7          | 6·7           | 7·3             |
| 5              | 9·7         | 6·7  | 6·7          | 8·7     | 6·3         | 10·0              | 10·0         | 7·3           | 8·7             |
| 6              | 3·7         | 0·7  | 0·3          | 4·7     | 1·0         | 6·3               | 6·3          | 3·7           | 3·3             |
| 7              | 2·0         | 2·3  | 2·7          | 1·3     | 3·3         | 0·0               | 0·0          | 3·3           | 0·0             |
| 8              | 1·0         | 2·3  | 2·0          | 1·7     | 1·7         | 0·7               | 4·3          | 3·7           | 1·0             |
| 9              | 2·0         | 3·7  | 1·7          | 3·0     | 2·0         | 3·0               | 1·0          | 3·3           | 2·0             |
| 10             | 3·3         | 2·0  | 0·7          | 0·7     | 2·3         | 3·0               | 2·7          | 3·0           | 0·7             |
| 11             | 6·0         | 4·0  | 2·3          | 5·7     | 2·3         | 6·0               | 4·0          | 3·7           | 1·0             |
| 12             | 3·7         | 4·3  | 4·0          | 2·0     | 4·0         | 1·0               | 3·0          | 6·3           | 3·3             |
| 13             | 0·7         | 2·3  | 1·3          | 5·0     | 1·3         | 3·3               | 3·7          | 3·3           | 3·7             |
| 14             | 0·7         | 1·3  | 0·0          | 2·3     | 1·3         | 3·3               | 3·0          | 1·0           | 3·3             |
| 15             | 8·3         | 9·0  | 9·7          | 10·0    | 10·0        | 9·7               | 6·3          | 10·0          | 9·7             |
| 16             | 6·3         | 10·0 | 10·0         | 6·0     | 9·3         | 7·0               | 6·3          | 10·0          | 8·3             |
| 17             | 9·7         | 10·0 | 9·7          | 10·0    | 9·0         | 10·0              | 10·0         | 10·0          | 10·0            |
| 18             | 3·0         | 7·0  | 7·0          | 6·7     | 5·7         | 3·3               | 6·0          | 6·3           | 4·0             |
| 19             | 2·7         | 3·3  | 3·0          | 10·0    | 5·0         | 10·0              | 9·0          | 10·0          | 5·0             |
| 20             | 3·0         | 3·7  | 4·0          | 5·0     | 3·3         | 10·0              | 6·7          | 6·3           | 4·3             |
| 21             | 6·0         | 7·3  | 7·3          | 10·0    | 5·7         | 10·0              | 10·0         | 9·0           | 7·0             |
| 22             | 3·7         | 5·3  | 3·3          | 4·7     | 3·3         | 6·7               | 6·0          | 5·0           | 3·7             |
| 23             | 3·7         | 4·7  | 3·7          | 6·0     | 2·0         | 6·7               | 6·7          | 4·7           | 5·7             |
| 24             | 10·0        | 10·0 | 9·0          | 10·0    | 8·3         | 10·0              | 10·0         | 10·0          | 10·0            |
| 25             | 10·0        | 10·0 | 10·0         | 10·0    | 9·3         | 10·0              | 10·0         | 10·0          | 10·0            |
| 26             | 0·0         | 3·7  | 3·7          | 10·0    | 3·3         | 8·0               | 6·7          | 3·3           | 7·3             |
| 27             | 7·0         | 9·3  | 10·0         | 6·3     | 9·0         | 5·0               | 3·3          | 9·3           | 5·3             |
| 28             | 3·7         | 6·3  | 4·7          | 5·7     | 7·7         | 4·0               | 4·3          | 4·3           | 4·3             |
| 29             | 3·3         | 1·3  | 0·3          | 1·3     | 1·3         | 0·3               | 0·0          | 0·0           | 0·7             |
| 30             | 9·7         | 7·0  | 6·7          | 7·0     | 5·3         | 7·3               | 7·0          | 7·7           | 7·3             |
| 31             | 7·7         | 8·3  | 9·3          | 6·7     | 9·3         | 7·3               | 8·0          | 10·0          | 7·3             |
| Śred.<br>mies. | 5·2         | 5·9  | 5·6          | 6·3     | 5·4         | 6·3               | 6·1          | 6·4           | 5·5             |

rzenia nieba.

dzienne.

Kwiecień 1899 roku.

| Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków | Boch-<br>nia | Szczaw-<br>nica |
|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|--------------|-----------------|
| 5·7                     | 5·7          | 6·0         | 10·0          | 5·0                  | 6·0           | 3·7         | 2·3          | 6·0             |
| 10·0                    | 10·0         | 10·0        | 10·0          | 10·0                 | 10·0          | 9·7         | 8·0          | 9·0             |
| 6·0                     | 3·3          | 4·0         | 10·0          | 5·3                  | 5·0           | 4·7         | 3·3          | 5·3             |
| 9·7                     | 9·3          | 8·0         | 10·0          | 7·3                  | 9·0           | 5·0         | 3·3          | 7·0             |
| 7·3                     | 9·3          | 6·0         | 10·0          | 8·0                  | 7·3           | 6·0         | 5·7          | 8·3             |
| 8·7                     | 9·0          | 8·3         | 10·0          | 4·3                  | 7·3           | 6·0         | 4·7          | 9·3             |
| 9·0                     | 8·7          | 8·3         | 10·0          | 9·3                  | 3·0           | 9·7         | 5·0          | 5·0             |
| 9·3                     | 10·0         | 9·7         | 10·0          | 9·7                  | 9·7           | 9·7         | 7·0          | 5·7             |
| 9·3                     | 8·0          | 10·0        | 10·0          | 10·0                 | 10·0          | 10·0        | 10·0         | 10·0            |
| 5·7                     | 6·0          | 6·0         | 10·0          | 6·7                  | 7·0           | 5·0         | 1·7          | 6·7             |
| 8·7                     | 3·7          | 6·7         | 10·0          | 9·3                  | 4·3           | 9·3         | 7·7          | 5·0             |
| 9·7                     | 10·0         | 9·3         | 10·0          | 8·3                  | 9·7           | 10·0        | 10·0         | 8·0             |
| 6·0                     | 9·3          | 8·7         | 10·0          | 10·0                 | 8·3           | 9·0         | 9·3          | 6·7             |
| 3·7                     | 9·0          | 8·3         | 10·0          | 9·3                  | 2·3           | 9·3         | 6·0          | 6·0             |
| 4·3                     | 6·7          | 6·7         | 8·0           | 7·0                  | 8·3           | 6·3         | 3·0          | 7·0             |
| 8·0                     | 8·0          | 6·3         | 7·0           | 10·0                 | 5·3           | 9·7         | 8·7          | 6·7             |
| 4·7                     | 3·0          | 4·0         | 3·0           | 3·7                  | 1·7           | 4·7         | 0·0          | 3·0             |
| 6·7                     | 3·3          | 5·0         | 9·0           | 6·3                  | 5·0           | 6·7         | 0·7          | 4·0             |
| 9·0                     | 9·7          | 10·0        | 9·0           | 10·0                 | 7·3           | 10·0        | 9·3          | 9·0             |
| 5·7                     | 10·0         | 10·0        | 10·0          | 10·0                 | 5·3           | 10·0        | 10·0         | 7·3             |
| 9·7                     | 6·7          | 7·7         | 7·0           | 10·0                 | 8·7           | 9·0         | 10·0         | 10·0            |
| 7·3                     | 10·0         | 8·7         | 10·0          | 9·7                  | —             | 8·3         | 5·0          | 7·3             |
| 5·3                     | 3·0          | 5·7         | 8·0           | 4·0                  | —             | 6·3         | 1·0          | 8·7             |
| 2·3                     | 0·0          | 0·3         | 0·0           | 0·0                  | —             | 0·7         | 0·7          | 0·0             |
| 5·0                     | 2·3          | 3·7         | 5·0           | 3·7                  | 1·3           | 2·7         | 1·7          | 1·3             |
| 7·0                     | 8·3          | 5·7         | 10·0          | 9·3                  | 4·3           | 6·3         | 1·7          | 7·0             |
| 9·0                     | 9·0          | 8·7         | 7·0           | 8·7                  | 9·0           | 7·3         | 3·3          | 9·3             |
| 9·3                     | 9·0          | 7·3         | 8·0           | 10·0                 | 9·7           | 10·0        | 8·0          | 8·7             |
| 5·7                     | 4·3          | 7·3         | 6·0           | 9·7                  | 4·3           | 6·3         | 2·7          | 7·0             |
| 8·0                     | 8·3          | 7·0         | 10·0          | 10·0                 | 5·3           | 9·0         | 3·3          | 8·3             |
| 7·2                     | 7·1          | 7·1         | 8·6           | 7·8                  | 6·2           | 7·3         | 5·1          | 6·8             |

Stan zachmu-  
Średnie

*Kwiecień 1899 roku.*

| Dzień          | Kry-<br>nica | Tar-<br>nów | Pil-<br>zno | Iwo-<br>niez | Rze-<br>szów | Smol-<br>nik | Sanok | Prze-<br>myśl | Stare-<br>miasto |
|----------------|--------------|-------------|-------------|--------------|--------------|--------------|-------|---------------|------------------|
| 1              | 6·7          | 2·7         | 6·0         | 7·3          | 10·0         | 8·7          | 5·0   | 3·7           | 4·7              |
| 2              | 5·0          | 7·3         | 9·7         | 7·3          | 6·7          | 6·7          | 6·0   | 3·7           | 4·0              |
| 3              | 3·3          | 2·7         | 8·0         | 7·3          | 6·7          | 6·3          | 6·0   | 2·0           | 5·0              |
| 4              | 4·3          | 5·0         | 6·7         | 2·0          | 5·0          | 1·0          | 1·0   | 0·0           | 0·3              |
| 5              | 8·3          | 4·7         | 7·7         | 2·3          | 5·0          | 1·3          | 2·0   | 0·0           | 0·3              |
| 6              | 10·0         | 5·3         | 6·0         | 4·7          | 3·3          | 7·0          | 8·0   | 5·3           | 2·7              |
| 7              | 9·0          | 7·7         | 9·7         | 2·3          | 0·0          | 6·7          | 5·0   | 3·0           | 1·0              |
| 8              | 6·0          | 5·0         | 9·7         | 5·3          | 3·0          | 6·7          | 6·0   | 3·3           | 4·0              |
| 9              | 10·0         | 10·0        | 10·0        | 9·3          | 8·7          | 10·0         | 10·0  | 3·7           | 2·0              |
| 10             | 6·7          | 10·0        | 6·3         | 10·0         | 10·0         | 10·0         | 10·0  | 8·0           | 9·0              |
| 11             | 8·3          | 7·7         | 9·3         | 4·7          | 5·0          | 7·0          | 6·0   | 1·7           | 1·3              |
| 12             | 8·3          | 10·0        | 9·7         | 7·3          | 10·0         | 9·7          | 9·0   | 6·3           | 3·0              |
| 13             | 10·0         | 4·3         | 10·0        | 10·0         | 10·0         | 10·0         | 10·0  | 7·0           | 8·0              |
| 14             | 8·3          | 6·0         | 7·0         | 3·0          | 0·0          | 9·3          | 8·0   | 4·0           | 5·0              |
| 15             | 8·3          | 5·3         | 8·7         | 5·3          | 3·3          | 9·7          | 8·0   | 6·3           | 4·0              |
| 16             | 9·0          | 10·0        | 9·0         | 4·7          | 8·3          | 7·7          | 5·0   | 3·3           | 5·0              |
| 17             | 3·3          | 1·0         | 2·0         | 2·7          | 5·0          | 2·0          | 3·0   | 2·0           | 0·0              |
| 18             | 5·0          | 5·0         | 5·3         | 2·0          | 0·0          | 7·7          | 2·0   | 3·0           | 1·0              |
| 19             | 9·0          | 10·0        | 9·0         | 4·0          | 0·0          | 3·0          | 3·0   | 1·3           | 1·7              |
| 20             | 5·3          | 9·0         | 9·3         | 2·3          | 3·3          | 4·0          | 4·0   | 2·0           | 1·3              |
| 21             | 10·0         | 10·0        | 9·7         | 6·7          | 6·7          | 7·3          | 10·0  | 7·0           | 5·0              |
| 22             | 7·0          | 7·0         | 9·0         | 4·7          | 5·0          | 7·0          | 6·0   | 4·0           | 4·0              |
| 23             | 6·7          | 6·3         | 8·0         | 4·7          | 6·7          | 3·7          | 4·0   | 1·3           | 2·7              |
| 24             | 0·0          | 2·0         | 0·3         | 2·3          | 1·7          | 1·3          | 4·0   | 1·0           | 0·7              |
| 25             | 1·3          | 2·0         | 0·7         | 2·3          | 1·0          | 3·0          | 3·0   | 1·3           | 1·0              |
| 26             | 5·0          | 2·0         | 2·7         | 3·3          | 0·0          | 8·0          | 2·0   | 5·3           | 3·0              |
| 27             | 10·0         | 3·7         | 5·7         | 4·7          | 3·3          | 7·7          | 5·0   | 0·7           | 2·0              |
| 28             | 10·0         | 10·0        | 6·0         | 6·7          | 5·0          | 8·0          | 6·0   | 1·7           | 2·0              |
| 29             | 8·3          | 2·7         | 6·3         | 10·0         | 8·3          | 9·3          | 9·0   | 3·0           | 3·0              |
| 30             | 10·0         | 7·7         | 6·7         | 4·0          | 5·0          | 6·7          | 6·0   | 2·3           | 3·0              |
| Śred.<br>mies. | 7·1          | 6·1         | 7·1         | 5·1          | 4·9          | 6·5          | 5·7   | 3·2           | 3·0              |

## rzenia nieba.

dzienne.

| Sam-<br>bor | Lwów | Du-<br>blany | Delatyn | Oży-<br>dów | Krzywo-<br>równia | Ober-<br>tyn | Tar-<br>nopol | Ja-<br>giel-<br>nica |
|-------------|------|--------------|---------|-------------|-------------------|--------------|---------------|----------------------|
| 10·0        | 9·7  | 10·0         | 8·3     | 10·0        | 8·0               | 10·0         | 10·0          | 9·3                  |
| 4·0         | 6·7  | 6·7          | 4·7     | 6·7         | 9·3               | 8·0          | 7·0           | 8·0                  |
| 9·3         | 7·0  | 7·0          | 10·0    | 7·7         | 9·3               | 8·7          | 6·7           | 7·0                  |
| 1·3         | 1·7  | 1·0          | 1·7     | 1·3         | 2·7               | 2·0          | 2·3           | 2·3                  |
| 0·7         | 1·0  | 0·0          | 1·7     | 1·0         | 0·7               | 2·7          | 0·7           | 1·3                  |
| 6·7         | 7·7  | 7·3          | 5·7     | 6·0         | 1·0               | 5·0          | 4·3           | 2·0                  |
| 3·7         | 5·7  | 5·7          | 6·7     | 5·7         | 2·7               | 3·0          | 5·0           | 3·0                  |
| 6·0         | 5·3  | 3·3          | 2·0     | 5·0         | 1·0               | 5·3          | 6·0           | 2·0                  |
| 4·3         | 2·7  | 2·0          | 2·3     | 0·7         | 2·0               | 1·0          | 0·0           | 1·0                  |
| 10·0        | 10·0 | 10·0         | 10·0    | 9·7         | 10·0              | 8·7          | 9·3           | 9·0                  |
| 3·3         | 6·7  | 5·3          | 6·0     | 7·0         | 4·7               | 7·0          | 5·7           | 4·0                  |
| 6·0         | 9·7  | 9·3          | 5·3     | 6·3         | 6·7               | 7·0          | 9·7           | 7·7                  |
| 10·0        | 9·3  | 9·7          | 10·0    | 8·7         | 8·6               | 10·0         | 10·0          | 9·7                  |
| 8·3         | 6·0  | 6·3          | 9·3     | 7·3         | 7·0               | 6·7          | 6·3           | 6·0                  |
| 9·0         | 9·3  | 9·7          | 2·7     | 8·0         | 1·3               | 3·3          | 7·7           | 6·7                  |
| 4·0         | 9·0  | 8·7          | 4·0     | 5·3         | 5·0               | 6·3          | 7·7           | 7·0                  |
| 1·3         | 4·3  | 1·7          | 1·7     | 2·0         | 3·7               | 0·3          | 1·3           | 2·0                  |
| 3·3         | 5·0  | 4·0          | 6·0     | 1·0         | 6·0               | 9·0          | 6·7           | 6·0                  |
| 4·0         | 5·0  | 2·3          | 5·3     | 3·0         | 4·7               | 3·0          | 4·3           | 3·0                  |
| 3·7         | 8·3  | 7·0          | 10·0    | 7·7         | 9·0               | 8·7          | 9·7           | 7·0                  |
| 9·3         | 8·3  | 7·3          | 6·0     | 6·3         | 2·0               | 4·7          | 7·7           | 4·0                  |
| 5·3         | 6·3  | 5·3          | 7·3     | 4·7         | 3·7               | 7·3          | 6·3           | 4·3                  |
| 4·0         | 6·0  | 4·7          | 10·0    | 7·0         | 10·0              | 10·0         | 9·7           | 9·0                  |
| 6·3         | 1·3  | 0·3          | 5·0     | 0·0         | 5·7               | 6·0          | 1·0           | 1·0                  |
| 7·7         | 5·7  | 2·3          | 1·7     | 3·7         | 2·0               | 5·3          | 4·3           | 3·0                  |
| 9·3         | 7·3  | 6·0          | 6·0     | 5·7         | 3·7               | 2·7          | 3·0           | 6·0                  |
| 4·3         | 2·3  | 1·7          | 6·3     | 0·3         | 1·3               | 5·0          | 0·7           | 5·0                  |
| 4·7         | 2·0  | 0·7          | 2·7     | 0·3         | 1·3               | 4·7          | 0·0           | 1·0                  |
| 9·3         | 6·3  | 6·3          | 4·3     | 4·3         | 4·7               | 1·3          | 0·3           | 1·0                  |
| 4·3         | 6·0  | 7·0          | 6·3     | 5·7         | 5·0               | 4·3          | 4·3           | 3·0                  |
| 5·6         | 6·1  | 5·3          | 5·6     | 4·9         | 4·7               | 5·6          | 5·3           | 4·7                  |

Stan zachmu-  
Średnie

*Maj 1899 roku.*

| Dzień          | Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków | Boch-<br>nia | Szczaw-<br>nica |
|----------------|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|--------------|-----------------|
| 1              | 7·7                     | 9·7          | 9·0         | 7·0           | 10·0                 | 10·0          | 8·3         | 4·7          | 5·7             |
| 2              | 9·3                     | 9·0          | 9·7         | 10·0          | 10·0                 | 9·0           | 9·7         | 4·3          | 5·3             |
| 3              | 8·7                     | 9·0          | 9·3         | 10·0          | 9·3                  | 7·7           | 10·0        | 7·0          | 6·7             |
| 4              | 8·3                     | 7·0          | 8·0         | 10·0          | 9·0                  | 8·7           | 7·0         | 5·0          | 8·7             |
| 5              | 10·0                    | 10·0         | 10·0        | 10·0          | 10·0                 | 10·0          | 10·0        | 10·0         | 10·0            |
| 6              | 6·7                     | 6·7          | 8·3         | 9·0           | 10·0                 | 8·3           | 9·0         | 4·7          | 9·3             |
| 7              | 8·3                     | 7·0          | 5·7         | 8·0           | 6·7                  | 9·0           | 7·3         | 3·0          | 5·3             |
| 8              | 10·0                    | 9·7          | 8·0         | 8·0           | 10·0                 | 7·3           | 7·7         | 10·0         | 10·0            |
| 9              | 8·7                     | 9·3          | 9·7         | 10·0          | 10·0                 | 9·3           | 8·7         | 5·3          | 10·0            |
| 10             | 10·0                    | 10·0         | 10·0        | 10·0          | 10·0                 | 9·0           | 10·0        | 8·3          | 9·3             |
| 11             | 8·0                     | 7·7          | 5·3         | 6·0           | 9·3                  | 2·3           | 9·0         | 7·7          | 6·7             |
| 12             | 8·3                     | 9·3          | 9·3         | 10·0          | 10·0                 | 4·0           | 10·0        | 10·0         | 6·7             |
| 13             | 8·0                     | 10·0         | 8·3         | 9·0           | 10·0                 | 9·0           | 10·0        | 7·7          | 10·0            |
| 14             | 2·7                     | 3·0          | 3·3         | 5·0           | 1·0                  | 4·0           | 1·3         | 0·7          | 3·7             |
| 15             | 3·7                     | 4·0          | 4·0         | 4·0           | 5·7                  | 2·7           | 5·0         | 3·3          | 2·0             |
| 16             | 8·7                     | 9·0          | 8·7         | 10·0          | 8·3                  | 8·0           | 8·3         | 7·7          | 8·3             |
| 17             | 6·7                     | 6·7          | 7·3         | 7·0           | 9·7                  | 9·7           | 10·0        | 7·7          | 9·3             |
| 18             | 2·0                     | 0·3          | 0·7         | 0·0           | 0·3                  | 1·3           | 0·3         | 0·0          | 4·3             |
| 19             | 1·3                     | 0·3          | 1·3         | 2·0           | 0·0                  | 2·0           | 0·3         | 0·0          | 0·7             |
| 20             | 5·7                     | 3·0          | 3·0         | 7·0           | 6·0                  | 7·3           | 6·7         | 3·3          | 5·3             |
| 21             | 8·7                     | 7·7          | 8·7         | 10·0          | 8·0                  | 8·7           | 8·3         | 7·0          | 8·3             |
| 22             | 7·7                     | 6·3          | 7·0         | 10·0          | 6·0                  | 7·0           | 9·3         | 4·3          | 9·0             |
| 23             | 7·7                     | 7·7          | 8·3         | 10·0          | 8·3                  | 9·3           | 9·0         | 7·7          | 7·3             |
| 24             | 8·7                     | 7·7          | 8·0         | 9·0           | 5·7                  | 6·3           | 7·0         | 2·7          | 6·3             |
| 25             | 7·7                     | 8·0          | 8·0         | 8·0           | 10·0                 | 7·7           | 10·0        | 7·7          | 9·7             |
| 26             | 9·3                     | 10·0         | 10·0        | 10·0          | 10·0                 | 9·0           | 10·0        | 10·0         | 10·0            |
| 27             | 10·0                    | 10·0         | 10·0        | 10·0          | 10·0                 | 10·0          | 10·0        | 10·0         | 6·3             |
| 28             | 7·0                     | 4·0          | 7·3         | 8·0           | 2·7                  | 6·7           | 2·7         | 1·7          | 10·0            |
| 29             | 9·7                     | 10·0         | 10·0        | 10·0          | 10·0                 | 10·0          | 8·7         | 8·3          | 10·0            |
| 30             | 7·3                     | 8·3          | 8·3         | 8·0           | 9·7                  | 9·7           | 8·3         | 5·7          | 8·7             |
| 31             | 4·0                     | 2·3          | 3·7         | 5·0           | 2·7                  | 6·3           | 3·3         | 2·3          | 6·0             |
| Śred.<br>mies. | 7·4                     | 7·2          | 7·4         | 8·1           | 7·7                  | 7·4           | 7·6         | 5·8          | 7·4             |

rzenia nieba.  
dzienne.

| Kry-<br>nica | Tar-<br>nów | Pilzno | Iwo-<br>nicz | Rze-<br>szów | Smol-<br>nik | Sanok | Prze-<br>myśl | Stare-<br>miasto |
|--------------|-------------|--------|--------------|--------------|--------------|-------|---------------|------------------|
| 7'0          | 8'3         | 10'0   | 8'7          | 8'3          | 9'0          | 8'0   | 6'3           | 7'0              |
| 5'0          | 8'7         | 9'3    | 2'0          | 5'0          | 5'7          | 6'0   | 3'7           | 2'0              |
| 7'0          | 7'3         | 6'0    | 3'3          | 3'3          | 4'3          | 2'0   | 4'3           | 2'0              |
| 7'7          | 8'0         | 7'7    | 3'7          | 6'7          | 7'3          | 6'0   | 7'3           | 7'7              |
| 10'0         | 10'0        | 9'7    | 8'3          | 10'0         | 10'0         | 9'0   | 6'7           | 9'0              |
| 10'0         | 5'0         | 5'3    | 3'3          | 6'7          | 4'3          | 5'0   | 4'3           | 4'3              |
| 7'0          | 1'0         | 5'3    | 2'3          | 5'3          | 5'3          | 4'0   | 6'7           | 5'3              |
| 10'0         | 5'3         | 9'7    | 6'0          | 10'0         | 10'0         | 10'0  | 8'7           | 7'0              |
| 10'0         | 6'7         | 8'7    | 5'7          | 3'3          | 9'7          | 7'0   | 7'3           | 7'0              |
| 10'0         | 8'7         | 9'0    | 8'0          | 3'0          | 10'0         | 9'0   | 6'3           | 3'7              |
| 5'0          | 9'0         | 10'0   | 5'0          | 10'0         | 6'7          | 7'0   | 4'7           | 6'0              |
| 6'0          | 10'0        | 10'0   | 5'7          | 8'3          | 7'0          | 10'0  | 6'0           | 5'3              |
| 9'0          | 7'7         | 4'0    | 5'0          | 0'0          | 6'3          | 4'0   | 1'3           | 3'7              |
| 4'3          | 0'3         | 0'3    | 3'0          | 0'0          | 3'0          | 1'0   | 2'7           | 1'7              |
| 1'7          | 2'7         | 0'7    | 2'0          | 1'0          | 3'0          | 0'0   | 0'0           | 0'7              |
| 9'0          | 10'0        | 9'7    | 4'7          | 6'7          | 9'7          | 4'0   | 5'0           | 4'3              |
| 10'0         | 9'3         | 10'0   | 5'7          | 10'0         | 10'0         | 10'0  | 8'7           | 10'0             |
| 2'0          | 1'0         | 0'7    | 2'0          | 1'7          | 0'3          | 0'0   | 0'7           | 3'0              |
| 1'3          | 1'3         | 0'3    | 1'3          | 3'3          | 1'0          | 0'0   | 0'0           | 0'3              |
| 6'0          | 7'3         | 2'7    | 2'0          | 1'7          | 3'7          | 0'0   | 2'7           | 1'7              |
| 7'3          | 2'0         | 8'7    | 6'0          | 8'3          | 8'0          | 8'3   | 3'7           | 4'0              |
| 5'7          | 5'0         | 9'0    | 3'3          | 1'7          | 6'3          | 3'0   | 2'3           | 3'3              |
| 7'0          | 8'3         | 9'0    | 5'7          | 0'0          | 9'0          | 5'0   | 3'0           | 4'0              |
| 8'0          | 7'7         | 9'0    | 7'7          | 3'3          | 9'0          | 6'0   | 5'0           | 5'0              |
| 10'0         | 6'3         | 7'3    | 7'3          | 5'0          | 9'3          | 8'0   | 6'3           | 4'3              |
| 8'3          | 9'3         | 10'0   | 5'0          | 5'0          | 9'7          | 5'0   | 2'3           | 3'7              |
| 10'0         | 10'0        | 10'0   | 9'3          | 8'3          | 9'7          | 8'0   | 8'0           | 3'7              |
| 7'3          | 4'7         | 4'3    | 2'0          | 6'0          | 5'7          | 6'0   | 1'7           | 3'3              |
| 10'0         | 10'0        | 10'0   | 10'0         | 6'0          | 10'0         | 10'0  | 8'7           | 10'0             |
| 6'7          | 7'3         | 7'0    | 5'7          | 6'0          | 10'0         | 7'0   | 8'0           | 8'0              |
| 1'3          | 3'0         | 1'0    | 2'7          | 1'0          | 2'7          | 1'0   | 1'0           | 1'0              |
| 6'9          | 6'5         | 6'9    | 4'9          | 5'0          | 7'0          | 5'5   | 4'6           | 4'6              |

Stan zachmu-  
Średnio

Maj 1899 roku.

| Dzień          | Sam-<br>bor | Lwów | Du-<br>blany | Delatyn | Oży-<br>dów | Krzywo-<br>równia | Ober-<br>tyn | Tarno-<br>pol | Jagiel-<br>nia |
|----------------|-------------|------|--------------|---------|-------------|-------------------|--------------|---------------|----------------|
| 1              | 9·3         | 9·7  | 9·3          | 10·0    | 9·0         | 8·3               | 10·0         | 9·3           | 9·0            |
| 2              | 9·7         | 6·7  | 6·7          | 10·0    | 8·0         | 10·0              | 10·0         | 7·3           | 7·0            |
| 3              | 2·7         | 4·3  | 3·3          | 8·3     | 6·0         | 7·0               | 9·0          | 7·0           | 7·0            |
| 4              | 9·7         | 9·3  | 8·3          | 6·7     | 8·0         | 6·3               | 5·3          | 8·0           | 5·0            |
| 5              | 10·0        | 9·7  | 9·7          | 9·3     | 9·7         | 10·0              | 10·0         | 9·3           | 8·0            |
| 6              | 9·3         | 9·0  | 9·3          | 10·0    | 8·7         | 9·0               | 9·3          | 9·0           | 8·0            |
| 7              | 9·0         | 10·0 | 10·0         | 10·0    | 10·0        | 10·0              | 10·0         | 10·0          | 10·0           |
| 8              | 8·7         | 9·7  | 9·7          | 10·0    | 8·0         | 9·7               | 10·0         | 7·7           | 9·3            |
| 9              | 10·0        | 9·3  | 8·3          | 9·3     | 7·0         | 10·0              | 10·0         | 9·0           | 9·3            |
| 10             | 2·3         | 7·0  | 6·7          | 8·0     | 6·7         | 9·0               | 8·3          | 7·3           | 8·0            |
| 11             | 10·0        | 7·7  | 8·0          | 8·3     | 9·7         | 4·3               | 5·7          | 8·0           | 5·0            |
| 12             | 4·0         | 8·7  | 7·3          | 8·3     | 10·0        | 7·7               | 9·3          | 9·7           | 5·0            |
| 13             | 3·0         | 1·3  | 0·3          | 8·7     | 2·7         | 10·0              | 10·0         | 4·7           | 7·0            |
| 14             | 10·0        | 5·3  | 2·7          | 6·7     | 2·7         | 6·3               | 6·7          | 4·7           | 7·0            |
| 15             | 5·3         | 6·3  | 2·3          | 6·0     | 4·3         | 3·0               | 5·0          | 3·3           | 1·7            |
| 16             | 9·0         | 8·7  | 7·7          | 5·0     | 5·3         | 6·0               | 0·0          | 9·0           | 5·0            |
| 17             | 10·0        | 10·0 | 10·0         | 10·0    | 9·3         | 9·0               | 10·0         | 10·0          | 7·0            |
| 18             | 7·0         | 5·3  | 4·3          | 10·0    | 6·7         | 10·0              | 7·3          | 8·0           | 9·7            |
| 19             | 4·0         | 4·0  | 2·0          | 0·7     | 2·0         | 4·0               | 3·7          | 3·7           | 1·3            |
| 20             | 8·0         | 4·0  | 2·0          | 7·3     | 3·0         | 3·0               | 4·7          | 4·3           | 9·7            |
| 21             | 2·3         | 8·0  | 6·3          | 8·3     | 6·0         | 7·3               | 8·7          | 9·3           | 7·7            |
| 22             | 5·0         | 5·7  | 4·7          | 8·0     | 4·7         | 8·3               | 10·0         | 6·3           | 7·0            |
| 23             | 2·3         | 7·3  | 7·0          | 8·3     | 7·7         | 3·7               | 7·3          | 7·3           | 4·0            |
| 24             | 3·7         | 6·7  | 6·7          | 8·3     | 5·3         | 10·0              | 10·0         | 8·7           | 7·0            |
| 25             | 7·0         | 9·0  | 8·0          | 10·0    | 7·7         | 10·0              | 10·0         | 9·0           | 9·7            |
| 26             | 7·3         | 4·3  | 3·7          | 7·7     | 9·0         | 9·0               | 9·3          | 7·3           | 5·7            |
| 27             | 6·0         | 9·7  | 9·3          | 3·7     | 7·3         | 6·3               | 3·7          | 6·0           | 5·0            |
| 28             | 4·0         | 6·7  | 4·0          | 5·0     | 5·0         | 6·7               | 6·3          | 6·3           | 4·0            |
| 29             | 10·0        | 10·0 | 10·0         | 10·0    | 10·0        | 10·0              | 10·0         | 10·0          | 10·0           |
| 30             | 10·0        | 9·7  | 10·0         | 10·0    | 10·0        | 10·0              | 10·0         | 10·0          | 10·0           |
| 31             | 2·7         | 4·0  | 3·0          | 3·3     | 4·0         | 2·7               | 3·0          | 1·7           | 5·0            |
| Śred.<br>mies. | 6·8         | 7·3  | 6·5          | 7·9     | 6·9         | 7·6               | 7·9          | 7·5           | 6·9            |



## rzenia nieba

dzienne.

Czerwiec 1899 roku.

| Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków | Boeh-<br>nia | Szczaw-<br>nica |
|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|--------------|-----------------|
| 2'0                     | 5'3          | 2'0         | 6'0           | 6'7                  | 4'7           | 5'7         | 3'0          | 3'7             |
| 6'0                     | 2'7          | 2'3         | 6'0           | 4'7                  | 3'3           | 6'3         | 5'3          | 3'3             |
| 4'3                     | 2'0          | 2'3         | 0'0           | 2'3                  | 1'7           | 0'0         | 0'0          | 0'0             |
| 7'3                     | 7'0          | 4'7         | 7'0           | 8'7                  | 5'0           | 6'7         | 4'3          | 5'3             |
| 5'3                     | 7'7          | 4'7         | 7'0           | 8'7                  | 8'0           | 6'0         | 4'3          | 5'3             |
| 2'3                     | 1'7          | 1'7         | 2'0           | 6'0                  | 1'3           | 5'3         | 1'0          | 2'3             |
| 9'7                     | 10'0         | 7'3         | 8'0           | 8'3                  | 8'7           | 7'0         | 7'7          | 10'0            |
| 5'0                     | 5'3          | 4'0         | 4'0           | 6'0                  | 5'7           | 2'0         | 0'7          | 5'0             |
| 4'3                     | 6'0          | 7'7         | 10'0          | 4'3                  | 7'3           | 9'3         | 3'3          | 9'0             |
| 10'0                    | 8'7          | 9'7         | 10'0          | 10'0                 | 9'7           | 10'0        | 9'3          | 9'7             |
| 5'0                     | 6'3          | 5'7         | 7'0           | 9'0                  | 8'3           | 5'3         | 5'3          | 9'3             |
| 9'7                     | 10'0         | 8'7         | 9'0           | 9'3                  | 9'0           | 10'0        | 8'7          | 10'0            |
| 9'7                     | 9'3          | 10'0        | 10'0          | 8'3                  | 9'3           | 9'0         | 7'3          | 10'0            |
| 5'3                     | 8'0          | 8'3         | 7'0           | 6'0                  | 4'0           | 8'3         | 5'3          | 6'3             |
| 6'0                     | 6'3          | 6'7         | 6'0           | 3'7                  | 5'3           | 5'7         | 2'3          | 5'3             |
| 5'7                     | 3'3          | 6'0         | 2'0           | 5'0                  | 3'0           | 2'7         | 1'3          | 2'7             |
| 1'0                     | 0'3          | 4'0         | 5'0           | 2'0                  | 3'3           | 4'0         | 0'7          | 2'0             |
| 8'7                     | 9'0          | 8'3         | 9'0           | 9'7                  | 8'0           | 9'7         | 4'0          | 9'0             |
| 8'7                     | 8'0          | 8'3         | 7'0           | 9'3                  | 5'7           | 7'0         | 6'3          | 7'0             |
| 4'7                     | 2'0          | 5'0         | 4'0           | 1'7                  | 1'7           | 2'3         | 0'7          | 3'3             |
| 5'3                     | 4'3          | 5'3         | 4'0           | 4'0                  | 5'7           | 2'7         | 1'7          | 6'0             |
| 9'0                     | 8'7          | 7'3         | 10'0          | 9'7                  | 9'0           | 9'7         | 5'3          | 9'3             |
| 10'0                    | 8'7          | 10'0        | 10'0          | 10'0                 | 9'0           | 10'0        | 9'3          | 10'0            |
| 9'3                     | 7'7          | 8'0         | 10'0          | 9'7                  | 10'0          | 7'3         | 7'3          | 10'0            |
| 6'0                     | 7'7          | 6'7         | 8'0           | 4'3                  | 7'3           | 6'7         | 0'7          | 4'7             |
| 8'3                     | 9'3          | 9'3         | 9'0           | 10'0                 | 7'3           | 8'3         | 7'7          | 10'0            |
| 9'7                     | 8'7          | 9'7         | 10'0          | 8'0                  | 8'7           | 9'3         | 9'3          | 10'0            |
| 9'3                     | 6'7          | 8'0         | 10'0          | 8'3                  | 9'7           | 8'3         | 7'0          | 10'0            |
| 5'7                     | 1'0          | 1'3         | 1'0           | 5'0                  | 4'3           | 5'7         | 2'3          | 4'3             |
| 3'3                     | 3'7          | 3'0         | 6'0           | 3'0                  | 2'3           | 1'3         | 1'7          | 2'0             |
| 6'5                     | 6'2          | 6'2         | 6'8           | 6'7                  | 6'2           | 6'4         | 4'4          | 6'5             |

Stan zachmu-  
Średnie

Czerwiec 1899 roku.

| Dzień          | Kry-<br>nica | Tar-<br>nów | Pilzno | Iwo-<br>nicz | Rze-<br>szów | Smol-<br>nik | Sanok | Prze-<br>myśl | Stare-<br>miasto |
|----------------|--------------|-------------|--------|--------------|--------------|--------------|-------|---------------|------------------|
| 1              | 6'0          | 4'0         | 2'7    | 5'0          | 1'0          | 2'7          | 0'0   | 3'7           | 1'3              |
| 2              | 1'0          | 4'0         | 7'7    | 3'0          | 3'3          | 6'6          | 0'0   | 0'0           | 3'3              |
| 3              | 0'0          | 1'0         | 1'7    | 2'3          | 0'0          | 0'7          | 0'0   | 0'7           | 0'3              |
| 4              | 5'7          | 6'3         | 4'0    | 5'0          | 3'3          | 4'3          | 4'0   | 4'3           | 2'7              |
| 5              | 5'3          | 4'0         | 2'7    | 5'3          | 1'7          | 6'3          | 4'0   | 2'7           | 2'0              |
| 6              | 1'0          | 4'7         | 7'0    | 1'7          | 0'0          | 3'3          | 4'0   | 1'0           | 2'0              |
| 7              | 10'0         | 5'3         | 8'3    | 8'0          | 8'3          | 9'7          | 8'0   | 7'0           | 4'0              |
| 8              | 3'7          | 2'0         | 1'0    | 2'0          | 1'7          | 2'7          | 1'0   | 1'3           | 1'0              |
| 9              | 5'7          | 3'0         | 8'0    | 3'0          | 1'7          | 5'3          | 4'0   | 1'3           | 0'7              |
| 10             | 10'0         | 7'7         | 10'0   | 8'3          | 7'0          | 9'7          | 10'0  | 7'7           | 6'7              |
| 11             | 8'3          | 5'7         | 9'7    | 8'0          | 6'7          | 7'0          | 7'0   | 5'7           | 3'7              |
| 12             | 10'0         | 9'7         | 10'0   | 4'7          | 6'7          | 6'3          | 5'0   | 5'0           | 3'0              |
| 13             | 10'0         | 10'0        | 9'7    | 8'7          | 8'3          | 10'0         | 7'0   | 8'7           | 8'0              |
| 14             | 8'3          | 8'3         | 6'7    | 3'0          | 5'0          | 4'0          | 6'0   | 5'3           | 2'0              |
| 15             | 8'7          | 7'0         | 7'0    | 7'3          | 5'0          | 9'7          | 8'0   | 6'0           | 6'3              |
| 16             | 1'7          | 2'7         | 3'0    | 5'0          | 1'7          | 5'3          | 5'0   | 4'7           | 4'0              |
| 17             | 1'0          | 2'0         | 3'7    | 3'0          | 0'0          | 3'3          | 2'0   | 4'0           | 2'0              |
| 18             | 7'3          | 3'3         | 6'7    | 2'3          | 5'0          | 4'0          | 2'0   | 2'0           | 2'3              |
| 19             | 7'7          | 5'3         | 4'7    | 3'0          | 3'3          | 4'7          | 5'0   | 1'0           | 3'0              |
| 20             | 2'7          | 1'7         | 0'7    | 1'3          | 0'0          | 5'7          | 4'0   | 3'3           | 4'0              |
| 21             | 5'3          | 1'3         | 3'0    | 4'7          | 5'0          | 5'7          | 1'0   | 4'0           | 1'7              |
| 22             | 9'0          | 4'0         | 8'7    | 8'7          | 0'0          | 9'7          | 8'0   | 5'3           | 4'0              |
| 23             | 10'0         | 10'0        | 8'3    | 8'0          | 6'7          | 6'7          | 5'0   | 5'0           | 4'3              |
| 24             | 10'0         | 10'0        | 6'7    | 4'7          | 5'0          | 9'7          | 7'0   | 5'3           | 5'0              |
| 25             | 3'3          | 5'0         | 1'7    | 3'0          | 1'7          | 4'3          | 6'0   | 0'7           | 1'3              |
| 26             | 8'3          | 2'7         | 6'0    | 3'3          | 1'7          | 9'0          | 5'0   | 4'0           | 3'0              |
| 27             | 10'0         | 10'0        | 8'0    | 10'0         | 1'7          | 9'3          | 8'0   | 6'0           | 5'0              |
| 28             | 10'0         | 10'0        | 10'0   | 8'7          | 4'3          | 9'0          | 8'0   | 7'3           | 9'0              |
| 29             | 6'7          | 2'7         | 2'7    | 3'3          | 1'7          | 7'0          | 4'0   | 0'7           | 1'0              |
| 30             | 1'7          | 2'0         | 3'3    | 1'7          | 2'7          | 3'0          | 2'0   | 0'0           | 1'0              |
| Śred.<br>mies. | 6'3          | 5'2         | 5'8    | 4'9          | 3'3          | 6'1          | 4'7   | 3'8           | 3'2              |

rzenia nieba.  
dzienne.

| Sam-<br>bor | Lwów | Du-<br>blany | Delatyn | Oży-<br>dów | Krzywo-<br>równia | Ober-<br>tyn | Tar-<br>nopol | Ja-<br>giel-<br>nica |
|-------------|------|--------------|---------|-------------|-------------------|--------------|---------------|----------------------|
| 3·7         | 3·0  | 1·3          | 6·0     | 3·4         | 5·3               | 4·3          | 1·7           | 5·0                  |
| —           | 8·0  | 5·7          | 6·3     | 5·0         | 6·7               | 6·7          | 9·0           | 4·7                  |
| 2·7         | 3·0  | 2·7          | 3·3     | 4·7         | 8·7               | 4·3          | 2·0           | 1·7                  |
| 4·7         | 5·3  | 3·7          | 4·3     | 5·7         | 1·3               | 3·7          | 5·7           | 3·7                  |
| 4·0         | 3·7  | 2·7          | 9·3     | 4·0         | 8·0               | 9·3          | 4·7           | 4·3                  |
| 1·3         | 5·3  | 3·7          | 5·7     | 4·3         | 5·3               | 3·7          | 5·0           | 2·7                  |
| 5·3         | 6·3  | 5·3          | 8·3     | 5·7         | 7·7               | 5·3          | 5·7           | 6·0                  |
| 2·0         | 2·7  | 3·0          | 3·3     | 7·0         | 2·7               | 3·3          | 7·3           | 4·7                  |
| —           | 2·7  | 2·3          | 3·7     | 1·7         | 0·3               | 2·0          | 3·7           | 1·0                  |
| 7·3         | 10·0 | 9·7          | 8·3     | 8·0         | 10·0              | 10·0         | 9·0           | 6·7                  |
| 6·0         | 6·7  | 5·7          | 10·0    | 7·3         | 10·0              | 7·3          | 9·7           | 10·0                 |
| 3·0         | 5·0  | 3·7          | 7·7     | 1·7         | 7·3               | 6·0          | 7·0           | 5·7                  |
| 10·0        | 10·0 | 10·0         | 7·7     | 10·0        | 10·0              | 10·0         | 10·0          | 10·0                 |
| 4·0         | 6·3  | 6·0          | 2·7     | 5·0         | 6·3               | 5·3          | 5·0           | 3·3                  |
| 8·7         | 8·7  | 9·7          | 8·3     | 9·3         | 8·3               | 9·7          | 9·7           | 5·0                  |
| 7·0         | 6·0  | 6·0          | 8·3     | 7·9         | 7·0               | 7·7          | 9·7           | 8·0                  |
| 1·7         | 2·7  | 1·7          | 7·0     | 7·3         | 4·0               | 9·0          | 3·7           | 1·7                  |
| 2·7         | 2·7  | 3·0          | 7·0     | 3·3         | 7·3               | 6·0          | 2·0           | 1·7                  |
| 5·7         | 7·3  | 7·7          | 9·7     | 5·0         | 9·7               | 8·3          | 7·3           | 9·0                  |
| 3·0         | 6·0  | 5·0          | 6·7     | 3·7         | 6·7               | 8·7          | 5·7           | 6·3                  |
| 2·3         | 3·7  | 4·0          | 4·3     | 3·3         | 3·3               | 4·7          | 2·7           | 8·7                  |
| 6·3         | 7·7  | 6·7          | 6·7     | 6·0         | 9·7               | 9·7          | 7·7           | 8·0                  |
| 5·3         | 7·0  | 6·3          | 6·3     | 5·7         | 7·3               | 7·3          | 8·3           | 6·0                  |
| 7·3         | 7·7  | 7·0          | 9·7     | 7·0         | 10·0              | 9·0          | 9·7           | 9·0                  |
| 1·7         | 2·3  | 1·0          | 2·3     | 0·7         | 3·3               | 1·0          | 2·3           | 1·3                  |
| 4·3         | 6·7  | 6·3          | 5·3     | 4·7         | 6·7               | 4·3          | 6·7           | 5·7                  |
| 5·0         | 7·3  | 6·7          | 9·0     | 7·0         | 9·3               | 7·7          | 8·3           | 8·7                  |
| —           | 9·3  | 9·3          | 10·0    | 10·0        | 9·7               | 10·0         | 9·7           | 9·0                  |
| 1·7         | 3·3  | 2·3          | 6·3     | 4·7         | 5·0               | 7·0          | 5·0           | 6·0                  |
| 1·0         | 1·0  | 0·0          | 5·0     | 1·0         | 7·0               | 1·3          | 0·3           | 2·7                  |
| 4·4         | 5·6  | 4·9          | 6·6     | 5·3         | 6·8               | 6·5          | 6·1           | 5·5                  |

Stan zachmu-  
Średnie

. Lipiec 1899 roku.

| Dzień          | Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków | Boch-<br>nia                | Szosa-<br>w-<br>nica |
|----------------|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|-----------------------------|----------------------|
| 1              | 8.7                     | 9.0          | 5.0         | 10.0          | 10.0                 | 6.0           | 9.3         |                             | 10.0                 |
| 2              | 8.0                     | 8.7          | 9.3         | 10.0          | 9.0                  | 6.3           | 7.0         |                             | 8.0                  |
| 3              | 10.0                    | 10.0         | 10.0        | 10.0          | 10.0                 | 9.7           | 10.0        |                             | 10.0                 |
| 4              | 6.3                     | 7.7          | 8.0         | 9.0           | 9.0                  | 5.0           | 9.3         |                             | 7.3                  |
| 5              | 10.0                    | 10.0         | 9.7         | 10.0          | 8.7                  | 6.0           | 9.7         |                             | 7.3                  |
| 6              | 9.7                     | 9.7          | 9.3         | 10.0          | 10.0                 | —             | 10.0        |                             | 9.0                  |
| 7              | 10.0                    | 9.7          | 10.0        | 10.0          | 10.0                 | 9.0           | 8.0         |                             | 9.3                  |
| 8              | 10.0                    | 10.0         | 10.0        | 10.0          | 10.0                 | 10.0          | 10.0        |                             | 10.0                 |
| 9              | 10.0                    | 9.7          | 9.7         | 10.0          | 9.7                  | 9.3           | 10.0        |                             | 8.7                  |
| 10             | 7.3                     | 7.0          | 8.0         | 10.0          | 9.7                  | 9.7           | 10.0        |                             | 9.3                  |
| 11             | 7.0                     | 3.7          | 5.3         | 5.0           | 3.7                  | 6.0           | 2.7         | Nie zapisywano spostrzeżeń. | 5.0                  |
| 12             | 3.3                     | 0.7          | 2.7         | 3.0           | 3.0                  | 1.3           | 1.7         |                             | 2.0                  |
| 13             | 2.7                     | 2.3          | 4.3         | 5.0           | 3.3                  | 3.7           | 2.0         |                             | 3.0                  |
| 14             | 1.7                     | 2.3          | 1.7         | 0.0           | 2.7                  | 2.0           | 1.3         |                             | 2.7                  |
| 15             | 6.0                     | 6.0          | 4.3         | 7.0           | 6.3                  | 4.0           | 6.3         |                             | 1.0                  |
| 16             | 2.7                     | 3.3          | 3.7         | 3.0           | 5.0                  | 1.7           | 4.0         |                             | 2.3                  |
| 17             | 4.3                     | 5.0          | 5.7         | 5.0           | 6.0                  | 4.0           | 5.0         |                             | 3.0                  |
| 18             | 8.0                     | 7.7          | 4.7         | 8.0           | 7.7                  | —             | 5.0         |                             | 7.0                  |
| 19             | 5.3                     | 5.7          | 3.3         | 6.0           | 8.3                  | 3.3           | 7.3         |                             | 6.0                  |
| 20             | 7.7                     | 6.0          | 3.0         | 5.0           | 7.0                  | 5.0           | 5.0         |                             | 7.3                  |
| 21             | 1.7                     | 1.0          | 1.7         | 0.0           | 0.7                  | 1.0           | 1.0         | 2.0                         |                      |
| 22             | 3.3                     | 2.0          | 2.0         | 1.0           | 1.7                  | 1.3           | 0.0         | 2.0                         |                      |
| 23             | 4.3                     | 3.0          | 5.0         | 4.0           | 9.0                  | 3.0           | 6.7         | 4.3                         |                      |
| 24             | 9.0                     | 9.3          | 9.7         | 10.0          | 10.0                 | 9.3           | 10.0        | 9.3                         |                      |
| 25             | 9.7                     | 9.3          | 10.0        | 8.0           | 9.0                  | 9.3           | 7.7         | 7.0                         |                      |
| 26             | 7.0                     | 3.3          | 4.0         | 4.0           | 5.0                  | 6.3           | 2.3         | 8.7                         |                      |
| 27             | 8.0                     | 8.0          | 8.0         | 9.0           | 9.7                  | 8.7           | 10.0        | 9.3                         |                      |
| 28             | 9.0                     | 8.7          | 6.7         | 5.0           | 8.7                  | 5.3           | 4.0         | 6.3                         |                      |
| 29             | 10.0                    | 10.0         | 10.0        | 8.0           | 10.0                 | 9.7           | 10.0        | 10.0                        |                      |
| 30             | 10.0                    | 10.0         | 9.7         | 9.0           | 10.0                 | 9.3           | 10.0        | 10.0                        |                      |
| 31             | 9.7                     | 9.7          | 8.0         | 8.0           | 8.7                  | 10.0          | 10.0        | 10.0                        |                      |
| Śred.<br>mies. | 7.1                     | 6.7          | 6.5         | 6.8           | 7.5                  | 6.0           | 6.6         | 6.7                         |                      |

## rzenia nieba.

dzienne.

| Kry-<br>nica | Tar-<br>nów | Pil-<br>zno | Iwo-<br>nicz | Rze-<br>szów | Smol-<br>nik | Sanok | Prze-<br>myśl | Stare-<br>miasto |
|--------------|-------------|-------------|--------------|--------------|--------------|-------|---------------|------------------|
| 8.0          | 10.0        | 3.0         | 2.7          | 0.0          | 9.0          | 2.0   | 2.0           | 1.3              |
| 5.3          | 4.0         | 7.0         | 3.7          | 3.3          | 7.3          | 2.0   | 0.7           | 2.0              |
| 10.0         | 10.0        | 10.0        | 8.0          | 8.3          | 10.0         | 10.0  | 8.0           | 8.3              |
| 2.0          | 4.0         | 5.7         | 3.7          | 8.3          | 7.3          | 6.0   | 1.7           | 1.3              |
| 6.7          | 10.0        | 8.0         | 7.7          | 6.7          | 9.0          | 9.0   | 7.0           | 4.3              |
| 10.0         | 10.0        | 10.0        | 8.0          | 8.3          | 9.0          | 10.0  | 7.3           | 6.0              |
| 8.3          | 10.0        | 9.3         | 7.7          | 7.7          | 9.0          | 10.0  | 3.0           | 7.0              |
| 10.0         | 10.0        | 10.0        | 10.0         | 10.0         | 9.3          | 8.0   | 8.3           | 4.0              |
| 9.0          | 9.3         | 7.3         | 7.7          | 4.0          | 9.3          | 7.0   | 6.7           | 4.3              |
| 10.0         | 10.0        | 6.3         | 7.7          | 7.0          | 9.7          | 9.0   | 8.0           | 8.0              |
| 5.0          | 4.3         | 4.0         | 3.3          | 0.0          | 5.3          | 1.0   | 3.3           | 2.7              |
| 5.0          | 2.3         | 1.0         | 1.7          | 0.0          | 1.7          | 1.0   | 1.7           | 1.0              |
| 2.0          | 1.7         | 1.0         | 1.3          | 0.0          | 5.7          | 0.0   | 0.0           | 0.3              |
| 2.3          | 2.7         | 1.0         | 1.3          | 0.0          | 1.3          | 0.0   | 0.0           | 1.0              |
| 2.3          | 4.0         | 2.3         | 1.7          | 0.0          | 1.0          | 3.0   | 0.7           | 0.3              |
| 5.3          | 7.0         | 7.0         | 2.0          | 1.7          | 8.0          | 7.0   | 4.7           | 2.0              |
| 5.0          | 4.7         | 5.0         | 5.3          | 4.3          | 6.7          | 7.0   | 4.3           | 1.7              |
| 6.7          | 6.3         | 5.3         | 4.7          | 2.7          | 7.0          | 5.0   | 3.3           | 2.7              |
| 2.7          | 4.7         | 2.7         | 2.7          | 0.0          | 3.0          | 7.0   | 1.0           | 1.3              |
| 2.7          | 4.3         | 3.7         | 2.0          | 0.0          | 4.0          | 5.0   | 1.3           | 1.7              |
| 0.0          | 2.3         | 0.7         | 2.0          | 0.0          | 3.3          | 2.0   | 0.7           | 1.7              |
| 0.0          | 4.3         | 0.3         | 2.0          | 0.0          | 2.3          | 1.0   | 0.0           | 1.0              |
| 1.0          | 2.3         | 2.3         | 2.0          | 1.7          | 4.3          | 0.0   | 3.3           | 0.0              |
| 10.0         | 9.0         | 6.7         | 5.3          | 6.7          | 9.0          | 2.0   | 2.7           | 3.7              |
| 5.7          | 6.3         | 7.3         | 2.3          | 5.0          | 6.0          | 8.0   | 4.0           | 2.0              |
| 8.3          | 3.3         | 3.7         | 4.7          | 2.7          | 6.0          | 3.0   | 4.7           | 3.3              |
| 9.0          | 8.7         | 9.7         | 7.7          | 4.0          | 6.0          | 8.0   | 7.3           | 6.3              |
| 6.0          | 4.7         | 5.7         | 2.7          | 3.0          | 2.0          | 7.0   | 2.0           | 3.3              |
| 6.7          | 9.7         | 6.7         | 2.3          | 0.0          | 6.0          | 7.0   | 6.0           | 5.3              |
| 10.0         | 9.0         | 10.0        | 5.3          | 5.0          | 10.0         | 10.0  | 6.7           | 7.7              |
| 10.0         | 8.7         | 9.7         | 5.7          | 5.0          | 9.3          | 8.0   | 6.7           | 7.0              |
| 6.0          | 6.3         | 5.6         | 4.3          | 3.5          | 6.3          | 5.3   | 3.8           | 3.3              |

Stan zachmu-  
Średnie

*Lipiec 1899 roku.*

| Dzień          | Sam-<br>bor | Lwów | Du-<br>blany | Delatyn | Oży-<br>dów | Krzywo-<br>równia | Ober-<br>tyn | Tar-<br>nopol | Jagiel-<br>nica |
|----------------|-------------|------|--------------|---------|-------------|-------------------|--------------|---------------|-----------------|
| 1              | 3·0         | 1·7  | 3·7          | 1·7     | 2·0         | 0·3               | 0·0          | 0·7           | 0·0             |
| 2              | 3·7         | 2·0  | 2·0          | 6·7     | 1·3         | 6·7               | 5·7          | 1·3           | 4·3             |
| 3              | 8·7         | 9·0  | 10·0         | 9·7     | 7·0         | 10·0              | 10·0         | 9·7           | 6·7             |
| 4              | 0·7         | 3·0  | 2·7          | 6·3     | 4·3         | 3·0               | 3·7          | 3·0           | 1·3             |
| 5              | 5·0         | 7·0  | 6·7          | 6·0     | 6·7         | 2·0               | 4·3          | 7·0           | 7·0             |
| 6              | 9·0         | 0·0  | 8·0          | 9·7     | 6·3         | 9·7               | 10·0         | 9·7           | 8·7             |
| 7              | 6·3         | 7·7  | 6·7          | 8·0     | 6·7         | 7·3               | 6·7          | 8·7           | 8·0             |
| 8              | 7·3         | 6·0  | 7·7          | 8·3     | 8·3         | 6·7               | 6·7          | 8·0           | 6·7             |
| 9              | 4·7         | 6·7  | 7·7          | 7·3     | 6·0         | 9·0               | 9·7          | 7·0           | 4·7             |
| 10             | 9·3         | 9·0  | 9·0          | 9·3     | 9·3         | 8·7               | 10·0         | 9·0           | 9·7             |
| 11             | 4·7         | 4·0  | 4·0          | 9·7     | 5·3         | 6·3               | 6·3          | 5·7           | 6·0             |
| 12             | 0·3         | 4·3  | 5·3          | 4·0     | 5·3         | 2·7               | 6·7          | 6·3           | 4·0             |
| 13             | 1·7         | 2·3  | 3·0          | 4·0     | 4·3         | 3·7               | 3·7          | 5·3           | 3·3             |
| 14             | 0·7         | 2·3  | 3·3          | 7·0     | 3·0         | 5·3               | 2·0          | 2·0           | 4·0             |
| 15             | 2·0         | 2·0  | 2·3          | 5·7     | 3·3         | 4·7               | 3·7          | 2·0           | 6·0             |
| 16             | 4·3         | 4·3  | 5·3          | 7·0     | 2·7         | 7·3               | 6·3          | 4·7           | 3·0             |
| 17             | 2·7         | 0·3  | 6·7          | 7·3     | 6·0         | 8·3               | 3·3          | 6·7           | 6·7             |
| 18             | 6·3         | 6·0  | 6·0          | 5·3     | 5·3         | 4·3               | 7·0          | 6·0           | 2·0             |
| 19             | 1·7         | 5·3  | 2·7          | 4·0     | 4·3         | 6·7               | 3·0          | 5·7           | 5·0             |
| 20             | 0·7         | 2·0  | 1·7          | 6·3     | 3·3         | 6·7               | 8·0          | 6·7           | 6·7             |
| 21             | 2·0         | 3·3  | 3·0          | 7·7     | 2·0         | 8·7               | 9·0          | 4·0           | 6·0             |
| 22             | 1·3         | 2·7  | 2·3          | 10·0    | 6·0         | 10·0              | 10·0         | 10·0          | 9·3             |
| 23             | 1·7         | 3·7  | 5·7          | 5·3     | 4·3         | 3·7               | 3·3          | 2·7           | 2·3             |
| 24             | 0·7         | 9·3  | 10·0         | 7·3     | 8·0         | 6·3               | 8·0          | 10·0          | 4·3             |
| 25             | 8·0         | 6·0  | 5·7          | 7·3     | 5·0         | 7·0               | 5·7          | 5·0           | 3·7             |
| 26             | 9·3         | 4·3  | 4·3          | 9·7     | 4·3         | 9·7               | 10·0         | 5·3           | 5·3             |
| 27             | 8·0         | 8·3  | 8·7          | 6·0     | 8·0         | 7·3               | 5·3          | 9·7           | 4·3             |
| 28             | 6·7         | 4·3  | 4·7          | 7·0     | 6·0         | 6·7               | 8·3          | 4·3           | 4·3             |
| 29             | 8·3         | 7·7  | 8·7          | 5·7     | 6·0         | 7·3               | 8·7          | 8·7           | 5·7             |
| 30             | 9·7         | 8·7  | 9·0          | 9·0     | 9·3         | 7·0               | 8·7          | 10·0          | 8·7             |
| 31             | —           | 9·0  | 9·0          | 7·7     | 9·7         | 8·3               | 5·3          | 5·0           | 5·0             |
| Śred.<br>mies. | 4·6         | 5·3  | 5·7          | 7·0     | 5·5         | 6·5               | 6·5          | 6·1           | 5·2             |

rzenia nieba.

dzienne.

Sierpień 1899 roku.

| Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków | Boch-<br>nia | Szczaw-<br>nica |
|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|--------------|-----------------|
| 6·3                     | 8·0          | 7·0         | 8·0           | 10·0                 | 9·0           | 7·0         |              | 10·0            |
| 3·7                     | 0·3          | 2·0         | 1·0           | 4·3                  | 2·3           | 2·3         |              | 1·7             |
| 2·3                     | 0·0          | 1·3         | 0·0           | 0·7                  | 4·7           | 0·3         |              | 0·7             |
| 6·7                     | 6·0          | 5·3         | 2·0           | 4·7                  | 5·0           | 2·7         |              | 6·3             |
| 5·0                     | 5·7          | 5·3         | 5·0           | 7·0                  | 3·3           | 8·0         |              | 2·3             |
| 5·7                     | 5·7          | 3·7         | 5·0           | 5·3                  | 3·3           | 3·3         |              | 6·0             |
| 3·3                     | 3·3          | 3·7         | 5·0           | 3·3                  | 0·7           | 3·3         |              | 2·0             |
| 9·3                     | 6·0          | 8·0         | 8·0           | 8·3                  | 7·3           | 6·7         |              | 8·0             |
| 10·0                    | 10·0         | 10·0        | 10·0          | 10·0                 | 10·0          | 10·0        |              | 10·0            |
| 9·3                     | 9·0          | 8·0         | 9·0           | 10·0                 | 10·0          | 10·0        |              | 10·0            |
| 7·7                     | 7·0          | 9·0         | 8·0           | 8·3                  | 7·7           | 6·7         |              | 6·7             |
| 10·0                    | 10·0         | 10·0        | 9·0           | 9·7                  | 8·0           | 9·0         |              | 7·7             |
| 7·7                     | 8·0          | 7·3         | 5·0           | 6·7                  | 7·0           | 6·7         |              | 6·0             |
| 2·3                     | 1·3          | 2·0         | 1·0           | 1·3                  | 0·7           | 0·7         |              | 1·7             |
| 4·7                     | 2·0          | 2·3         | 3·0           | 2·0                  | 1·3           | 2·3         |              | 2·0             |
| 7·0                     | 4·0          | 3·3         | 4·0           | 5·7                  | 3·7           | 6·3         |              | 9·0             |
| 6·3                     | 8·7          | 7·0         | 7·0           | 7·0                  | 2·3           | 6·7         |              | 7·7             |
| 8·3                     | 6·7          | 6·7         | 7·0           | 7·3                  | 5·3           | 5·3         |              | 10·0            |
| 9·7                     | 8·0          | 10·0        | 10·0          | 9·7                  | 8·0           | 7·0         |              | 9·3             |
| 10·0                    | 10·0         | 10·0        | 10·0          | 10·0                 | 9·3           | 10·0        |              | 10·0            |
| 10·0                    | 9·7          | 8·0         | 7·0           | 9·7                  | 9·3           | 10·0        |              | 9·7             |
| 7·3                     | 4·7          | 5·7         | 4·0           | 4·0                  | 8·3           | 7·3         |              | 9·0             |
| 5·3                     | 5·7          | 4·7         | 7·0           | 6·0                  | 3·3           | 4·3         |              | 3·7             |
| 10·0                    | 10·0         | 10·0        | 10·0          | 10·0                 | 10·0          | 10·0        |              | 10·0            |
| 8·3                     | 8·7          | 7·0         | 8·0           | 9·7                  | 9·0           | 7·3         |              | 6·7             |
| 5·7                     | 7·0          | 7·3         | 8·0           | 10·0                 | 10·0          | 5·3         |              | 8·3             |
| 2·3                     | 3·7          | 3·3         | 4·0           | 0·3                  | 3·7           | 1·3         |              | 3·0             |
| 1·0                     | 0·7          | 1·0         | 6·0           | 1·0                  | 0·7           | 1·0         |              | 0·7             |
| 9·0                     | 7·7          | 5·7         | 7·0           | 9·3                  | 7·7           | 10·0        |              | 9·3             |
| 4·0                     | 5·3          | 4·0         | 3·0           | 0·7                  | 3·3           | 7·7         |              | 5·7             |
| 7·3                     | 6·7          | 5·0         | 6·0           | 3·3                  | 6·0           | 8·3         |              | 8·7             |
| 6·6                     | 6·1          | 5·9         | 6·0           | 6·3                  | 5·8           | 6·0         |              | 6·5             |

Nie zapisywano spostrzeżeń.

**Stan zachmu-  
Średnie**

*Sierpień 1899 roku.*

| Dzień          | Kry-<br>nica | Tar-<br>nów | Pil-<br>zno | Iwo-<br>nicz | Rze-<br>szów | Smol-<br>nik | Sanok | Prze-<br>myśl | Stare-<br>miasto |
|----------------|--------------|-------------|-------------|--------------|--------------|--------------|-------|---------------|------------------|
| 1              | 6·7          | 8·0         | 5·7         | 5·0          | 1·7          | 6·3          | 9·0   | 4·7           | 3·3              |
| 2              | 0·0          | 1·7         | 1·0         | 2·0          | 0·0          | 0·7          | 1·0   | 0·7           | 1·0              |
| 3              | 1·0          | 0·7         | 0·3         | 1·7          | 0·0          | 1·3          | 1·0   | 0·7           | 0·3              |
| 4              | 3·3          | 2·3         | 0·7         | 2·0          | 0·0          | 1·3          | 0·0   | 1·0           | 0·0              |
| 5              | 4·3          | 6·7         | 3·3         | 1·7          | 1·7          | 1·3          | 0·0   | 2·3           | 0·0              |
| 6              | 8·3          | 4·7         | 2·3         | 2·3          | 6·0          | 3·7          | 1·0   | 1·3           | 2·7              |
| 7              | 1·0          | 1·7         | 1·3         | 2·0          | 1·7          | 1·0          | 0·0   | 0·0           | 0·3              |
| 8              | 8·3          | 4·0         | 3·7         | 5·3          | 3·3          | 6·3          | 1·0   | 2·0           | 4·0              |
| 9              | 10·0         | 10·0        | 10·0        | 8·7          | 10·0         | 9·7          | 6·0   | 8·0           | 8·7              |
| 10             | 10·0         | 10·0        | 10·0        | 10·0         | 10·0         | 10·0         | 7·0   | 8·0           | 10·0             |
| 11             | 6·3          | 6·3         | 6·7         | 6·0          | 1·7          | 9·3          | 10·0  | 5·0           | 6·0              |
| 12             | 8·0          | 6·3         | 5·7         | 2·0          | 3·7          | 7·3          | 9·0   | 2·7           | 4·3              |
| 13             | 6·7          | 6·3         | 6·3         | 5·0          | 5·0          | 9·3          | 7·0   | 7·0           | 8·7              |
| 14             | 2·0          | 1·7         | 1·0         | 2·0          | 0·0          | 5·3          | 1·0   | 0·0           | 0·0              |
| 15             | 2·0          | 3·0         | 3·7         | 2·3          | 0·0          | 4·7          | 2·0   | 2·0           | 4·0              |
| 16             | 8·3          | 6·3         | 4·7         | 2·0          | 5·0          | 3·7          | 4·0   | 2·0           | 1·0              |
| 17             | 5·0          | 4·0         | 4·7         | 3·0          | 5·0          | 8·7          | 5·0   | 5·3           | 3·0              |
| 18             | 9·0          | 9·3         | 9·0         | 8·0          | 4·3          | 9·7          | 10·0  | 4·7           | 4·7              |
| 19             | 6·7          | 5·7         | 8·0         | 8·3          | 5·0          | 9·3          | 8·0   | 3·7           | 4·3              |
| 20             | 10·0         | 10·0        | 10·0        | 6·7          | 5·0          | 10·0         | 10·0  | 7·3           | 3·0              |
| 21             | 10·0         | 7·3         | 8·7         | 7·7          | 5·0          | 9·7          | 8·0   | 7·0           | 5·0              |
| 22             | 10·0         | 6·7         | 6·3         | 5·7          | 5·0          | 6·7          | 6·0   | 7·0           | 2·0              |
| 23             | 4·0          | 2·3         | 2·3         | 2·7          | 5·0          | 4·7          | 2·0   | 1·7           | 2·0              |
| 24             | 10·0         | 8·7         | 9·7         | 5·3          | 5·0          | 6·7          | 3·0   | 2·7           | 5·0              |
| 25             | 10·0         | 7·0         | 9·0         | 7·3          | 5·0          | 6·3          | 4·0   | 3·7           | 3·7              |
| 26             | 10·0         | 7·3         | 3·0         | 10·0         | 8·3          | 6·7          | 3·0   | 3·0           | 2·7              |
| 27             | 3·3          | 5·3         | 1·7         | 2·0          | 5·0          | 5·3          | 1·0   | 4·3           | 3·0              |
| 28             | 1·3          | 0·7         | 0·0         | 2·3          | 5·0          | 2·7          | 1·0   | 1·3           | 0·3              |
| 29             | 10·0         | 10·0        | 10·0        | 10·0         | 5·0          | 9·0          | 8·0   | 3·7           | 2·0              |
| 30             | 2·0          | 6·3         | 4·7         | 2·7          | 5·0          | 6·3          | 2·0   | 3·7           | 2·0              |
| 31             | 4·7          | 5·0         | 4·7         | 4·7          | 3·3          | 6·0          | 4·0   | 2·7           | 0·7              |
| Śred.<br>mies. | 6·2          | 5·7         | 5·1         | 4·7          | 4·1          | 6·1          | 4·3   | 3·5           | 3·1              |



rzenia nieba.  
dzienne.

| Sam-<br>bor | Lwów | Du-<br>blany | Delatyn | Oży-<br>dów | Krzywo-<br>równia | Ober-<br>tyn | Tar-<br>nopol | Ja-<br>giel-<br>nica |
|-------------|------|--------------|---------|-------------|-------------------|--------------|---------------|----------------------|
| 7'0         | 7'0  | 7'0          | 7'0     | 7'0         | 7'7               | 7'0          | 7'0           | 5'0                  |
| 1'7         | 2'0  | 1'7          | 5'0     | 2'0         | 2'7               | 3'0          | 5'7           | 3'3                  |
| 1'0         | 1'0  | 0'7          | 2'3     | 0'7         | 1'3               | 0'0          | 0'3           | 2'0                  |
| 2'3         | 1'3  | 0'3          | 3'0     | 0'3         | 7'0               | 0'3          | 0'3           | 2'0                  |
| 1'7         | 2'3  | 1'7          | 4'7     | 0'3         | 3'0               | 0'3          | 3'0           | 4'0                  |
| 7'0         | 6'0  | 7'0          | 7'0     | 6'0         | 6'7               | 6'3          | 6'0           | 6'0                  |
| 7'0         | 1'3  | 1'0          | 2'0     | 1'7         | 5'7               | 3'7          | 1'3           | 4'0                  |
| 7'0         | 1'7  | 1'7          | 7'3     | 3'0         | 7'3               | 7'0          | 2'0           | 7'0                  |
| 10'0        | 10'0 | 10'0         | 10'0    | 10'0        | 8'3               | 10'0         | 7'0           | 10'0                 |
| 9'3         | 10'0 | 10'0         | 10'0    | 10'0        | 10'0              | 10'0         | 10'0          | 10'0                 |
| 9'3         | 7'7  | 8'7          | 10'0    | 9'3         | 10'0              | 10'0         | 10'0          | 10'0                 |
| 5'7         | 7'7  | 7'3          | 8'7     | 4'3         | 7'3               | 6'0          | 5'3           | 5'0                  |
| 10'0        | 7'3  | 9'3          | 5'3     | 8'7         | 5'3               | 6'3          | 5'7           | 5'0                  |
| 3'0         | 1'7  | 0'7          | 2'3     | 1'7         | 2'3               | 1'7          | 2'7           | 4'0                  |
| 1'7         | 3'3  | 0'7          | 5'3     | 5'3         | 4'3               | 5'7          | 6'3           | 4'0                  |
| 4'7         | 3'7  | 3'7          | 2'7     | 1'7         | 4'7               | 0'0          | 2'0           | 4'0                  |
| 2'7         | 5'7  | 7'0          | 5'3     | 5'0         | 3'7               | 2'7          | 7'0           | 6'0                  |
| 6'0         | 7'0  | 6'7          | 10'0    | 8'0         | 9'7               | 10'0         | 8'3           | 9'0                  |
| 5'7         | 7'0  | 6'7          | 6'7     | 7'0         | 7'3               | 6'3          | 6'3           | 7'0                  |
| 9'0         | 6'7  | 6'0          | 7'0     | 8'0         | 8'3               | 8'3          | 7'7           | 6'0                  |
| 6'7         | 6'0  | 5'7          | 4'3     | 8'7         | 6'3               | 7'3          | 7'0           | 6'7                  |
| 5'0         | 5'7  | 2'7          | 6'3     | 4'0         | 6'3               | 3'7          | 6'3           | 4'0                  |
| 1'7         | 2'0  | 0'7          | 8'0     | 1'3         | 9'3               | 4'0          | 2'0           | 4'0                  |
| 5'3         | 3'7  | 3'7          | 8'3     | 5'0         | 10'0              | 3'3          | 9'0           | 3'0                  |
| 5'0         | 4'3  | 3'0          | 6'0     | 3'7         | 4'7               | 8'7          | 2'7           | 4'0                  |
| 5'3         | 6'7  | 6'7          | 5'3     | 9'3         | 7'3               | 10'0         | 10'0          | 6'3                  |
| 5'3         | 6'7  | 8'0          | 7'3     | 9'3         | 0'7               | 5'0          | 10'0          | 6'0                  |
| 1'0         | 2'0  | 1'0          | 4'0     | 3'0         | 0'7               | 5'3          | 3'3           | 2'0                  |
| 7'3         | 3'7  | 4'3          | 3'3     | 4'7         | 3'7               | 3'3          | 4'0           | 2'0                  |
| 1'3         | 2'7  | 3'7          | 3'3     | 7'7         | 4'7               | 7'3          | 6'7           | 2'0                  |
| 1'0         | 3'0  | 3'3          | 4'3     | 1'7         | 3'0               | 2'7          | 2'7           | 3'0                  |
| 5'1         | 4'7  | 4'5          | 5'8     | 5'1         | 5'8               | 5'3          | 5'4           | 5'0                  |

Stan zachmu-  
Średnie

Wrzesień 1899 roku.

| Dzień          | Kami-<br>tzer-<br>Platte | Biel-<br>sko | Ży-<br>wice | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków | Boch-<br>nia | Szczaw-<br>nica |
|----------------|--------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|--------------|-----------------|
| 1              | 7.0                      | 6.3          | 3.7         | 10.0          | 9.3                  | 5.3           | 9.3         | 4.3          | 5.0             |
| 2              | 4.7                      | 4.7          | 5.3         | 8.0           | 3.7                  | 2.3           | 7.3         | 2.7          | 5.7             |
| 3              | 8.7                      | 10.0         | 8.0         | 10.0          | 9.7                  | 7.7           | 7.7         | 5.3          | 7.7             |
| 4              | 7.0                      | 7.7          | 8.0         | 8.0           | 10.0                 | 9.0           | 9.7         | 2.7          | 9.0             |
| 5              | 3.0                      | 0.0          | 0.3         | 5.0           | 0.3                  | 1.0           | 0.7         | 0.7          | 0.3             |
| 6              | 3.0                      | 1.0          | 0.7         | 3.0           | 0.3                  | 0.0           | 0.0         | 0.0          | 2.7             |
| 7              | 6.0                      | 5.7          | 5.3         | 10.0          | 4.7                  | 3.7           | 6.0         | 0.7          | 8.3             |
| 8              | 7.0                      | 7.3          | 7.7         | 10.0          | 8.7                  | 8.3           | 8.3         | 6.3          | 9.3             |
| 9              | 8.0                      | 8.3          | 7.7         | 7.0           | 9.3                  | 9.7           | 6.3         | 6.0          | 6.7             |
| 10             | 9.3                      | 10.0         | 9.3         | 10.0          | 8.0                  | 9.7           | 10.0        | 9.3          | 10.0            |
| 11             | 10.0                     | 10.0         | 10.0        | 10.0          | 10.0                 | 10.0          | 10.0        | 10.0         | 10.0            |
| 12             | 8.0                      | 9.3          | 9.0         | 10.0          | 9.7                  | 7.3           | 9.7         | 7.7          | 9.0             |
| 13             | 7.0                      | 7.3          | 7.0         | 9.0           | 6.7                  | 5.3           | 9.3         | 3.3          | 6.7             |
| 14             | 9.7                      | 9.0          | 9.3         | 10.0          | 10.0                 | 10.0          | 9.3         | 8.0          | 8.0             |
| 15             | 6.0                      | 5.3          | 5.7         | 6.0           | 5.3                  | 6.3           | 8.3         | 6.0          | 6.3             |
| 16             | 7.3                      | 6.7          | 6.0         | 9.0           | 7.7                  | 4.3           | 8.3         | 4.0          | 8.3             |
| 17             | 9.7                      | 10.0         | 8.7         | 10.0          | 9.7                  | 8.7           | 8.3         | 7.0          | 7.3             |
| 18             | 5.3                      | 5.0          | 6.3         | 1.0           | 6.0                  | 4.7           | 5.7         | 3.3          | 7.7             |
| 19             | 7.7                      | 7.3          | 7.7         | 10.0          | 9.0                  | 7.7           | 6.7         | 4.7          | 5.3             |
| 20             | 7.3                      | 8.0          | 8.3         | 10.0          | 4.7                  | 7.7           | 9.7         | 5.3          | 8.3             |
| 21             | 7.0                      | 7.7          | 8.0         | 8.0           | 6.7                  | 8.3           | 7.0         | 6.7          | 6.7             |
| 22             | 3.3                      | 3.7          | 4.0         | 6.0           | 2.0                  | 4.0           | 4.0         | 1.0          | 4.0             |
| 23             | 9.7                      | 10.0         | 9.7         | 10.0          | 9.3                  | 9.0           | 10.0        | 7.7          | 8.7             |
| 24             | 7.7                      | 6.3          | 9.3         | 10.0          | 7.0                  | 6.3           | 9.7         | 5.0          | 6.7             |
| 25             | 7.0                      | 5.3          | 5.7         | 6.0           | 4.3                  | 3.3           | 3.7         | 1.7          | 3.7             |
| 26             | 5.0                      | 5.3          | 4.3         | 6.0           | 3.7                  | 3.0           | 5.0         | 2.7          | 7.3             |
| 27             | 3.0                      | 1.7          | 3.0         | 5.0           | 3.3                  | 3.0           | 3.0         | 2.3          | 3.3             |
| 28             | 1.7                      | 1.0          | 2.3         | 5.0           | 1.3                  | 2.7           | 1.0         | 2.7          | 0.0             |
| 29             | 9.3                      | 9.3          | 8.7         | 9.0           | 7.7                  | 8.0           | 7.0         | 4.3          | 7.3             |
| 30             | 3.0                      | 3.0          | 5.0         | 5.0           | 4.3                  | 6.0           | 3.7         | 5.7          | 5.0             |
| 31             |                          |              |             |               |                      |               |             |              |                 |
| Śred.<br>mies. | 6.6                      | 6.4          | 6.5         | 8.0           | 6.4                  | 5.9           | 6.8         | 4.6          | 6.5             |

## rzenia nieba.

dzienne.

| Kry-<br>nica | Tar-<br>nów | Pilzno | Iwo-<br>nicz | Rze-<br>szów | Smol-<br>nik | Sanok | Prze-<br>myśl | Stare-<br>miasto |
|--------------|-------------|--------|--------------|--------------|--------------|-------|---------------|------------------|
| 8·3          | 4·3         | 8·3    | 5·0          | 1·7          | 6·0          | 2·0   | 2·7           | 2·0              |
| 3·3          | 5·3         | 4·7    | 2·3          | 0·0          | 1·3          | 1·0   | 1·3           | 0·3              |
| 6·7          | 9·0         | 8·0    | 5·0          | 5·0          | 9·7          | 4·0   | 3·0           | 5·0              |
| 8·3          | 9·0         | 9·7    | 7·7          | 6·7          | 8·7          | 6·0   | 4·0           | 3·0              |
| 4·0          | 5·7         | 4·7    | 5·0          | 5·0          | 6·3          | 6·0   | 3·0           | 3·0              |
| 3·7          | 1·0         | 0·3    | 1·7          | 1·7          | 0·0          | 0·0   | 0·0           | 0·0              |
| 6·7          | 5·0         | 0·3    | 5·0          | 3·3          | 4·0          | 3·0   | 2·7           | 4·0              |
| 10·0         | 8·0         | 2·3    | 7·3          | 6·7          | 5·7          | 2·0   | 3·0           | 2·7              |
| 10·0         | 10·0        | 9·7    | 7·7          | 5·0          | 10·0         | 9·0   | 5·3           | 8·0              |
| 10·0         | 10·0        | 9·7    | 10·0         | 8·3          | 10·0         | 10·0  | 7·3           | 7·0              |
| 10·0         | 10·0        | 10·0   | 10·0         | 10·0         | 10·0         | 10·0  | 8·7           | 8·0              |
| 8·3          | 9·0         | 9·7    | 10·0         | 10·0         | 10·0         | 10·0  | 8·0           | 9·0              |
| 10·0         | 4·7         | 6·0    | 10·0         | 8·3          | 8·3          | 6·0   | 2·0           | 1·7              |
| 10·0         | 7·0         | 9·0    | 8·3          | 10·0         | 9·0          | 8·0   | 3·0           | 3·0              |
| 10·0         | 5·7         | 6·0    | 5·3          | 10·0         | 7·0          | 10·0  | 4·0           | 2·0              |
| 8·3          | 4·3         | 8·7    | 5·0          | 5·0          | 9·0          | 6·0   | 5·7           | 4·0              |
| 10·0         | 7·7         | 8·7    | 2·7          | 2·7          | 6·7          | 5·0   | 4·0           | 1·7              |
| 7·7          | 3·0         | 8·3    | 6·0          | 1·3          | 9·0          | 9·0   | 8·0           | 8·3              |
| 6·0          | 6·0         | 9·0    | 2·3          | 0·0          | 8·7          | 3·0   | 2·7           | 1·7              |
| 6·7          | 6·0         | 6·7    | 2·3          | 2·0          | 3·0          | 2·0   | 1·0           | 1·0              |
| 10·0         | 5·7         | 10·0   | 7·7          | 10·0         | 10·0         | 8·0   | 8·0           | 10·0             |
| 3·3          | 2·7         | 4·3    | 2·7          | 1·0          | 3·0          | 0·0   | 0·7           | 2·0              |
| 9·0          | 7·7         | 9·0    | 10·0         | 8·3          | 6·3          | 5·0   | 5·7           | 3·0              |
| 10·0         | 6·3         | 9·3    | 10·0         | 10·0         | 10·0         | 10·0  | 7·3           | 8·0              |
| 0·3          | 3·3         | 5·0    | 2·0          | 1·7          | 0·3          | 1·0   | 1·0           | 1·0              |
| 3·3          | 4·0         | 1·3    | 2·0          | 1·7          | 6·0          | 6·0   | 2·7           | 1·0              |
| 4·3          | 3·0         | 2·3    | 2·3          | 0·0          | 5·7          | 0·0   | 0·7           | 1·0              |
| 1·0          | 1·3         | 1·0    | 2·3          | 0·0          | 1·7          | 0·0   | 0·0           | 0·3              |
| 7·7          | 7·0         | 5·3    | 5·0          | 3·3          | 9·0          | 8·0   | 2·7           | 1·0              |
| 10·0         | 5·0         | 10·0   | 5·3          | 1·7          | 6·0          | 5·0   | 2·7           | 1·3              |
| 7·2          | 5·9         | 6·6    | 5·6          | 4·7          | 6·7          | 5·2   | 3·7           | 3·5              |

Stan zachmu-  
Średnie

Wrzesień 1899 roku.

| Dzień          | Sam-<br>bor | Lwów | Du-<br>blany | Delatyn | Oży-<br>dów | Krzywo-<br>równia | Ober-<br>tyn                | Tarno-<br>pol | Jagiel-<br>nica |     |
|----------------|-------------|------|--------------|---------|-------------|-------------------|-----------------------------|---------------|-----------------|-----|
| 1              | 1·3         | 3·7  | 2·7          | 3·7     | 4·7         | 4·7               |                             | 1·0           | 3·3             |     |
| 2              | 0·3         | 2·7  | 1·3          | 4·0     | 3·3         | 3·0               |                             | 1·3           | 3·0             |     |
| 3              | 5·3         | 8·7  | 9·7          | 10·0    | 7·3         | 9·3               |                             | 6·7           | 5·0             |     |
| 4              | 6·0         | 5·0  | 5·3          | 6·0     | 4·3         | 6·3               |                             | 5·7           | 9·0             |     |
| 5              | 5·3         | 8·7  | 9·3          | 5·7     | 5·3         | 6·7               |                             | 6·7           | 4·3             |     |
| 6              | 0·7         | 0·7  | 1·7          | 5·3     | 5·0         | 3·7               |                             | 4·0           | 4·0             |     |
| 7              | 4·3         | 5·3  | 5·3          | 1·7     | 4·7         | 1·3               |                             | 5·7           | 2·3             |     |
| 8              | 3·3         | 1·3  | 2·0          | 5·7     | 2·7         | 6·0               |                             | 4·3           | 0·0             |     |
| 9              | 9·3         | 7·0  | 7·7          | 10·0    | 9·3         | 10·0              |                             | 6·7           | 9·0             |     |
| 10             | —           | 9·7  | 7·0          | 10·0    | 10·0        | 10·0              |                             | 10·0          | 9·0             |     |
| 11             | —           | 10·0 | 10·0         | 9·0     | 10·0        | 6·3               | Nie zapisywano spostrzeżeń. | 10·0          | 8·0             |     |
| 12             | 10·0        | 10·0 | 10·0         | 7·7     | 9·3         | 6·7               |                             | 10·0          | 8·3             |     |
| 13             | 2·0         | 2·3  | 4·0          | 4·3     | 3·3         | 3·3               |                             | 8·7           | 1·7             |     |
| 14             | 5·3         | 2·7  | 4·3          | 7·3     | 2·7         | 6·0               |                             | 3·7           | 4·0             |     |
| 15             | 5·0         | 6·3  | 6·0          | 9·7     | 6·0         | 10·0              |                             | 7·7           | 3·3             |     |
| 16             | 3·0         | 6·0  | 4·7          | 6·7     | 4·0         | 7·0               |                             | 9·0           | 2·3             |     |
| 17             | 2·0         | 6·0  | 7·3          | 3·3     | 4·7         | 5·3               |                             | 8·3           | 0·3             |     |
| 18             | 10·0        | 10·0 | 10·0         | 10·0    | 9·7         | 10·0              |                             | 7·7           | 0·0             |     |
| 19             | 3·3         | 6·0  | 6·0          | 6·3     | 4·7         | 6·7               |                             | 10·0          | 0·0             |     |
| 20             | 2·3         | 2·0  | 2·3          | 1·0     | 1·3         | 1·0               |                             | 7·3           | 1·7             |     |
| 21             | 10·0        | 9·0  | 9·3          | 9·3     | 8·3         | 7·3               |                             | 3·7           | 0·0             |     |
| 22             | 0·7         | 2·3  | 2·0          | 1·7     | 2·7         | 1·0               |                             | 9·0           | 5·7             |     |
| 23             | 3·3         | 5·0  | 5·0          | 1·0     | 3·0         | 0·3               |                             | 1·3           | 2·0             |     |
| 24             | 0·3         | 9·0  | 9·3          | 8·0     | 8·0         | 7·0               |                             | 1·3           | 1·3             |     |
| 25             | 1·7         | 3·0  | 2·7          | 5·7     | 4·3         | 6·7               |                             | 9·7           | 2·0             |     |
| 26             | 4·3         | 5·0  | 5·0          | 5·3     | 4·3         | 2·3               |                             | 4·0           | 4·3             |     |
| 27             | 0·7         | 1·7  | 1·3          | 1·7     | 1·7         | 5·7               |                             | 6·3           | 0·0             |     |
| 28             | 2·3         | 1·0  | 1·0          | 0·7     | 0·7         | 0·0               |                             | 2·3           | 0·0             |     |
| 29             | 3·3         | 5·3  | 3·7          | 4·3     | 4·7         | 1·0               |                             | 2·0           | 6·3             |     |
| 30             | 2·7         | 3·3  | 3·0          | 2·3     | 2·7         | 4·3               |                             | 1·7           | 4·0             |     |
|                |             |      |              |         |             |                   |                             | 1·3           | 0·0             |     |
| Śred.<br>mies. | 4·2         | 5·3  | 5·3          | 5·6     | 5·1         | 5·3               |                             |               | 5·6             | 3·5 |

## rzenia nieba

dienne.

Październik 1899 roku.

| Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków | Boch-<br>nia | Szczaw-<br>nica |
|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|--------------|-----------------|
| 3·3                     | 3·7          | 4·0         | 3·0           | 5·7                  | 5·3           | 5·3         | 2·7          | 5·3             |
| 2·7                     | 2·0          | 2·7         | 5·0           | 0·3                  | 1·3           | 0·7         | 1·7          | 0·0             |
| 7·3                     | 7·3          | 5·0         | 6·0           | 6·3                  | 6·3           | 6·3         | 4·0          | 6·3             |
| 1·3                     | 0·0          | 0·7         | 0·0           | 0·0                  | 0·7           | 3·3         | 0·0          | 3·3             |
| 4·7                     | 2·0          | 3·7         | 5·0           | 3·0                  | 5·3           | 1·7         | 4·3          | 3·7             |
| 10·0                    | 10·0         | 10·0        | 10·0          | 10·0                 | 9·7           | 10·0        | 9·3          | 10·0            |
| 10·0                    | 10·0         | 9·7         | 10·0          | 10·0                 | 9·3           | 10·0        | 7·7          | 10·0            |
| 10·0                    | 10·0         | 9·3         | 10·0          | 8·7                  | 9·3           | 10·0        | 9·3          | 10·0            |
| 4·3                     | 2·3          | 4·0         | 6·0           | 2·0                  | 4·7           | 3·3         | 5·7          | 5·7             |
| 0·3                     | 0·0          | 0·3         | 0·0           | 0·0                  | 1·0           | 0·0         | 0·0          | 0·0             |
| 3·0                     | 1·3          | 1·7         | 4·0           | 0·7                  | 1·7           | 2·3         | 2·3          | 0·3             |
| 2·7                     | 2·0          | 1·7         | 0·0           | 5·3                  | 0·0           | 5·7         | 1·0          | 0·0             |
| 7·3                     | 7·3          | 6·7         | 9·0           | 6·7                  | 1·3           | 7·0         | 3·0          | 2·0             |
| 7·3                     | 9·0          | 9·7         | 10·0          | 10·0                 | 10·0          | 7·0         | 1·0          | 7·7             |
| 7·7                     | 4·0          | 4·3         | 6·0           | 4·3                  | 6·7           | 3·0         | 3·0          | 6·3             |
| 3·0                     | 0·0          | 0·7         | 3·0           | 0·3                  | 0·0           | 4·0         | 7·7          | 0·3             |
| 9·7                     | 9·0          | 8·0         | 10·0          | 10·0                 | 7·0           | 9·7         | 2·7          | 9·0             |
| 10·0                    | 10·0         | 9·0         | 10·0          | 10·0                 | 10·0          | 10·0        | 0·0          | 10·0            |
| 8·0                     | 6·7          | 5·0         | 8·0           | 7·7                  | 3·7           | 4·7         | 8·3          | 4·3             |
| 7·0                     | 5·7          | 6·7         | 8·0           | 7·0                  | 10·0          | 10·0        | 8·3          | 10·0            |
| 1·3                     | 2·7          | 2·3         | 4·0           | 3·0                  | 0·0           | 3·0         | 6·7          | 0·7             |
| 8·0                     | 8·0          | 0·0         | 3·0           | 3·3                  | 0·0           | 6·7         | 7·7          | 0·0             |
| 3·3                     | 1·0          | 1·0         | 1·0           | 3·3                  | 0·0           | 4·3         | 1·0          | 1·3             |
| 7·3                     | 9·3          | 5·3         | 10·0          | 9·3                  | 8·0           | 7·0         | 4·0          | 3·0             |
| 9·0                     | 8·0          | 8·7         | 10·0          | 7·7                  | 9·0           | 9·7         | 0·0          | 5·0             |
| 5·7                     | 2·7          | 2·3         | 4·0           | 0·0                  | 2·7           | 2·3         | 4·3          | 2·7             |
| 1·7                     | 0·3          | 0·7         | 0·0           | 0·0                  | 0·0           | 1·0         | 3·7          | 0·0             |
| 6·7                     | 7·0          | 5·3         | 7·0           | 7·3                  | 3·3           | 5·7         | 1·7          | 8·7             |
| 6·7                     | 4·7          | 7·0         | 6·0           | 5·7                  | 3·0           | 9·3         | 4·0          | 3·0             |
| 3·3                     | 2·0          | 1·3         | 3·0           | 3·0                  | 1·7           | 2·7         | 4·0          | 1·3             |
| 7·3                     | 7·0          | 8·0         | 10·0          | 9·0                  | 2·3           | 5·7         | 5·0          | 8·0             |
| 5·8                     | 5·0          | 4·7         | 5·7           | 5·1                  | 4·3           | 5·5         | 4·0          | 4·4             |

**Stan zachmu-  
Średnie**

*Październik 1899 roku.*

| Dzień          | Kry-<br>nica | Tar-<br>nów | Pilzno | Iwo-<br>nicz | Rze-<br>szów | Smol-<br>nik | Sanok | Prze-<br>myśl | Stare-<br>miasto |
|----------------|--------------|-------------|--------|--------------|--------------|--------------|-------|---------------|------------------|
| 1              | 3·7          | 1·7         | 0·0    | 2·3          | 0·0          | 5·3          | 0·0   | 0·7           | 0·7              |
| 2              | 0·0          | 0·3         | 0·0    | 2·0          | 0·0          | 2·3          | 1·0   | 0·0           | 0·0              |
| 3              | 10·0         | 8·0         | 8·0    | 7·7          | 8·3          | 7·3          | 9·0   | 6·3           | 4·3              |
| 4              | 3·3          | 4·3         | 1·0    | 4·7          | 1·7          | 1·3          | 3·0   | 4·3           | 3·0              |
| 5              | 7·7          | 2·3         | 0·7    | 2·3          | 1·7          | 5·0          | 0·0   | 0·7           | 0·0              |
| 6              | 10·0         | 10·0        | 10·0   | 10·0         | 10·0         | 9·7          | 10·0  | 4·3           | 7·7              |
| 7              | 10·0         | 9·3         | 10·0   | 8·0          | 10·0         | 9·7          | 10·0  | 8·0           | 8·3              |
| 8              | 10·0         | 10·0        | 10·0   | 10·0         | 10·0         | 10·0         | 10·0  | 8·0           | 9·0              |
| 9              | 3·3          | 3·3         | 6·7    | 5·7          | 5·0          | 7·0          | 7·0   | 5·3           | 5·0              |
| 10             | 0·0          | 0·0         | 0·0    | 2·3          | 4·3          | 1·0          | 0·0   | 0·0           | 0·0              |
| 11             | 2·0          | 0·0         | 0·0    | 2·0          | 1·7          | 1·7          | 0·0   | 0·0           | 1·0              |
| 12             | 3·3          | 0·7         | 0·0    | 2·3          | 0·0          | 0·3          | 0·0   | 0·0           | 0·0              |
| 13             | 2·7          | 3·7         | 4·3    | 3·0          | 0·0          | 1·7          | 4·0   | 0·0           | 0·0              |
| 14             | 6·7          | 6·3         | 6·3    | 6·3          | 10·0         | 6·7          | 10·0  | 4·7           | 6·7              |
| 15             | 5·0          | 5·3         | 6·7    | 6·0          | 10·0         | 5·7          | 6·0   | 6·0           | 1·7              |
| 16             | 1·0          | 9·3         | 9·7    | 3·0          | 6·7          | 5·7          | 6·0   | 2·7           | 3·0              |
| 17             | 10·0         | 9·7         | 10·0   | 10·0         | 10·0         | 9·7          | 10·0  | 8·0           | 7·7              |
| 18             | 10·0         | 10·0        | 10·0   | 10·0         | 10·0         | 10·0         | 10·0  | 7·3           | 10·0             |
| 19             | 7·3          | 2·0         | 4·7    | 10·0         | 6·7          | 8·3          | 10·0  | 7·0           | 5·7              |
| 20             | 10·0         | 5·0         | 10·0   | 10·0         | 5·0          | 9·3          | 9·0   | 6·7           | 5·0              |
| 21             | 3·3          | 1·0         | 0·7    | 5·0          | 0·0          | 3·7          | 2·0   | 1·0           | 2·3              |
| 22             | 3·3          | 5·0         | 0·7    | 3·0          | 0·0          | 4·3          | 2·0   | 0·0           | 2·7              |
| 23             | 3·3          | 0·3         | 3·3    | 2·3          | 0·0          | 1·0          | 1·0   | 1·0           | 1·0              |
| 24             | 7·7          | 3·7         | 9·0    | 5·3          | 0·0          | 4·7          | 5·0   | 4·0           | 5·0              |
| 25             | 10·0         | 5·7         | 8·0    | 7·7          | 10·0         | 9·0          | 8·0   | 6·0           | 2·0              |
| 26             | 1·7          | 3·7         | 5·7    | 5·0          | 5·0          | 6·3          | 2·0   | 3·3           | 2·7              |
| 27             | 0·0          | 1·0         | 3·0    | 2·3          | 0·0          | 0·7          | 4·0   | 0·0           | 0·0              |
| 28             | 5·0          | 5·7         | 8·3    | 2·7          | 0·0          | 6·7          | 0·0   | 2·7           | 2·0              |
| 29             | 8·0          | 5·7         | 7·7    | 5·0          | 0·0          | 5·0          | 2·0   | 5·3           | 1·7              |
| 30             | 1·7          | 3·0         | 7·7    | 2·3          | 0·0          | 1·3          | 1·0   | 1·0           | 0·3              |
| 31             | 6·0          | 6·0         | 5·7    | 5·0          | 1·7          | 3·3          | 4·0   | 4·7           | 2·0              |
| Śred.<br>mies. | 5·4          | 4·6         | 5·3    | 5·3          | 4·1          | 5·3          | 4·7   | 3·5           | 3·2              |

## rzenia nieba.

dzienne.

| Sam-<br>bor | Lwów | Du-<br>blany | Delatyn | Oży-<br>dów | Krzywo-<br>równia | Ober-<br>tyn | Tar-<br>nopol | Ja-<br>giel-<br>nica |
|-------------|------|--------------|---------|-------------|-------------------|--------------|---------------|----------------------|
| 1'0         | 2'0  | 1'3          | 0'0     | 1'0         | 0'3               |              | 0'0           | 0'0                  |
| 0'0         | 0'7  | 0'0          | 0'0     | 0'3         | 3'7               |              | 0'0           | 3'3                  |
| 6'7         | 6'3  | 6'7          | 5'0     | 4'0         | 3'7               |              | 4'7           | 2'3                  |
| 6'0         | 9'3  | 9'3          | 10'0    | 7'3         | 9'3               |              | 10'0          | 3'0                  |
| 0'7         | 3'0  | 2'7          | 3'7     | 4'3         | 3'3               |              | 6'7           | 4'0                  |
| 9'0         | 7'7  | 7'3          | 6'3     | 7'7         | 4'7               |              | 8'0           | 0'0                  |
| 9'7         | 10'0 | 10'0         | 10'0    | 9'0         | 10'0              |              | 10'0          | 0'0                  |
| 9'3         | 9'0  | 8'7          | 7'3     | 8'7         | 9'0               |              | 10'0          | 10'0                 |
| 9'3         | 7'3  | 7'7          | 8'3     | 8'3         | 10'0              |              | 5'7           | 4'7                  |
| 9'7         | 0'3  | 0'0          | 0'7     | 0'3         | 0'0               |              | 0'0           | 0'0                  |
| 1'0         | 2'0  | 2'0          | 2'0     | 1'7         | 2'3               |              | 2'7           | 0'0                  |
| 0'7         | 1'0  | 0'3          | 0'3     | 1'3         | 0'0               |              | 3'3           | 0'0                  |
| 0'0         | 1'0  | 0'3          | 0'0     | 0'3         | 0'0               |              | 0'0           | 1'0                  |
| 6'7         | 8'7  | 7'0          | 6'7     | 8'7         | 8'7               |              | 9'7           | 7'7                  |
| 4'7         | 5'7  | 3'7          | 6'3     | 4'7         | 8'0               |              | 5'0           | 10'0                 |
| 5'0         | 5'0  | 4'7          | 2'7     | 5'3         | 2'7               |              | 3'7           | 6'0                  |
| 9'7         | 9'3  | 10'0         | 9'0     | 8'3         | 6'7               |              | 10'0          | 10'0                 |
| 10'0        | 9'7  | 9'3          | 8'7     | 8'0         | 8'7               |              | 10'0          | 1'0                  |
| 6'3         | 10'0 | 10'0         | 9'0     | 10'0        | 10'0              |              | 10'0          | 6'7                  |
| 9'0         | 10'0 | 10'0         | 10'0    | 10'0        | 10'0              |              | 10'0          | 6'0                  |
| 4'0         | 4'7  | 4'3          | 5'7     | 5'7         | 5'3               |              | 4'7           | 4'0                  |
| 0'7         | 4'0  | 2'0          | 5'7     | 0'3         | 3'3               |              | 1'7           | 4'0                  |
| 0'3         | 1'3  | 1'0          | 1'7     | 0'0         | 0'0               |              | 1'3           | 4'3                  |
| 3'0         | 6'7  | 6'7          | 4'7     | 5'7         | 2'3               |              | 7'0           | 8'0                  |
| 7'7         | 7'0  | 4'7          | 9'0     | 8'0         | 7'3               |              | 5'7           | 9'0                  |
| 6'0         | 9'3  | 10'0         | 9'3     | 10'0        | 9'3               |              | 10'0          | 4'7                  |
| 0'0         | 1'0  | 0'3          | 0'0     | 1'0         | 0'0               |              | 3'0           | 0'0                  |
| 5'3         | 6'3  | 6'0          | 4'7     | 4'7         | 1'0               |              | 7'7           | 0'0                  |
| 1'3         | 6'3  | 7'7          | 4'7     | 9'0         | 2'3               |              | 9'0           | 3'0                  |
| 0'7         | 3'3  | 2'3          | 2'7     | 4'3         | 1'0               |              | 7'0           | 4'7                  |
| 3'0         | 3'0  | 3'3          | 0'7     | 2'7         | 0'3               |              | 1'7           | 5'0                  |
| 4'8         | 5'5  | 5'1          | 5'0     | 5'2         | 4'6               |              | 5'7           | 3'9                  |

Nie zapisywano spostrzeżeń.

Stan zachmu-  
Środnie

Listopad 1899 roku.

| Dzień          | Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wało-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków | Boch-<br>nia | Szczaw-<br>alica |
|----------------|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|--------------|------------------|
| 1              | 5.0                     | 2.0          | 4.7         | 10.0          | 2.7                  | 0.7           | 1.3         | 0.0          | 2.7              |
| 2              | 2.7                     | 0.0          | 0.7         | 0.0           | 0.3                  | 0.0           | 1.7         | 2.7          | 0.3              |
| 3              | 5.0                     | 3.0          | 4.7         | 10.0          | 5.7                  | 2.0           | 5.3         | 2.3          | 3.3              |
| 4              | 8.3                     | 7.3          | 7.3         | 5.0           | 6.7                  | 1.7           | 7.7         | 4.3          | 4.7              |
| 5              | 1.7                     | 0.0          | 1.0         | 3.0           | 3.0                  | 1.0           | 2.7         | 2.7          | 2.3              |
| 6              | 1.0                     | 0.0          | 0.0         | 0.0           | 3.3                  | 0.0           | 3.3         | 3.3          | 3.3              |
| 7              | 4.7                     | 6.0          | 1.3         | 0.0           | 1.3                  | 0.7           | 6.7         | 0.7          | 0.0              |
| 8              | 2.7                     | 0.7          | 1.0         | 2.0           | 8.3                  | 2.0           | 10.0        | 3.3          | 3.3              |
| 9              | 10.0                    | 10.0         | 8.3         | 10.0          | 9.0                  | 8.3           | 10.0        | 8.7          | 9.0              |
| 10             | 9.0                     | 8.0          | 8.3         | 10.0          | 9.3                  | 7.0           | 10.0        | 4.3          | 9.7              |
| 11             | 10.0                    | 5.7          | 6.3         | 7.0           | 7.0                  | 8.3           | 8.0         | 8.7          | 7.7              |
| 12             | 8.3                     | 8.7          | 5.0         | 10.0          | 6.0                  | 6.0           | 6.0         | 3.0          | 5.7              |
| 13             | 10.0                    | 10.0         | 10.0        | 10.0          | 10.0                 | 10.0          | 10.0        | 9.3          | 10.0             |
| 14             | 10.0                    | 10.0         | 10.0        | 10.0          | 10.0                 | 10.0          | 10.0        | 5.3          | 10.0             |
| 15             | 10.0                    | 10.0         | 10.0        | 9.0           | 10.0                 | 10.0          | 10.0        | 10.0         | 10.0             |
| 16             | 10.0                    | 10.0         | 10.0        | 10.0          | 10.0                 | 10.0          | 10.0        | 9.3          | 10.0             |
| 17             | 8.3                     | 7.7          | 7.3         | 10.0          | 9.3                  | 10.0          | 9.3         | 9.3          | 10.0             |
| 18             | 10.0                    | 10.0         | 10.0        | 10.0          | 10.0                 | 10.0          | 10.0        | 10.0         | 10.0             |
| 19             | 5.7                     | 3.3          | 5.0         | 6.0           | 4.7                  | 4.0           | 4.3         | 6.0          | 6.7              |
| 20             | 8.7                     | 8.3          | 8.3         | 8.0           | 7.0                  | 2.0           | 7.3         | 6.0          | 5.3              |
| 21             | 6.3                     | 1.7          | 5.0         | 2.0           | 0.7                  | 5.0           | 2.7         | 0.7          | 4.3              |
| 22             | 8.3                     | 7.0          | 7.7         | 8.0           | 7.0                  | 5.7           | 7.0         | 5.3          | 7.0              |
| 23             | 10.0                    | 10.0         | 10.0        | 10.0          | 9.7                  | 8.3           | 10.0        | 5.7          | 10.0             |
| 24             | 10.0                    | 10.0         | 8.3         | 10.0          | 10.0                 | 10.0          | 10.0        | 10.0         | 8.0              |
| 25             | 10.0                    | 7.0          | 7.7         | 9.0           | 5.0                  | 8.3           | 7.3         | 6.0          | 10.0             |
| 26             | 4.7                     | 6.0          | 1.7         | 3.0           | 3.7                  | 2.3           | 3.3         | 1.7          | 4.0              |
| 27             | 6.3                     | 7.7          | 9.7         | 9.0           | 9.7                  | 5.0           | 8.3         | 6.7          | 7.3              |
| 28             | 10.0                    | 10.0         | 10.0        | 10.0          | 10.0                 | 10.0          | 10.0        | 10.0         | 10.0             |
| 29             | 10.0                    | 10.0         | 10.0        | 10.0          | 10.0                 | 10.0          | 10.0        | 10.0         | 10.0             |
| 30             | 10.0                    | 10.0         | 10.0        | 10.0          | 10.0                 | 10.0          | 10.0        | 10.0         | 8.7              |
| Śred.<br>mies. | 7.6                     | 6.7          | 6.6         | 7.3           | 7.0                  | 5.8           | 7.4         | 5.8          | 6.8              |



**rzenia nieba.**  
dzienne.

| Kry-<br>nica | Tar-<br>nów | Pil-<br>zno | Iwo-<br>nicz | Rze-<br>szów | Smol-<br>nik | Sanok | Prze-<br>myśl | Stare-<br>miasto |
|--------------|-------------|-------------|--------------|--------------|--------------|-------|---------------|------------------|
| 2'0          | 2'0         | 0'3         | 2'0          | 5'0          | 3'7          | 5'0   | 1'0           | 1'0              |
| 0'0          | 0'0         | 1'7         | 2'7          | 0'0          | 0'7          | 0'0   | 0'0           | 0'0              |
| 3'3          | 1'3         | 2'3         | 3'0          | 0'0          | 1'0          | 2'0   | 1'7           | 1'0              |
| 7'7          | 4'7         | 4'7         | 5'0          | 0'0          | 3'3          | 1'0   | 0'0           | 0'0              |
| 3'3          | 3'3         | 1'0         | 4'7          | 0'0          | 3'7          | 3'0   | 2'0           | 1'7              |
| 3'3          | 0'3         | 0'0         | 2'0          | 0'0          | 0'3          | 1'0   | 0'0           | 0'0              |
| 0'0          | 0'3         | 0'0         | 2'0          | 0'0          | 0'0          | 0'0   | 0'0           | 0'0              |
| 3'3          | 3'3         | 0'0         | 1'7          | 0'0          | 3'3          | 0'0   | 0'0           | 1'3              |
| 10'0         | 6'3         | 8'3         | 7'7          | 6'7          | 10'0         | 10'0  | 6'0           | 6'3              |
| 8'3          | 8'7         | 9'7         | 8'0          | 3'7          | 7'0          | 8'0   | 5'3           | 4'7              |
| 6'7          | 6'7         | 10'0        | 8'0          | 10'0         | 9'7          | 7'0   | 5'3           | 6'7              |
| 6'7          | 7'0         | 10'0        | 5'7          | 10'0         | 8'3          | 5'0   | 3'0           | 1'0              |
| 10'0         | 10'0        | 10'0        | 5'7          | 10'0         | 10'0         | 10'0  | 8'0           | 7'3              |
| 9'0          | 8'7         | 10'0        | 5'7          | 5'0          | 9'0          | 8'0   | 6'3           | 7'0              |
| 10'0         | 6'7         | 10'0        | 3'0          | 10'0         | 9'3          | 10'0  | 6'3           | 7'7              |
| 10'0         | 10'0        | 10'0        | 9'3          | 10'0         | 10'0         | 10'0  | 7'3           | 10'0             |
| 10'0         | 9'7         | 8'7         | 10'0         | 10'0         | 9'0          | 6'0   | 3'7           | 5'0              |
| 10'0         | 10'0        | 10'0        | 10'0         | 10'0         | 9'7          | 10'0  | 6'7           | 6'0              |
| 6'7          | 8'0         | 10'0        | 7'7          | 5'0          | 7'0          | 8'0   | 4'0           | 4'0              |
| 6'7          | 6'0         | 9'7         | 2'3          | 0'0          | 7'0          | 6'0   | 2'0           | 2'0              |
| 4'3          | 0'0         | 0'3         | 2'0          | 0'0          | 6'0          | 3'0   | 2'0           | 4'0              |
| 9'0          | 7'3         | 6'7         | 10'0         | 6'7          | 9'0          | 7'0   | 4'0           | 4'0              |
| 9'7          | 10'0        | 10'0        | 10'0         | 8'3          | 10'0         | 10'0  | 5'7           | 7'0              |
| 6'7          | 10'0        | 10'0        | 10'0         | 10'0         | 10'0         | 10'0  | 8'0           | 7'0              |
| 9'0          | 10'0        | 8'3         | 6'7          | 6'7          | 10'0         | 10'0  | 2'7           | 5'0              |
| 3'3          | 2'7         | 3'3         | 2'3          | 5'0          | 1'0          | 3'0   | 0'0           | 0'3              |
| 6'7          | 10'0        | 9'3         | 7'7          | 8'3          | 7'3          | 7'0   | 4'3           | 5'0              |
| 10'0         | 10'0        | 10'0        | 10'0         | 10'0         | 10'0         | 10'0  | 8'0           | 9'0              |
| 10'0         | 10'0        | 10'0        | 10'0         | 10'0         | 10'0         | 10'0  | 8'0           | 6'0              |
| 10'0         | 10'0        | 10'0        | 10'0         | 10'0         | 10'0         | 10'0  | 7'3           | 8'0              |
| 6'9          | 6'4         | 6'8         | 6'2          | 5'7          | 6'8          | 6'3   | 4'0           | 4'3              |

Stan zachmu-  
Średnie

*Listopad 1899 roku.*

| Dzień          | Sam-<br>bor | Lwów | Du-<br>blany | Delatyn | Oży-<br>dów | Krzywo-<br>równia | Ober-<br>tyn                | Tar-<br>nopol | Jagiel-<br>nica |
|----------------|-------------|------|--------------|---------|-------------|-------------------|-----------------------------|---------------|-----------------|
| 1              | 2·3         | 3·3  | 2·3          | 3·3     | 2·3         | 3·3               |                             | 4·0           | 2·7             |
| 2              | 0·3         | 1·0  | 0·3          | 1·7     | 0·7         | 1·7               |                             | 1·7           | 0·0             |
| 3              | 2·7         | 1·7  | 1·0          | 0·3     | 1·7         | 0·0               |                             | 0·3           | 0·3             |
| 4              | 0·0         | 1·7  | 0·3          | 0·7     | 0·3         | 1·3               |                             | 1·3           | 3·3             |
| 5              | 3·7         | 5·7  | 7·0          | 7·0     | 5·3         | 7·0               |                             | 7·0           | 6·3             |
| 6              | 0·0         | 0·3  | 0·0          | 0·0     | 0·0         | 3·3               |                             | 0·0           | 2·0             |
| 7              | 0·0         | 4·0  | 3·3          | 3·3     | 0·7         | 0·0               |                             | 10·0          | 7·3             |
| 8              | 1·7         | 3·7  | 3·3          | 3·3     | 3·3         | 0·0               |                             | 8·0           | 5·7             |
| 9              | 6·7         | 10·0 | 7·0          | 10·0    | 7·3         | 6·0               |                             | 10·0          | 7·7             |
| 10             | 6·7         | 7·7  | 7·0          | 8·3     | 10·0        | 10·0              |                             | 10·0          | 8·0             |
| 11             | 8·3         | 9·3  | 9·3          | 9·0     | 8·3         | 9·7               | Nie zapisywano spostrzeżeń. | 9·3           | 6·0             |
| 12             | 3·7         | 5·0  | 4·0          | 3·3     | 3·0         | 2·3               |                             | 5·3           | 7·7             |
| 13             | 8·0         | 9·7  | 9·7          | 9·7     | 10·0        | 8·7               |                             | 10·0          | 5·0             |
| 14             | 7·3         | 9·3  | 9·3          | 9·7     | 7·3         | 8·0               |                             | 9·7           | 5·7             |
| 15             | 7·0         | 8·3  | 7·7          | 7·7     | 7·7         | 7·0               |                             | 9·3           | 6·3             |
| 16             | 10·0        | 8·7  | 7·0          | 10·0    | 6·7         | 10·0              |                             | 10·0          | 5·0             |
| 17             | 8·3         | 9·3  | 8·7          | 10·0    | 2·7         | 9·3               |                             | 9·3           | 4·0             |
| 18             | 9·0         | 9·7  | 9·3          | 6·0     | 10·0        | 7·7               |                             | 9·3           | 3·7             |
| 19             | 5·7         | 6·7  | 7·7          | 3·3     | 6·0         | 6·0               |                             | 8·3           | 2·0             |
| 20             | 2·7         | 7·0  | 7·0          | 8·0     | 6·0         | 6·0               |                             | 7·7           | 6·3             |
| 21             | 1·0         | 3·7  | 3·0          | 8·0     | 3·0         | 9·0               | 4·7                         | 3·7           |                 |
| 22             | 5·7         | 7·3  | 6·7          | 7·7     | 4·3         | 4·0               | 7·7                         | 4·7           |                 |
| 23             | 7·0         | 9·7  | 9·7          | 7·0     | 10·0        | 9·0               | 10·0                        | 2·3           |                 |
| 24             | 9·3         | 10·0 | 10·0         | 9·7     | 10·0        | 9·7               | 10·0                        | 2·0           |                 |
| 25             | 3·0         | 5·3  | 4·3          | 5·3     | 5·3         | 6·7               | 6·7                         | 5·0           |                 |
| 26             | 1·3         | 1·3  | 1·0          | 1·7     | 1·3         | 1·0               | 0·7                         | 0·3           |                 |
| 27             | 4·0         | 9·3  | 9·0          | 6·7     | 8·0         | 8·0               | 7·0                         | 1·3           |                 |
| 28             | 9·7         | 9·7  | 9·3          | 9·3     | 9·7         | 9·3               | 8·3                         | 5·3           |                 |
| 29             | 9·3         | 9·3  | 7·0          | 6·7     | 7·0         | 7·0               | 9·3                         | 5·3           |                 |
| 30             | 10·0        | 10·0 | 10·0         | 9·0     | 9·7         | 6·0               | 10·0                        | 7·0           |                 |
| Śred.<br>mies. | 5·1         | 6·6  | 6·0          | 6·2     | 5·6         | 5·9               |                             | 7·2           | 4·4             |

## rzenia nieba.

dzienne.

Grudzień 1899 roku.

| Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków | Boeh-<br>nia | Szczaw-<br>nica |
|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|--------------|-----------------|
| 5·0                     | 6·7          | 3·3         | 10·0          | 7·0                  | 5·0           | 6·7         | 6·7          | 3·3             |
| 7·7                     | 6·0          | 7·7         | 6·0           | 4·3                  | 6·0           | 6·3         | 6·0          | 7·3             |
| 10·0                    | 10·0         | 10·0        | 10·0          | 10·0                 | 10·0          | 8·7         | 10·0         | 10·0            |
| 9·0                     | 6·7          | 6·7         | 9·0           | 6·7                  | 5·7           | 8·3         | 8·7          | 6·7             |
| 9·3                     | 7·0          | 7·0         | 8·0           | 7·0                  | 10·0          | 7·0         | 8·3          | 8·0             |
| 10·0                    | 10·0         | 10·0        | 10·0          | 10·0                 | 10·0          | 10·0        | 8·3          | 10·0            |
| 10·0                    | 7·3          | 8·3         | 10·0          | 7·0                  | 10·0          | 9·7         | 4·7          | 9·0             |
| 10·0                    | 7·7          | 8·3         | 10·0          | 10·0                 | 3·3           | 8·7         | 10·0         | 10·0            |
| 10·0                    | 10·0         | 10·0        | 10·0          | 10·0                 | 10·0          | 9·0         | 10·0         | 10·0            |
| 8·3                     | 8·0          | 8·0         | 10·0          | 10·0                 | 8·3           | 10·0        | 9·3          | 9·7             |
| 10·0                    | 10·0         | 8·0         | 10·0          | 10·0                 | 10·0          | 10·0        | 10·0         | 10·0            |
| 5·0                     | 1·7          | 4·0         | 7·0           | 0·7                  | 5·7           | 4·3         | 2·7          | 3·3             |
| 9·0                     | 8·0          | 8·7         | 8·0           | 6·7                  | 10·0          | 6·7         | 6·0          | 10·0            |
| 8·0                     | 6·0          | 4·7         | 8·0           | 10·0                 | 7·3           | 10·0        | 3·3          | 8·7             |
| 9·3                     | 10·0         | 9·7         | 10·0          | 7·7                  | 6·7           | 10·0        | 9·3          | 9·3             |
| 10·0                    | 10·0         | 10·0        | 10·0          | 10·0                 | 10·0          | 10·0        | 9·3          | 10·0            |
| 7·3                     | 10·0         | 10·0        | 10·0          | 10·0                 | 10·0          | 10·0        | 10·0         | 10·0            |
| 5·3                     | 10·0         | 10·0        | 10·0          | 10·0                 | 8·3           | 10·0        | 10·0         | 9·3             |
| 8·7                     | 10·0         | 8·0         | 10·0          | 6·7                  | 7·3           | 6·0         | 4·7          | 4·0             |
| 4·0                     | 1·0          | 2·7         | 2·0           | 0·3                  | 3·3           | 2·7         | 4·0          | 0·3             |
| 2·3                     | 0·7          | 1·0         | 0·0           | 0·0                  | 0·0           | 0·0         | 2·0          | 0·3             |
| 3·7                     | 0·0          | 1·7         | 0·0           | 1·0                  | 1·0           | 6·7         | 4·0          | 0·0             |
| 2·3                     | 0·3          | 1·0         | 0·0           | 0·0                  | 0·0           | 0·0         | 5·7          | 0·0             |
| 4·7                     | 2·7          | 4·3         | 6·0           | 4·0                  | 1·7           | 4·3         | 3·0          | 0·0             |
| 10·0                    | 10·0         | 11·0        | 10·0          | 10·0                 | 8·3           | 10·0        | 5·0          | 6·7             |
| 7·0                     | 5·0          | 6·0         | 10·0          | 7·3                  | 8·3           | 7·0         | 5·7          | 10·0            |
| 6·7                     | 4·0          | 7·7         | 9·0           | 7·0                  | 7·3           | 7·3         | 9·3          | 8·0             |
| 7·0                     | 6·7          | 6·3         | 10·0          | 6·7                  | 6·7           | 9·7         | 10·0         | 6·7             |
| 7·0                     | 2·3          | 5·7         | 9·0           | 1·3                  | 3·3           | 6·7         | 7·7          | 3·3             |
| 4·0                     | 5·0          | 3·3         | 8·0           | 0·7                  | 5·0           | 4·0         | 10·0         | 6·7             |
| 4·7                     | 8·0          | 8·0         | 10·0          | 3·3                  | 6·7           | 6·7         | 10·0         | 6·3             |
| 7·3                     | 6·5          | 6·8         | 8·1           | 6·3                  | 6·6           | 7·3         | 7·2          | 6·7             |

Stan zachmu-  
Środnie

Grudzień 1899 roku.

| Dzień          | Kry-<br>nica | Tar-<br>nów | Pil-<br>zno | Iwo-<br>niec | Rze-<br>szów | Sutol-<br>nik | Sanok | Prze-<br>myśl | Stare-<br>miasto |
|----------------|--------------|-------------|-------------|--------------|--------------|---------------|-------|---------------|------------------|
| 1              | 9'0          | 6'7         | 6'7         | 7'7          | 8'3          | 9'7           | 7'0   | 4'7           | 4'0              |
| 2              | 7'7          | 6'7         | 7'3         | 10'0         | 6'7          | 9'0           | 5'0   | 0'0           | 3'0              |
| 3              | 10'0         | 10'0        | 10'0        | 10'0         | 8'3          | 10'0          | 10'0  | 8'0           | 9'0              |
| 4              | 6'7          | 9'3         | 9'0         | 4'0          | 1'0          | 6'7           | 8'0   | 5'3           | 4'3              |
| 5              | 7'7          | 5'0         | 10'0        | 7'7          | 10'0         | 10'0          | 8'0   | 7'3           | 8'3              |
| 6              | 10'0         | 10'0        | 10'0        | 10'0         | 6'7          | 9'7           | 10'0  | 4'7           | 7'0              |
| 7              | 10'0         | 5'0         | 4'0         | 5'0          | 2'0          | 6'3           | 7'0   | 2'7           | 5'0              |
| 8              | 10'0         | 10'0        | 10'0        | 8'0          | 1'7          | 10'0          | 8'0   | 3'7           | 7'0              |
| 9              | 10'0         | 6'7         | 10'0        | 8'0          | 4'3          | 9'3           | 8'0   | 3'3           | 7'7              |
| 10             | 10'0         | 6'7         | 9'7         | 8'0          | 3'0          | 9'0           | 5'0   | 5'0           | 9'0              |
| 11             | 10'0         | 10'0        | 10'0        | 10'0         | 8'3          | 10'0          | 9'0   | 5'0           | 9'3              |
| 12             | 3'3          | 3'3         | 3'3         | 4'7          | 0'0          | 0'7           | 2'0   | 1'3           | 0'0              |
| 13             | 10'0         | 6'7         | 10'0        | 4'3          | 0'0          | 6'0           | 4'0   | 4'0           | 2'7              |
| 14             | 10'0         | 9'0         | 9'0         | 5'0          | 6'7          | 7'0           | 6'0   | 2'7           | 3'0              |
| 15             | 10'0         | 8'3         | 9'3         | 4'7          | 5'0          | 7'0           | 9'0   | 3'0           | 3'3              |
| 16             | 10'0         | 10'0        | 10'0        | 10'0         | 8'3          | 10'0          | 9'0   | 5'3           | 9'0              |
| 17             | 10'0         | 10'0        | 10'0        | 10'0         | 10'0         | 10'0          | 9'0   | 4'3           | 9'0              |
| 18             | 7'0          | 7'3         | 10'0        | 7'7          | 6'7          | 6'7           | 6'0   | 4'3           | 3'3              |
| 19             | 1'7          | 0'0         | 1'3         | 1'7          | 5'0          | 0'0           | 0'0   | 1'3           | 0'0              |
| 20             | 0'0          | 0'0         | 0'7         | 2'0          | 0'0          | 0'0           | 0'0   | 0'0           | 0'0              |
| 21             | 0'0          | 0'0         | 0'0         | 2'0          | 0'0          | 0'0           | 0'0   | 0'0           | 0'0              |
| 22             | 0'0          | 5'3         | 1'0         | 1'7          | 0'0          | 0'0           | 0'0   | 1'0           | 0'7              |
| 23             | 0'0          | 0'0         | 0'0         | 2'0          | 0'0          | 0'0           | 0'0   | 2'3           | 0'0              |
| 24             | 0'0          | 3'3         | 0'0         | 2'3          | 4'7          | 0'0           | 0'0   | 0'0           | 0'0              |
| 25             | 10'0         | 9'0         | 6'7         | 9'7          | 0'0          | 8'0           | 4'0   | 3'7           | 2'0              |
| 26             | 10'0         | 0'0         | 10'0        | 10'0         | 0'0          | 10'0          | 9'0   | 4'0           | 3'7              |
| 27             | 10'0         | 0'0         | 10'0        | 4'0          | 8'3          | 6'3           | 2'0   | 0'0           | 0'3              |
| 28             | 10'0         | 10'0        | 9'7         | 10'0         | 10'0         | 10'0          | 8'0   | 4'7           | 5'0              |
| 29             | 10'0         | 2'0         | 7'0         | 4'3          | 0'0          | 10'0          | 7'0   | 1'0           | 5'0              |
| 30             | 10'0         | 3'3         | 6'3         | 3'3          | 8'3          | 8'0           | 5'0   | 1'7           | 2'0              |
| 31             | 10'0         | 2'3         | 9'0         | 3'7          | 5'0          | 9'7           | 6'0   | 1'0           | 2'3              |
| Śred.<br>mies. | 7'5          | 5'7         | 7'1         | 6'2          | 4'5          | 6'7           | 5'5   | 3'1           | 4'0              |

## rzenia nieba.

dzienne.

| Sam-<br>bor | Lwów | Du-<br>blany | Delatyn | Oży-<br>dów | Krzywo-<br>równia | Herod-<br>denka | Tar-<br>nopol | Ja-<br>giel-<br>nica |
|-------------|------|--------------|---------|-------------|-------------------|-----------------|---------------|----------------------|
| 47          | 67   | 97           | 70      | 100         | 00                | 10              | 100           | 50                   |
| 27          | 43   | 37           | 37      | 37          | 37                | 67              | 37            | 10                   |
| 93          | 100  | 100          | 67      | 93          | 67                | 80              | 100           | 70                   |
| 77          | 67   | 67           | 53      | 67          | 37                | 50              | 67            | 50                   |
| 90          | 80   | 80           | 60      | 77          | 60                | 10              | 100           | 50                   |
| 80          | 67   | 67           | 93      | 80          | 97                | 80              | 100           | 50                   |
| 17          | 83   | 90           | 53      | 80          | 43                | 67              | 83            | 30                   |
| 47          | 100  | 87           | 100     | 80          | 83                | 100             | 100           | 60                   |
| 63          | 100  | 100          | 100     | 80          | 97                | 100             | 100           | 70                   |
| 87          | 90   | 90           | 100     | 70          | 97                | 100             | 100           | 80                   |
| 87          | 100  | 100          | 100     | 87          | 100               | 100             | 100           | 80                   |
| 67          | 93   | 100          | 83      | 93          | 93                | 100             | 100           | 70                   |
| 70          | 93   | 97           | 47      | 97          | 83                | 100             | 100           | 80                   |
| 83          | 87   | 93           | 93      | 83          | 97                | 100             | 100           | 90                   |
| 87          | 100  | 100          | 100     | 97          | 63                | 100             | 100           | 100                  |
| 97          | 100  | 100          | 100     | 83          | 97                | 100             | 100           | 100                  |
| 87          | 100  | 100          | 100     | 77          | 100               | 100             | 100           | 90                   |
| 90          | 87   | 83           | 100     | 90          | 83                | 100             | 100           | 90                   |
| 53          | 20   | 17           | 40      | 13          | 00                | 50              | 23            | 33                   |
| 17          | 00   | 00           | 07      | 00          | 33                | 00              | 00            | 00                   |
| 00          | 10   | 10           | 40      | 30          | 00                | 33              | 33            | 20                   |
| 13          | 67   | 63           | 27      | 53          | 00                | 97              | 70            | 90                   |
| 00          | 60   | 60           | 13      | 60          | 00                | 100             | 100           | 80                   |
| 10          | 07   | 00           | 00      | 03          | 00                | 67              | 17            | 27                   |
| 50          | 37   | 30           | 27      | 37          | 33                | 00              | 03            | 10                   |
| 10          | 73   | 100          | 47      | 87          | 83                | 67              | 100           | 50                   |
| 90          | 90   | 80           | 10      | 87          | 13                | 100             | 100           | 90                   |
| 17          | 100  | 100          | 67      | 100         | 50                | 100             | 100           | 90                   |
| 57          | 53   | 43           | 60      | 57          | 60                | 100             | 100           | 80                   |
| 20          | 53   | 50           | 73      | 80          | 77                | 80              | 67            | 87                   |
| 33          | 90   | 80           | 63      | 73          | 63                | 100             | 63            | 93                   |
| 54          | 72   | 71           | 62      | 69          | 56                | 82              | 80            | 64                   |

## Ilość opadu

Styczeń 1899 roku.

| Dzień         | Kami-<br>tzer-<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków |
|---------------|--------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|
| 1             | —                        | —            | —●          | —             | —                    | —             | 0·05≡       |
| 2             | —                        | 0·1●         | 2·2●*       | 2·7●          | 1·6●                 | 4·2●          | 1·15≡●      |
| 3             | 5·8*                     | 1·0*         | 5·7*        | 1·0*≡         | 0·8*                 | 23·0*         | 4·05*       |
| 4             | 4·7*                     | 0·8*         | 6·2*        | 2·0*          | 1·3Δ                 | 5·8*          | 0·05Δ       |
| 5             | —                        | 0·1●         | —           | —             | —                    | —             | —           |
| 6             | —                        | —≡           | —           | —             | —                    | 2·5*          | —≡          |
| 7             | —                        | —            | —           | 0·2*          | —                    | —             | —           |
| 8             | —                        | —            | —           | —             | —                    | 1·0*          | —≡*         |
| 9             | —                        | —            | —           | —             | —                    | —             | —≡          |
| 10            | —                        | —            | —           | —≡            | —                    | —             | 0·10≡       |
| 11            | —                        | —≡           | —           | —             | —                    | —             | —           |
| 12            | —                        | 6·9●         | 0·7●        | —≡            | —                    | —             | —≡          |
| 13            | 5·6*                     | —            | 4·4*        | 1·2●          | 7·5●                 | 13·0*         | 5·05●       |
| 14            | 6·4*                     | 7·8*         | 10·6*       | 4·0*          | 6·3*                 | 28·9*         | 4·90●*      |
| 15            | 3·2*                     | 2·5*         | —*          | 3·0*          | —*                   | 3·5*          | 3·90●*      |
| 16            | 0·8●≡                    | 3·2●         | 4·0*        | 1·4●          | —                    | 0·3*●         | 0·80●       |
| 17            | —                        | 1·4●*        | —           | 0·8*          | 5·4●*                | 5·0●*         | 3·30●       |
| 18            | 0·5*                     | —            | —           | —             | —                    | 0·2*          | —*Δ         |
| 19            | —≡                       | 0·1●         | —           | —             | —                    | —             | 0·30≡●*     |
| 20            | —                        | 2·4●         | 0·4●        | —             | 1·0●                 | —             | —≡●         |
| 21            | 0·3●≡                    | 0·6●         | 0·2●        | 0·6●≡         | —                    | —             | 1·75≡●      |
| 22            | —                        | —            | —           | —             | —                    | —             | —≡          |
| 23            | —                        | —≡           | —           | —             | —                    | —             | 0·40≡       |
| 24            | —                        | —≡           | 0·8●        | —≡            | 0·7●                 | —             | 0·05≡●      |
| 25            | 0·4*                     | 0·9*≡        | 0·8●        | 0·7*≡         | —●*                  | 2·0*≡         | 1·90●*      |
| 26            | —                        | —            | —           | —             | —                    | —*            | —           |
| 27            | —                        | —            | —           | —             | —                    | —             | —≡          |
| 28            | —                        | —            | 1·5*        | —             | 0·1*                 | —             | —≡          |
| 29            | —                        | 3·9●*        | —*          | —             | —                    | 0·2*          | —*          |
| 30            | —                        | 0·2*≡        | —           | 1·3*          | —*                   | 0·8*≡         | 0·10*       |
| 31            | —                        | 0·1*         | —           | —             | —                    | —             | —≡          |
| Suma<br>opadu | 27·7                     | 32·0         | 37·5        | 18·9          | 24·7                 | 90·4          | 27·85       |

w milimetrach.

| Boeh-<br>nia | Szczaw-<br>nica | Kry-<br>nica | Tar-<br>nów | Pilzno | Iwo-<br>nicz | Rze-<br>szów | Smol-<br>nik | Sanok  |
|--------------|-----------------|--------------|-------------|--------|--------------|--------------|--------------|--------|
| —            | —               | 1'0*         | —           | —      | —            | —            | 4'1●         | —      |
| 3'0●         | 4'5●            | 6'1*         | 0'9●        | 3'8●   | —            | 0'6●         | 13'9●        | 6'2●   |
| 4'5*         | 20'4*           | 14'9*        | 3'0*        | 12'9●  | 6'4●*        | 1'4*         | 10'0●*       | 14'5●* |
| 3'2*         | 6'5*            | 4'1*         | 0'2*        | 0'8*   | 8'6*         | 2'2*         | 0'6*         | 4'8*   |
| —            | —               | —            | —           | —      | 3'2*         | 1'0*         | —            | —      |
| 0'2*         | 2'1*            | 3'0*         | 0'1*        | —*     | —            | —            | 2'7*         | —      |
| —            | —               | 0'1*         | —           | —      | —            | —            | —            | —      |
| —            | 0'8*            | 1'7*         | 0'2●        | 1'2*   | 4'3*         | 1'2*         | 0'4*         | 0'4*   |
| —            | —               | —            | —           | —      | 1'6*         | —            | —            | —      |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| 3'1●         | 7'1●*           | 1'9●*        | 0'8●        | 4'0●   | —            | 1'2●*        | —            | —      |
| 4'5●         | 12'7*           | 12'7*        | —●*         | 4'2●   | 4'6●*        | 1'8●         | 1'0●*        | 1'5●   |
| 1'5●*        | 3'1*            | 4'3*         | —●*         | 1'4*   | 3'2*         | 1'6●*        | 10'6*        | 8'0●*  |
| 0'2●         | 1'2●            | 3'7*         | —●*         | 4'0*   | 1'6*         | 1'0●         | 4'6*         | 4'4*   |
| 3'5●         | 3'1●*           | 2'8*≡        | 2'0●        | 1'2*   | 1'2●         | 1'8●         | 0'5*         | 4'2●   |
| —            | 0'6*            | 0'2*         | —           | 0'2*   | 0'6*         | 2'2*         | —            | 1'4*   |
| 2'5*         | —               | —            | 0'8●*≡      | 1'5*   | —            | —            | —            | —      |
| 0'5●         | —               | —            | 0'2●        | —      | —            | 0'6●         | —            | —      |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| —            | —               | 1'0●         | 2'6●        | —      | 2'7●         | 1'2*         | 3'3●         | 1'2●   |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| 6'5●         | —               | —            | 2'2●        | 0'4●   | —            | 3'2●         | —            | —      |
| 5'5●*        | 0'1*≡           | 2'1●*        | 5'4*●       | 2'0●   | 0'4*         | 3'0●*        | —            | 0'9●*≡ |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| 2'4*         | 0'6*            | 1'5*Δ        | 1'2*        | 1'4*   | —            | 2'8*         | —            | 2'8*   |
| —            | —               | —            | —           | 0'5*   | —            | —            | 1'4*         | 1'1*   |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| 41'1         | 62'3            | 62'0         | 19'6        | 39'5   | 38'4         | 26'8         | 53'1         | 51'4   |

## Ilość opadu

Styczeń 1899 roku.

| Dzień         | Prze-<br>myśl | Łomna | Chyrów | Stare-<br>miasto | Sambor | Dolina | Lwów  |
|---------------|---------------|-------|--------|------------------|--------|--------|-------|
| 1             | 1'0●          | 0'1●  | 0'3●*  | —                | —      | 4'0*   | —●    |
| 2             | —             | 1'0●  | —      | 0'1●             | —      | 3'4*   | —     |
| 3             | 7'1●          | 14'0* | 13'1●* | 18'8●*           | 7'5●*  | 1'3*   | —●    |
| 4             | 1'3*          | 3'3*  | 3'3*   | 2'7*             | 3'0*   | —      | 7'6*  |
| 5             | —             | —     | —      | —                | —*     | —      | 3'7*  |
| 6             | 0'2*          | —     | 0'5*   | 0'9*             | —      | —      | —●    |
| 7             | —             | —     | —      | —                | —      | —      | 1'7*  |
| 8             | 0'2*          | —     | —      | —                | —      | —      | —     |
| 9             | —             | —     | —      | —                | —      | —      | 1'7*  |
| 10            | —             | —     | —      | —                | —      | —      | —     |
| 11            | —             | —     | —      | —                | —      | —      | —     |
| 12            | —             | —     | —      | —                | —      | —      | —     |
| 13            | 1'7●          | 0'7●* | 1'3●   | 1'1●             | —      | —      | 1'3●  |
| 14            | 3'3●          | 6'0*  | 3'6*   | 6'1●*            | 4'0●*  | 3'5*   | 2'2●* |
| 15            | —             | 2'5*  | 1'5*   | 1'9*             | 1'5●*  | —      | 5'2*  |
| 16            | 2'0●          | —     | 0'1*   | 0'4●             | 7'5●   | —      | 0'2●* |
| 17            | 1'0●          | 1'0●* | —      | 2'8●             | 5'0●   | —      | 7'2●  |
| 18            | —             | 0'1*  | 2'0*   | 0'8*             | 4'0●*  | —      | 1'8*  |
| 19            | 0'1*          | —     | —      | —                | —      | —      | 3'2*  |
| 20            | —             | —     | —      | —                | —      | —      | 1'6●  |
| 21            | 0'3●          | 1'0●  | 0'9●   | 1'7●             | —      | 3'5*   | 1'2●  |
| 22            | —             | —     | —      | —                | —      | —      | 0'9●  |
| 23            | —             | —     | —      | —                | —      | —      | —     |
| 24            | —             | —     | —      | —                | —      | —      | —     |
| 25            | 9'2●*         | —     | 7'4●*  | 7'4●*            | 1'4●*  | —      | 3'1●* |
| 26            | —             | —     | —      | —                | —      | —      | —     |
| 27            | —             | —     | —      | —                | —      | —      | —     |
| 28            | —             | —     | —      | —                | —      | —      | —     |
| 29            | 0'6*          | 0'1*  | 0'6*   | 0'8*             | —      | —      | —     |
| 30            | 0'3*          | —     | 0'3*   | 0'3*             | 2'5*   | —      | 2'6*  |
| 31            | —             | —     | —      | —                | —      | —      | 1'5*  |
| Suma<br>opadu | 28'3          | 29'8  | 34'9   | 45'8             | 36'4   | 15'7   | 46'7  |



w milimetrach.

| Du-<br>blany | Del-<br>tyn | Oży-<br>dów | Krzy-<br>wo-<br>równia | Kolo-<br>myja | Ober-<br>tyn | Tar-<br>nopol | Jagiel-<br>nica |
|--------------|-------------|-------------|------------------------|---------------|--------------|---------------|-----------------|
| 0'5●         | —           | 0'1●■       | 1'8*                   | —             | —            | 0'1●■         | —               |
| 0'2●         | —           | —           | 3'8*                   | —             | —            | —             | —               |
| 1'5*         | 1'2*        | 2'6*        | —                      | 3'3*          | 1'5*         | 1'8●■         | 2'2*            |
| 3'8*         | 8'2*        | 16'2*       | —                      | 16'0*         | 5'8*         | 5'5*■         | 4'0*            |
| —            | —           | —           | —                      | —             | 0'1*         | 0'5*■◁        | 1'3*            |
| 0'7*         | 1'6*        | —           | —                      | 1'4*          | 0'6*         | 0'7*■         | —               |
| —            | —           | 0'5*        | —                      | —             | 0'2*         | 0'3*■         | —               |
| 0'3*         | —           | 1'2*        | —                      | —             | —            | 0'7*          | 0'5*            |
| —            | —           | 0'4●        | —                      | —             | —            | 0'5*■         | 0'2*            |
| —            | —           | —           | —                      | —             | —            | —             | 0'8*            |
| —            | —           | —           | —                      | —             | —■           | 0'3■          | —               |
| —            | —           | —■          | —*                     | —             | —            | —■            | —               |
| 2'6●*        | 0'6●        | 0'8●        | 3'5●                   | —             | —            | 0'5●■         | —               |
| 2'8*         | 5'9*        | 4'6*        | 2'1●                   | 7'5*          | 5'7*         | 2'2*■         | 3'0*            |
| 1'0*         | 1'7*        | 0'4*        | —                      | —             | 0'3*         | 3'2*■         | 2'2*            |
| 2'6●         | —           | 8'1●*       | —                      | —             | —            | 2'1*■         | —               |
| 1'0●         | 2'9*        | 0'4*        | —                      | 2'5*          | 1'4●         | 0'5●■         | —               |
| 0'9*         | —           | 0'6*        | —                      | —             | 0'1*         | 0'5*■         | —               |
| 1'8●         | —           | 2'8●        | —                      | —             | 0'1*         | 1'5*■         | 0'1*            |
| —            | —           | 0'2●        | —                      | —             | —            | 0'5●■         | 2'0●            |
| 1'8●         | —           | 1'8●        | —                      | 2'5●          | 1'7●         | 1'2●■         | 0'5●            |
| —            | —           | —           | —                      | —             | —            | —■            | —■              |
| —            | —           | —           | —                      | —             | —            | —■            | —               |
| —            | —           | —           | —                      | —             | —            | —■            | —               |
| 5'3●*        | 9'6●*       | 0'8●■       | 4'2●                   | 1'6●*         | 3'6*         | 1'3*■         | 3'2●            |
| —            | —           | —           | —                      | —             | —            | 0'3■          | 3'6*            |
| —            | —           | —           | —                      | —             | —            | —■            | —               |
| —            | —           | —           | —                      | —             | —            | —■            | —               |
| 0'9*         | 0'9*        | 2'3*        | 0'3*                   | —             | 0'1*         | 1'5*■         | 2'1*            |
| 0'5*         | —           | 0'6*        | —                      | —             | —            | 0'3*■+        | —               |
| —            | —           | —           | —                      | —             | —            | —■            | —               |
| 28'2         | 32'6        | 44'4        | 15'7                   | 34'8          | 21'2         | 26'0          | 25'7            |

## Ilość opadu

Luty 1899 roku.

| Dzień         | Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wice | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków |
|---------------|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|
| 1             | 2.7*≡                   | 4.4*         | 5.3●*       | 0.5*          | 0.5*                 | 7.0*          | 6.50*●      |
| 2             | -≡                      | 1.3*         | 2.5*        |               | 0.3*                 | 8.0*          | 2.50≡*      |
| 3             | 4.5*≡                   | 1.8*         | 0.9*        | 0.3*          | 0.4*                 | 2.1*≡         | 0.55≡*      |
| 4             | 2.3*                    | —            | —*          | *             | 2.2*                 | 0.1*          | —≡*         |
| 5             | —                       | 1.1*         | 0.6*        | 0.7*          | 0.7*                 | —             | —           |
| 6             | 2.7*                    | —            | 1.0*        | 1.3*          | —                    | 2.2*          | 1.10‡       |
| 7             | 3.4*—                   | 1.5*         | —           | —             | 0.7*                 | —≡            | 3.25*       |
| 8             | —                       | —            | —           | —             | —                    | —●            | —≡          |
| 9             | 5.7●                    | 0.5●         | —           | —             | 2.7●                 | —             | 0.40●       |
| 10            | —                       | —            | —           | —             | —                    | —             | —≡          |
| 11            | —                       | —            | —           | —             | —                    | —             | —≡          |
| 12            | 2.8●                    | 2.8●         | 0.4●        | —             | 3.2●                 | —             | —≡          |
| 13            | 3.4●*                   | 1.6●         | 0.8●        | —             | —                    | —             | 2.45●       |
| 14            | —                       | —            | —           | —             | —                    | —             | ●≡          |
| 15            | —                       | —≡           | —           | —             | —                    | —             | —≡          |
| 16            | —                       | 1.2●≡        | —           | —             | —                    | —             | —≡          |
| 17            | 1.4●*≡                  | 1.5●≡        | 0.5●        | 1.0●≡         | 0.7●≡                | 0.2●          | —●≡         |
| 18            | —                       | —            | —           | —             | —                    | —             | —           |
| 19            | —                       | —            | —           | —             | —                    | —             | —           |
| 20            | —                       | 1.7●*≡       | 0.2●        | —             | 1.1●                 | —             | —≡          |
| 21            | 4.2*≡                   | 2.4●*Δ       | 3.8*        | 1.1*≡         | 1.0*                 | 10.0*         | 0.50●*      |
| 22            | 2.3*≡                   | 2.1*         | 6.6*        | 2.1*          | 3.8*                 | 8.2*          | 0.85‡       |
| 23            | 1.4*≡                   | 0.5*         | 2.2*        | 2.6*          | 1.6*                 | 2.8*          | 0.30*       |
| 24            | 0.8*≡                   | 1.5*         | 0.8*        | 0.8*          | 0.6*                 | 0.3*          | 1.60*       |
| 25            | —                       | 0.5*         | 0.3*        | 0.1*          | —                    | —             | 0.10*       |
| 26            | 0.9*≡                   | 0.3*         | 0.2*        | 0.4*          | —                    | —             | —           |
| 27            | 1.3*≡                   | —            | 1.0*        | 1.4*          | 1.5*                 | 2.6*          | —*Δ         |
| 28            | 2.4*≡                   | 1.9*         | 0.5*        | 0.1●          | 0.4*                 | 1.3*          | 0.95*●      |
| Suma<br>opadu | 44.2                    | 28.6         | 28.1        | 12.4          | 30.4                 | 44.8          | 21.05       |

w milimetrach.

| Bochnia | Szczawnica | Krynica | Tarnów | Pilzno | Iwonicz | Rzeszów | Smolnik | Sanok |
|---------|------------|---------|--------|--------|---------|---------|---------|-------|
| 12.3*   | 5.6*       | 5.7*    | 10.3*  | 12.2*  | 4.6*    | 7.4*    | 6.7*    | 11.7* |
| 3.3*    | 5.8*       | 7.9*    | 4.2*   | 6.5*   | 8.5*    | 9.0*    | —       | 4.0*  |
| 0.2*    | 1.1*       | 2.5*    | 2.1*   | 2.4*   | 6.4*    | 1.6*    | 7.7*    | 7.0*  |
| 0.3*    | 0.1*       | 0.2*    | —      | 0.1*   | —       | —       | —       | 1.2*  |
| 0.3*    | 1.2*       | 0.8*    | 2.3*   | —      | 8.3*    | 0.6*    | 0.1*    | —     |
| 2.5*    | 1.3*       | 1.7*    | 4.0*   | —      | —       | 0.8*    | 3.3*    | 1.1*  |
| 4.5*    | 2.2*       | 1.5*    | —      | —      | 2.3*    | 1.8*    | 2.9*    | 1.0*  |
| —       | —          | —       | 0.4*   | 0.1*   | 4.7*    | 0.4*    | 3.0*    | 0.4*  |
| —       | 1.4*       | 4.2*    | 1.0*   | 2.6*   | 1.3*    | 0.6*    | —       | 2.1*  |
| —       | —          | —       | —      | —      | —       | —       | —       | —     |
| —       | —          | —       | —      | —      | —       | —       | —       | —     |
| 0.5*    | 2.1*       | —       | 3.5*   | 2.6*   | —       | 1.0*    | 0.1*    | 2.3*  |
| —       | 0.1*       | —       | —      | —      | —       | 0.6*    | —       | —     |
| —       | —          | —       | —      | —      | —       | —       | —       | —     |
| —       | —          | —       | —      | —      | —       | —       | —       | —     |
| —       | —          | —       | —      | —      | —       | —       | —       | —     |
| 1.2*    | 0.4*       | 2.7*    | —      | 0.3*   | 0.6*    | 1.4*    | 0.2*    | 1.4*  |
| —       | —          | —       | —      | —      | —       | —       | —       | —     |
| —       | —          | —       | —      | —      | —       | —       | —       | —     |
| —       | 0.2*       | —       | 1.0*   | —      | 10.4*   | 2.4*    | 2.4*    | 2.3*  |
| 4.5*    | 4.7*       | 13.8*   | 1.4*   | 5.2*   | 6.2*    | 1.6*    | 2.7*    | 3.1*  |
| 5.4*    | 11.8*      | 14.8*   | 3.4*   | 2.5*   | 1.7*    | 3.0*    | 5.0*    | 9.0*  |
| 3.5*    | 4.1*       | 2.7*    | 3.2*   | 6.0*   | 2.3*    | 1.0*    | 8.8*    | 2.5*  |
| 0.3*    | 0.7*       | 1.0*    | 0.4*   | 0.4*   | —       | 0.4*    | 1.4*    | 0.9*  |
| 0.4*    | 0.3*       | 0.6*    | —      | 0.1*   | 1.6*    | —       | —       | 0.1*  |
| —       | 0.4*       | 0.7*    | 1.0*   | 0.4*   | 0.4*    | 2.2*    | —       | —     |
| 1.3*    | 2.1*       | 2.2*    | 3.3*   | 4.2*   | 4.8*    | 1.0*    | 4.4*    | 4.2*  |
| 1.2*    | 2.2*       | 1.6*    | 3.8*   | 4.5*   | —       | —       | 3.2*    | 2.5*  |
| 45.2    | 47.8       | 54.6    | 45.9   | 48.1   | 73.1    | 36.8    | 51.9    | 56.8  |

## Ilość opadu

Luty 1899 roku.

| Dzień         | Prze-<br>myśl | Łomna | Chyrów | Stare-<br>miasto | Sambor | Dolina | Lwów           |
|---------------|---------------|-------|--------|------------------|--------|--------|----------------|
| 1             | 4'0●*         | 0'1*  | 3'4*   | 4'3●             | 3'6●   | —      | 1'2●           |
| 2             | 5'7*          | 0'1*  | 3'1*   | 2'9*             | 4'9*   | —      | 8'5*           |
| 3             | 5'0*          | 8'0*  | 10'0*  | 10'1*            | 1'4*   | —      | 1'0*           |
| 4             | 0'1*          | —     | 0'5*   | 0'7*             | —      | —      | —              |
| 5             | —             | —     | —      | —                | —      | —      | —              |
| 6             | 0'2*          | 1'2*  | 1'6*   | 1'3*             | —      | —      | 1'0*           |
| 7             | 2'6*          | —     | 1'2*   | 0'8*             | 1'2*   | —      | —*             |
| 8             | 0'1●          | —     | —      | 0'3●             | —      | —      | 1'6●*          |
| 9             | 2'0●          | 1'0●  | 1'0●   | 0'4●             | 0'4●   | —      | 1'1●*<br>0'0●  |
| 10            | —             | —     | —      | —                | —      | —      | —              |
| 11            | —             | —     | —      | —                | 0'2●   | —      | —              |
| 12            | 1'8●          | 1'0●  | 1'2●   | 0'9●             | 0'3●   | —      | —              |
| 13            | —             | —     | —      | —                | —      | —      | 2'1●           |
| 14            | —             | —     | —      | —                | —      | —      | 2'2●           |
| 15            | —             | —     | —      | —                | —      | —      | —              |
| 16            | —             | —     | —      | —                | —      | —      | —              |
| 17            | 1'0●          | 0'1●  | 1'2●   | 2'2●*            | —      | 5'3*   | 3'4●*          |
| 18            | 0'1●          | —     | —      | —                | 1'1●   | —      | 1'2●*<br>0'9*  |
| 19            | —             | —     | —      | —                | —      | —      | —              |
| 20            | 0'9●          | 0'3*  | 1'0*   | 0'8●*            | —      | —      | —              |
| 21            | 0'2*          | 2'0*  | 1'9*   | 4'1*             | 0'2*   | 2'0*   | 10'0●*<br>3'7* |
| 22            | 2'8*          | 8'0*  | 5'4*   | 8'4*             | 0'9*   | 1'5*   | —              |
| 23            | 1'1*          | 3'5*  | 2'4*   | 2'0*             | 0'9*   | 2'9*   | 1'7*           |
| 24            | 0'2*          | 0'1*  | 0'5*   | 0'7*             | —      | 2'6*   | —*             |
| 25            | —             | 0'1*  | 0'2*   | 0'6*             | —      | 1'3*   | —              |
| 26            | —             | —     | —      | —                | 0'5*   | —      | —              |
| 27            | 0'1*          | 3'6*  | 2'0*   | 3'3*             | 1'3*   | —      | 0'6*           |
| 28            | 0'2*          | 4'2*  | 1'3*   | 2'5*             | 1'9*   | —      | 11'9●*         |
| Suma<br>opadu | 29'2          | 33'3  | 37'9   | 46'1             | 24'8   | 15'6   | 58'1           |

w milimetrach.

| Du-<br>blany | De-<br>latyn | Oży-<br>dów | Krzy-<br>wo-<br>równia | Koło-<br>myja | Ober-<br>tyn | Tar-<br>nopol | Jagiel-<br>nica |
|--------------|--------------|-------------|------------------------|---------------|--------------|---------------|-----------------|
| 0'3*         | 1'2●         | —           | —                      | —             | —            | 2'6≡●         | —               |
| 0'6*         | 4'0*         | 1'6*        | —*                     | —             | —            | 0'2*          | 0'2●≡           |
| 4'9*         | 0'1*         | —           | 2'5*                   | 2'1*          | 2'5*         | 8'6*          | —               |
| —            | —            | —           | —                      | —             | —            | 0'4*          | 0'3●*           |
| 0'4*         | 1'5*         | 0'9*        | 0'2●*                  | —             | 0'1*         | —             | 1'4*            |
| 0'2*         | —            | 1'5*        | —                      | —             | —            | 0'4+          | —               |
| 0'4*         | —            | 0'8●        | —                      | —             | —            | 1'3*          | —               |
| 1'7●*        | —            | 1'6●        | 2'0●                   | —             | 0'3●         | 1'1*●         | —               |
| 5'7●         | —            | 0'5●≡       | —                      | 5'3●          | 5'3●         | 10'0*●        | —               |
| 0'3●         | —            | —           | —                      | 1'0●          | —            | 0'5●          | 5'2●            |
| —            | —            | —           | —                      | —             | —            | —             | 0'3●            |
| 0'6●         | —            | 1'8●        | —                      | —             | —            | —             | —               |
| 3'4●         | —            | 2'1●        | —                      | —             | 0'2●         | 2'9●          | 2'0●            |
| —            | —            | —           | —                      | —             | —            | —             | —               |
| —            | —            | —           | 6'4*                   | —             | —            | —             | —               |
| —            | —            | —           | 1'4*                   | —             | —            | —             | —               |
| 2'4●*        | 7'2●         | 3'1●*       | —                      | 8'8●          | 4'6●         | 1'8●*         | 1'2●            |
| 0'4●≡        | 0'7●         | —           | —                      | 1'1●*         | —            | 0'6*          | 3'6*            |
| —            | —            | —           | 0'3*                   | —             | —            | —             | —               |
| 0'7●         | —            | 1'7●        | 1'3*                   | —             | 1'1*         | 1'1*          | —               |
| 0'5*         | 4'0*         | 2'5*        | 0'3*                   | 4'3●*≡        | 0'6*         | 1'5*          | 1'6*            |
| 2'6*         | 5'5*         | 2'8*        | 1'8*                   | 9'0*          | 5'4*         | 2'8*          | 0'7*            |
| 1'2*         | 1'6*         | 1'5*        | 0'6*                   | 0'9*          | 0'5*         | 1'5*          | 12'5*           |
| —            | 1'8*         | 0'9*        | 0'3*                   | 5'2*          | 0'4*         | 0'5*          | —               |
| —            | 1'0*         | —           | 0'4*                   | 9'5*          | 1'7*         | 0'4*          | 0'6*            |
| —            | 1'0*         | —           | 5'5*                   | 1'2*          | 0'2*         | —             | 1'7*            |
| 0'7*         | 5'0*         | 10'4*       | 4'1*                   | 18'8*         | 1'4*         | 2'6*          | —               |
| 1'2*         | 5'8*         | 0'8*        | —                      | 14'0●*        | 2'5*         | 1'3*          | 4'0*            |
| 28'2         | 40'4         | 34'5        | 27'1                   | 81'2          | 26'8         | 44'1          | 35'3            |

## Ilość opadu

Marzec 1899 roku.

| Dzień         | Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wiec | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków |
|---------------|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|
| 1             | 1' *≡                   | 7'8●*        | 3'2●        | 3'1*          | 0'4*                 | 8'0*          | 1'10*●      |
| 2             | 0'9*≡                   | 5'5●         | 7'8●        | 5'5●          | 3'5●*                | 7'9●*         | 7'85●       |
| 3             | —                       | —            | —           | —             | 6'9●                 | 0'2*          | 0'20●       |
| 4             | 2'4*≡                   | 1'2*         | 2'4●        | —             | —                    | 0'2*          | —≡          |
| 5             | 4'3*≡                   | —            | 3'6*        | 3'1*          | 2'1*                 | 4'5*          | 1'70*       |
| 6             | —                       | —            | —           | —             | 0'6*                 | —*            | —           |
| 7             | —                       | —            | —           | —             | —                    | —             | —≡          |
| 8             | —                       | —            | —           | —             | —                    | —             | —≡          |
| 9             | —                       | —            | —           | —             | —                    | —             | —≡          |
| 10            | —                       | —            | —           | —             | —                    | —             | —           |
| 11            | —≡                      | —            | —≡          | —≡            | —                    | —             | —≡          |
| 12            | —                       | —≡           | —           | —≡            | —                    | —             | —≡          |
| 13            | —                       | —≡           | —           | —             | —                    | —             | —≡          |
| 14            | —                       | —            | —           | —             | —                    | —             | —≡          |
| 15            | —                       | —≡           | —           | —             | —                    | —             | —≡          |
| 16            | —                       | 4'3●         | —           | —             | —                    | —             | —≡          |
| 17            | —≡                      | —            | ●*          | —             | —                    | 0'5*          | 0'35●≡      |
| 18            | 3'7*≡                   | 2'5●*        | 2'1*        | 2'5●*         | 3'1*                 | —             | 0'50●*      |
| 19            | 0'7*≡                   | 0'1*Δ        | —           | 1'8*          | 0'1*                 | —             | 0'30*       |
| 20            | 2'2*                    | 0'1*         | 0'4*        | —             | —                    | —             | —           |
| 21            | —                       | —≡           | 0'4*        | 0'9*          | 0'5*                 | 4'0*          | —*          |
| 22            | —                       | 0'5*         | —           | —●            | —*                   | —             | —           |
| 23            | 0'6*                    | 1'9*         | 0'5*        | 1'1*          | 0'1*                 | —             | —           |
| 24            | 1'3*                    | —            | —           | —             | 0'5*                 | 0'6*          | —*          |
| 25            | —                       | 2'4*         | 8'8*        | 4'8*          | 0'7*                 | 3'8*          | 1'45*       |
| 26            | 2'1*                    | 0'3*         | —           | —             | —                    | —             | 0'10*       |
| 27            | —                       | 0'3*         | 0'6*        | 1'5*          | 0'4*                 | 0'4*          | 0'55*       |
| 28            | —                       | —            | —           | —             | —                    | —             | —●≡         |
| 29            | —                       | 1'0●         | —●          | 0'7●≡         | 0'3●                 | —             | —≡          |
| 30            | 2'7*≡                   | 11'7●≡       | 10'3●       | 3'3●          | 1'8●                 | —●            | 0'70●≡      |
| 31            | 1'9*                    | —*           | 0'3*        | —             | —                    | 8'4●*         | 0'20*       |
| Suma<br>opadu | 24'1                    | 39'6         | 40'4        | 28'3          | 21'0                 | 38'5          | 12'00       |



## Ilość opadu

Marzec 1899 roku.

| Dzień         | Prze-<br>myśl | Łomna | Chyrów | Stare-<br>miasto | Sam-<br>bor | Dolina | Lwów  |
|---------------|---------------|-------|--------|------------------|-------------|--------|-------|
| 1             | 0'4*          | 4'9*  | 3'0*   | 3'4*             | 1'1*        | —      | 8'4●* |
| 2             | 9'7●          | 0'1*  | 9'2*●  | 8'4*             | 0'7*        | —      | 0'3●* |
| 3             | —             | —     | —      | —                | —           | —      | 11'8● |
| 4             | —             | —     | —      | 1'3*             | —           | —      | —●Δ   |
| 5             | 0'2*          | 1'5*  | 1'1*   | —                | —*          | —      | —*    |
| 6             | —             | —     | —      | —                | —           | —      | —     |
| 7             | —             | —     | —      | —                | —           | —      | —     |
| 8             | —             | —     | —      | —                | —           | —      | —     |
| 9             | —             | —     | —      | —                | —           | —      | —     |
| 10            | —             | —     | —      | —                | —           | —      | —     |
| 11            | —             | —     | —      | —                | —           | —      | —     |
| 12            | —≡            | —     | —      | —                | —           | —      | —≡    |
| 13            | —             | —     | —      | —                | —           | —      | —≡    |
| 14            | —             | —     | —      | —                | —           | —      | ●     |
| 15            | —             | —     | —      | —                | —           | —      | 0'9≡  |
| 16            | 0'4●          | —     | 0'9●   | 0'9●             | —           | —      | —●    |
| 17            | —             | —     | —      | —                | —           | —      | —≡    |
| 18            | 0'7●          | 2'0*  | 2'3*●  | 3'0●*            | 0'3●*       | 2'5*   | —●*   |
| 19            | 0'4*          | —*    | 0'8*   | 0'8*             | 0'1*        | —      | 2'5*Δ |
| 20            | —             | —     | —      | —                | —           | —      | —     |
| 21            | 0'2*          | 1'6*  | 4'0*   | 3'9*             | 0'1*        | 1'4*   | —●*Δ  |
| 22            | 0'1*          | —     | 0'1*   | —                | —           | —      | 2'4*  |
| 23            | —             | 0'3*  | 1'5*   | 2'6*             | —           | 8'8*   | —     |
| 24            | 0'3*          | 0'4*  | 2'0*   | 1'5*             | 0'5*        | —      | 10'2* |
| 25            | 7'0*          | 14'0* | 21'6*  | 27'8*            | 4'0*        | 1'9*   | 0'2*  |
| 26            | 0'2*          | —     | 1'7*   | —                | —           | 11'0*  | 15'0* |
| 27            | 1'1*          | 2'4*  | 0'5*   | 0'3*             | 0'1*        | —      | —*    |
| 28            | —             | —     | —      | —                | —           | —      | 2'1*  |
| 29            | —             | —     | —      | 0'8●             | —           | —      | —     |
| 30            | 3'6●          | —     | 1'6*●  | —                | 0'6●        | —      | —●Δ   |
| 31            | 1'2*          | 0'1*  | 0'7*   | 0'8*             | 0'2*        | —      | 2'2●* |
| Suma<br>opadu | 25'5          | 27'3  | 51'0   | 55'5             | 7'7         | 25'6   | 56'0  |



w milimetrach.

| Du-<br>blany | De-<br>latyn | Oży-<br>dów | Krzy-<br>wo-<br>równia | Koło-<br>myja | Ober-<br>tyn | Tar-<br>nopol | Jagiel-<br>nica |
|--------------|--------------|-------------|------------------------|---------------|--------------|---------------|-----------------|
| 2'2*         | 2'0*         | 2'5●*       | —                      | 1'8*          | 1'2*         | 3'0*          | 0'1*            |
| 5'6●         | 0'2●         | 2'6●*       | 0'8●*                  | 1'8●          | —            | 4'3*          | 7'0*            |
| 1'0●         | —            | 4'2●        | 0'3*                   | —             | —            | 0'6*●         | 1'5●            |
| —            | —            | 1'3●        | 2'1*                   | —             | —            | —■            | 0'2●            |
| 0'3*         | 6'7*         | 0'5*        | 4'6*                   | 1'5*          | 1'5*         | 0'3●*         | —               |
| —            | —            | —           | 0'7*                   | —             | —            | —             | —               |
| —            | —            | —           | —                      | —             | —            | —■            | —               |
| —            | —            | —           | —                      | —             | —            | —■            | —               |
| —            | —            | —           | —                      | —             | —            | —■            | —               |
| —            | —            | —           | —                      | —             | —            | —■            | —               |
| —            | —            | —           | —                      | —             | —            | —■            | —               |
| —            | —            | —           | —                      | —             | —            | —■            | 0'2■            |
| 0'3●         | —            | 0'3●        | —                      | —             | —            | —■            | —               |
| 0'4●         | —            | 0'3●        | —●                     | —             | —            | 1'3●          | —               |
| —            | —            | —           | —                      | —             | —            | —■            | —               |
| —            | —            | —           | —                      | —             | —            | —■            | —               |
| 2'3*         | 4'6*         | 1'5*        | 4'2*                   | 5'3*          | 4'3*         | 1'5*          | —               |
| 1'4*         | 0'5*         | —           | 2'3*                   | —             | —            | 0'3*          | 0'2*            |
| —            | —            | —           | 1'3*                   | —*            | —            | —             | —               |
| —            | 3'9*         | 3'6*        | 1'5*                   | 2'1*          | 0'2*         | 3'2*          | 1 0*            |
| —            | 1'2*         | —           | 0'4*                   | —             | —            | 0'3*          | 2'0*            |
| 1'7*         | 15'8*        | 3'5*        | 15'2*                  | 31'1*         | 13'5*        | 2'4*          | —               |
| 2'4*         | 6'7*         | 4'2*        | 8'6*                   | 7'1*          | 5'4*         | 3'6*          | 7'0*            |
| 4'0*         | 19'8*        | 8'1*        | 13'4*                  | 32'4*         | 14'6*        | 10'0*         | 5'9*            |
| —            | 1'3*         | —           | 0'4*                   | —             | 0'2*         | 0'6*          | 15'0*           |
| 1'0*         | —            | 0'6*        | —                      | —             | 0'5*         | 1'3*          | 5'0*            |
| —            | —            | —           | —                      | —             | —            | —■            | 0'2*            |
| —            | —            | —           | —                      | —             | —            | —■            | —               |
| 4'0●         | 2'5●         | 2'4●        | —●                     | —             | 1'4●         | 0'5●          | —               |
| 0'9*         | 1'8*         | 3'6*        | 0'4●*                  | —             | 0'1*         | 1'2*●         | 3'4●            |
| 27'5         | 67'0         | 39'2        | 56'2                   | 83'1          | 42'9         | 34'4          | 48'7            |

## Ilość opadu

Kwiecień 1899 roku.

| Dzień         | Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków |
|---------------|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|
| 1             | 1'3*                    | 0'1*         | 0'5*        | 8'8*          | 0'4*                 | —●*           | —           |
| 2             | 0'7*■                   | 2'9●*        | 4'4●        | 8'4●          | 4'9●*                | 5'5●*         | 3'00*●      |
| 3             | —                       | —            | —           | —             | —                    | —             | 0'25●■      |
| 4             | —                       | —■           | —           | —             | —                    | —             | —           |
| 5             | 8'2*                    | 10'4●        | —●          | 9'8●          | 6'5●                 | 6'5●          | 4'60■●      |
| 6             | —                       | —●           | —           | —             | —                    | —             | 2'10●■      |
| 7             | —                       | —            | —           | —             | —                    | —             | —■          |
| 8             | 3'4●*                   | 10'6●        | 14'7●       | 4'7●■         | 11'0●                | 6'1●*         | 0'50●       |
| 9             | 0'3*                    | 0'4●         | 1'2●        | —             | 0'6●                 | 14'0**        | 7'75●       |
| 10            | —■                      | 0'1●         | —           | —             | —                    | —             | —■          |
| 11            | 0'7*■                   | 4'4●         | 5'1●        | —             | 2'0●                 | —             | —■●         |
| 12            | 4'9*■                   | 12'1**       | 8'0●*       | 4'3●■         | 3'8●                 | 9'3●*         | 9'70●       |
| 13            | —                       | 0'9●         | —           | —             | —                    | —             | 0'30●       |
| 14            | —                       | 0'1●         | 0'8●        | —             | —                    | —             | —           |
| 15            | 2'1●                    | 1'5●         | 4'5●        | —             | 1'6●                 | —             | —●          |
| 16            | 3'6●Δ                   | 17'5●        | 0'8●        | 3'0●          | 7'3●                 | 5'0●          | 4'15●Δ      |
| 17            | 1'4●                    | 2'2●         | —           | —             | 2'4●                 | —             | 0'70●       |
| 18            | 1'3●                    | 4'3●         | 1'8●        | —             | 2'6●                 | —             | 2'85●■      |
| 19            | 0'9●                    | 0'8●■        | 0'3●        | 7'8●■         | —<                   | —             | 1'95●       |
| 20            | —■                      | 1'7*■K       | 2'2●        | 1'5●■         | 4'2●K                | 4'6●K         | 0'30●■      |
| 21            | 5'4*■                   | 11'7●        | 13'8●       | 14'5●■        | 12'0●                | 4'9●K         | 13'00*K     |
| 22            | 2'8●■                   | 4'7●         | 1'6●        | 8'0●■         | 0'5●                 | —●            | 0'95●■      |
| 23            | —                       | —            | —           | —■            | —                    | 9'0*          | —           |
| 24            | —                       | —            | —           | —             | —                    | —             | —■          |
| 25            | —                       | —            | —           | —             | —                    | —             | —           |
| 26            | —                       | —            | —           | —             | —                    | —             | 1'45●       |
| 27            | 6'2*Δ■                  | 2'9●K        | 16'4●       | 2'0●K         | 1'6●K                | 8'5●K         | 1'10●K      |
| 28            | —■                      | —■           | 0'6●        | —■            | —                    | 7'8●          | 2'40●K      |
| 29            | 2'8●K                   | 2'7●K        | 4'0●K       | 1'6●K         | —                    | 1'1●          | 0'05■●      |
| 30            | 3'5●                    | 6'7●K        | 2'6●        | 3'2●          | —                    | 2'7●          | 1'15●       |
| Suma<br>opadu | 49'5                    | 98'7         | 83'0        | 67'6          | 61'4                 | 85'0          | 58'25       |

w milimetrach.

| Boch-<br>nia | Szczaw-<br>nica | Kry-<br>nica | Tar-<br>nów | Pilzno | Iwo-<br>nicz | Rze-<br>szów | Smol-<br>nik | Sanok   |
|--------------|-----------------|--------------|-------------|--------|--------------|--------------|--------------|---------|
| —            | —               | —            | —           | —*     | 2·8*         | —            | —            | —       |
| 8·5*         | —               | 13·6●        | 3·8●        | 2·7●   | 0·3*         | 1·0●         | 5·5*         | 5·7●    |
| —            | —               | —            | —           | —●     | 0·5●         | —            | —            | —       |
| —            | —               | —            | —           | —      | —            | —            | —            | —       |
| 7·5●         | 13·6·Δ          | 8·8●         | 4·1●        | 3·0●   | —            | 2·4●         | 3·6●         | 3·1●    |
| 1·5●         | —               | —            | 0·4●        | —●     | 0·4●         | —            | —            | 0·9●    |
| —            | —               | —            | —           | —      | —            | —            | —            | —       |
| —            | 3·2●            | 0·6●         | 2·0●        | 1·0●   | —            | —            | —            | —       |
| 13·5●        | 15·1●           | 17·7●        | 25·0●       | 15·5●  | 2·5●*        | 6·2●         | 10·6●        | 10·1●   |
| —            | —               | —            | —           | —      | —            | —            | 4·2●         | 7·4●    |
| —            | —               | —            | 0·2●        | —      | —            | —            | —            | —       |
| 11·0●        | 8·3●*           | 7·6●*        | 6·3●        | 6·6●   | —*           | 5·6●         | 15·4●Δ       | 9·8●*   |
| —            | —               | 0·8*         | —           | —      | —            | 1·8●         | 1·3●         | 3·3●    |
| —            | —               | —            | —           | —      | —            | —            | —            | —       |
| 2·5●         | —               | 4·2●         | —           | 5·9●   | 1·2●         | 7·2●         | 5·2●         | 1·5●    |
| 3·4●         | 3·5●            | 3·4·ΔR       | 1·0●        | 2·1●   | 2·3●         | 2·0●         | 5·8·ΔR       | 11·4·ΔR |
| 0·6●         | —               | 0·1●         | 17·4●Δ      | —      | —            | 1·0●         | —            | 4·5●R   |
| 1·2●         | —               | —            | —           | 0·5●   | —            | —            | —            | —       |
| 0·5●         | —               | —            | 1·0●        | —      | —            | —            | —            | —       |
| —            | 5·4●            | 7·2●R        | —           | 1·6●   | 1·5●         | 2·2●         | 9·2●R        | 1·4●R   |
| 11·8●R       | 16·0·ΔR         | 4·5·ΔR       | 2·2●        | 16·0●  | —            | 3·4●R        | 1·5●R        | 3·7●R   |
| 2·0●         | 1·5●            | 1·5●         | 12·0●R      | 1·3●   | 11·6●        | 2·6●         | —            | 6·3●    |
| —            | 4·1●            | —            | 18·0●       | —      | —            | —            | —            | —       |
| —            | —               | —            | —           | —      | —            | —            | —            | —       |
| —            | —               | —            | —           | —      | —            | —            | —            | —       |
| —            | —               | 0·1●         | —           | —      | —            | —            | 1·4●         | —       |
| 3·0●R        | 1·7●            | 1·9●         | 0·2●        | 0·2●   | —            | —            | 4·6●         | 0·5●R   |
| 17·6·R       | 11·3·R          | 0·3●R        | 2·6●        | 4·3●   | —R           | 5·2●R        | 1·9●         | 10·9●R  |
| 0·5●R        | 1·1●            | —            | 1·2●        | 1·8●   | —            | 1·8Δ●        | 3·1●         | 19·2·ΔR |
| 0·6●         | 0·2●            | 7·3●R        | 10·5●       | 5·7●   | 6·2●R        | 3·0●         | 7·2●         | 0·4●    |
| 85·7         | 85·0            | 79·6         | 107·9       | 68·2   | 68·2         | 45·4         | 85·5         | 100·1   |

## Ilość opadu

Kwiecień 1899 roku.

| Dzień         | Prze-<br>myśl | Lomna | Chyrów  | Stare-<br>miasto | Sambor | Dolina | Lwów  |
|---------------|---------------|-------|---------|------------------|--------|--------|-------|
| 1             | —             | 0'2*  | 0'4*    | —                | 0'2*   | —      | 3'4*  |
| 2             | 24'1*         | 0'1*  | 1'5●    | 2'4●             | 0'6●   | —      | 0'4*  |
| 3             | —             | —     | —       | —                | —      | —      | 2'2●  |
| 4             | —             | —     | —       | —                | —      | —      | —     |
| 5             | 0'2●          | —     | 0'2●    | 0'6●             | —      | —      | —     |
| 6             | —             | —     | —       | —                | —      | —      | —     |
| 7             | —             | —     | —       | —                | —      | —      | —●    |
| 8             | —             | —     | —       | —                | —      | —      | —     |
| 9             | 0'1●          | 0'2●  | 3'5●    | 0'9●             | —      | —      | —     |
| 10            | 5'9●          | 0'1●  | 6'1●    | 7'0●             | 0'3●   | 3'9●   | 1'3●= |
| 11            | —             | —     | —       | —                | —      | —      | 1'6●  |
| 12            | 3'9●          | 0'6●* | 2'2●    | 5'4●*            | 3'5●   | 1'2●   | 0'2●  |
| 13            | 4'9●          | 0'5●  | 3'3●    | 3'3●             | 2'9●   | —      | 1'1●  |
| 14            | 0'3●          | 0'3●  | 1'1●    | 0'4●             | —      | —      | 2'4●= |
| 15            | 2'4●          | 0'1●  | 0'6●    | —                | 0'3●   | —      | 0'4●  |
| 16            | 5'1●          | —     | 4'4●K   | 6'6●K            | 2'8●   | 1'3●   | 1'0●  |
| 17            | 0'2●          | —     | 0'2●    | —                | —      | —      | 1'6●  |
| 18            | —             | —     | —       | —                | —      | —      | —     |
| 19            | —             | —     | —       | —                | —      | —      | —     |
| 20            | 2'5●K         | —     | —       | —                | —      | —      | —=    |
| 21            | 1'7●          | 1'0●* | 2'6●=   | 4'4●=            | —      | —      | —     |
| 22            | 3'5●          | —     | 4'1●    | 2'7●             | —      | 0'2●   | 0'4●  |
| 23            | —             | —     | —       | —                | —      | —      | 0'1●  |
| 24            | —             | —     | —       | —                | —      | —      | —     |
| 25            | —             | —     | —       | —                | —      | —      | —     |
| 26            | —             | —     | —       | —                | 0'6●   | —      | —     |
| 27            | —             | —     | —       | —                | —      | —      | —     |
| 28            | —             | 0'1●  | 0'7●K   | 0'8●K            | —      | —      | —     |
| 29            | 6'3●K         | —     | 27'7ΔK● | 6'8●K            | 1'8●   | —      | —●    |
| 30            | —             | —     | 1'8●    | 0'8●             | —      | —      | 7'3●  |
| Suma<br>opadu | 61'1          | 3'2   | 60'4    | 42'1             | 13'0   | 6'6    | 23'4  |

w milimetrach.

| Du-<br>blany | Dela-<br>tyn | Oży-<br>dów | Krzy-<br>wo-<br>równia | Koło-<br>myja | Ober-<br>tyn | Tar-<br>nopol | Jagiel-<br>nica |
|--------------|--------------|-------------|------------------------|---------------|--------------|---------------|-----------------|
| 0'7*         | 0'2●*        | 4'2*        | 7'6*                   | —             | 0'2*         | 0'6*≡         | 0'2*            |
| 1'9●*        | —            | 2'1●        | 0'6*                   | 7'0●*         | 1'0●         | 1'3*●≡        | 0'2●            |
| —            | —            | —           | —                      | —●            | —            | —             | 1'0●            |
| —            | —            | —           | —                      | —             | —            | —≡            | 0'2●            |
| —            | —            | —           | —                      | —             | —            | —≡            | —               |
| —            | —            | —           | —                      | —             | —            | —≡            | —               |
| —            | —            | —           | —                      | —             | —            | —≡            | —               |
| —            | —            | —           | —                      | —             | —            | —≡            | —               |
| —            | —            | —           | —                      | —             | —            | —≡            | —               |
| —            | —            | —           | —                      | —             | —            | —≡            | —               |
| 4'0●         | 0'1●         | 0'4●        | —●                     | —             | —            | —≡            | —               |
| —            | —            | —           | —                      | —             | —≡           | —             | —               |
| 1'4●         | 1'3●         | 0'9●        | —●                     | —             | —            | —≡            | —               |
| 3'7●         | 0'2●         | 2'4●        | 0'3●                   | —             | 3'2●         | 3'5●≡         | 0'1●            |
| —            | —            | 0'5●        | 1'5●                   | —             | —            | 0'9●≡         | 2'6●            |
| 2'4●         | —            | 0'8●        | —                      | —             | —            | —●            | 0'5●            |
| 1'8●         | —            | —           | —●                     | —             | —            | —≡            | —               |
| —            | —            | —           | —                      | —             | —            | —≡            | —               |
| —            | —            | —           | —                      | —             | —            | —≡            | —               |
| —            | —            | 6'5●R       | —                      | 0'8●          | —            | 1'0●R         | —               |
| —            | —            | —           | —                      | —             | —            | —             | —               |
| 0'7●         | 0'1●         | —           | —                      | —             | —            | —             | 0'8●            |
| —            | —            | 0'5●        | —                      | 0'1●          | —            | —             | —               |
| —            | —            | —           | —                      | —             | —            | —             | —               |
| —            | —            | —           | —                      | —             | —            | —             | —               |
| —            | —            | —           | —                      | —             | —            | —             | —               |
| —            | —            | —           | —                      | —             | —            | —             | —               |
| —            | —            | —           | —                      | —             | —            | —             | —               |
| —            | —            | —           | —                      | —             | —            | —             | —               |
| —            | —            | —           | —                      | —             | —            | —             | —               |
| —            | —            | —           | —                      | —             | —            | —             | —               |
| 4'6●         | —            | —           | —                      | —             | —            | —             | —               |
| 0'9●         | 0'2●         | 1'8●        | 0'4●R                  | —             | —            | —●            | —               |
| —            | —            | —           | —                      | —             | —            | —             | —               |
| 22'1         | 2'1          | 20'1        | 10'4                   | 7'9           | 4'4          | 7'3           | 5'6             |

## Ilość opadu

Maj 1899 roku.

| Dzień         | Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków |
|---------------|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|
| 1             | 3·5●*                   | 1·3●*        | 4·8●        | 2·8●=         | —●                   | 2·0●          | 0·10●       |
| 2             | —                       | —■           | —           | —             | 0·6●                 | —             | —■          |
| 3             | 5·3●=                   | 1·3●         | 2·2●        | 1·6●          | 5·9●                 | 1·3●          | 1·00●R      |
| 4             | 6·7●=                   | —            | —           | 0·9●          | 0·2●                 | —             | 5·40●       |
| 5             | 8·4●=                   | 4·9●=        | 6·2●        | 3·5●          | 1·3●                 | 12·5●         | 7·50●       |
| 6             | 1·3●=                   | 8·6·ΔR       | 7·4●        | —             | 7·7●                 | 1·1●          | 0·45●       |
| 7             | 0·8●                    | 0·8●         | —           | 1·8●          | 0·2●                 | 1·0●          | —           |
| 8             | 2·7●=                   | 3·6●=        | 1·2●=       | 3·0●=         | —●                   | 2·1●          | 2·05●       |
| 9             | 0·4●                    | 4·0●         | 6·0●        | 3·6●          | 4·2●                 | 0·6●          | 3·00●       |
| 10            | 46·7●=                  | 28·9●        | 19·6●       | 5·5●          | 6·3●                 | 6·3●          | 14·55●      |
| 11            | —                       | 0·3●         | —           | 1·9●          | 16·1●                | —             | 3·00●       |
| 12            | —■                      | 8·6●         | 7·2●        | 1·5●          | 1·9●                 | —             | 0·50●=      |
| 13            | 3·1●                    | 0·2●=        | 2·3●        | 2·0●=         | 3·3●                 | 6·5●          | 1·40●       |
| 14            | —                       | —            | —           | 0·5●          | 0·1●                 | —             | —           |
| 15            | —                       | —            | —           | —●            | —                    | —             | —           |
| 16            | —■                      | 7·3●         | 9·5●        | 1·7●          | —                    | 7·5●          | —●          |
| 17            | 2·9●=                   | —●           | 1·9●        | 1·1●=         | 4·1●                 | 2·3●          | 2·80●       |
| 18            | —                       | —            | —           | —             | 0·2●                 | —             | —■          |
| 19            | —                       | —            | —           | —             | —                    | —             | —           |
| 20            | 5·7●R                   | 0·1●R        | 0·2●        | 1·3●          | —◁                   | 2·7●Δ         | 10·90●R     |
| 21            | 4·2●                    | —●           | —●          | —             | 9·0●                 | 0·3●          | 0·10●       |
| 22            | —                       | —●           | 0·1●        | 1·0●          | —                    | —             | 1·15●       |
| 23            | —                       | —■           | 3·2●        | —             | —                    | 2·8●          | 0·05●       |
| 24            | —                       | 10·7●        | 11·1●       | 3·0●=         | —                    | 6·4●          | —           |
| 25            | 8·4●=                   | 3·0●         | 12·0●       | 5·1●=         | 13·0●                | 5·0●          | 13·00●      |
| 26            | 14·7●                   | 8·8●         | 11·4●       | 6·1●          | 5·7●                 | 3·4●          | 6·10●       |
| 27            | 9·8●=                   | 5·1●         | 2·2●        | 7·3●          | 9·2●                 | —             | 9·65●       |
| 28            | —                       | —            | —           | —             | 3·6●                 | —             | —           |
| 29            | 3·2●=                   | 1·0●         | 0·4●        | 1·1●          | —                    | 5·0●          | —●          |
| 30            | —                       | —            | —           | —             | —                    | —             | —■          |
| 31            | —                       | —            | —           | —             | —                    | —             | —■          |
| Suma<br>opadu | 127·8                   | 98·5         | 108·9       | 56·3          | 92·6                 | 68·8          | 82·70       |

w milimetrach.

| Boch-<br>nia      | Szczaw-<br>nica | Kry-<br>nica                | Tar-<br>nów | Pilzno             | Iwo-<br>niez | Rze-<br>szów      | Smol-<br>nik | Sanok              |
|-------------------|-----------------|-----------------------------|-------------|--------------------|--------------|-------------------|--------------|--------------------|
| 2'3●              | —               | 1'0●                        | —           | 1'6●               | 5'7●         | 1'0●              | 1'8●         | —                  |
| —                 | —               | —                           | —           | —                  | —            | —                 | —            | —                  |
| 2'0●              | 0'8●            | 1'3●                        | 3'8●        | 2'8● $\mathbb{R}$  | —            | 0'8●              | —            | 1'4●               |
| 2'4● $\Delta$     | —               | 2'3 $\Delta$ ● $\mathbb{R}$ | 0'3●        | 1'6● $\mathbb{R}$  | 0'6●         | —                 | 4'4●         | —                  |
| 9'2●              | 13'3●           | 6'4●                        | 2'0●        | 1'5●               | —            | 0'6●              | 6'8●         | 4'7●               |
| 2'0●              | 1'7●            | 2'6●                        | 1'5●        | 2'0●               | 6'4●         | —                 | 17'0●        | 6'9●               |
| —                 | 0'4●            | 3'3●                        | 2'5●        | 2'2●               | 0'7●         | 2'6●              | —            | —                  |
| 0'5●              | —               | 2'2●                        | 3'8●        | 1'0●               | 0'3●         | 3'0●              | 3'6●         | 2'5●               |
| 0'3●              | 1'4●            | 4'1●                        | 5'3●        | 4'7●               | 1'2●         | 3'2●              | 1'4●         | 7'1●               |
| 7'0●              | 4'2●            | 2'9●                        | 6'7●        | 5'6●               | 5'3●         | 5'0●              | 10'6●        | 1'1●               |
| 0'6●              | —               | —                           | 1'6●        | 1'2●               | 0'4●         | 1'2●              | 0'5●         | 0'4●               |
| 0'5●              | —               | 3'6●                        | 3'0●        | 1'4●               | —            | —                 | 0'5●         | 1'2●               |
| 6'0●              | 2'2●            | 4'0●                        | —           | —                  | 3'8●         | —                 | 0'1●         | —                  |
| —                 | —               | — $\mathbb{R}$              | —           | —                  | —            | —                 | —            | —                  |
| —                 | —               | —                           | —           | —                  | —            | —                 | —            | —                  |
| 21'5●             | 14'0●           | 19'8● $\mathbb{R}$          | 22'0●       | 20'0● $\mathbb{R}$ | —            | 3'6● $\mathbb{R}$ | 12'0●        | 28'8● $\mathbb{R}$ |
| —                 | 0'4●            | 0'5●                        | 0'7●        | 0'2●               | 9'4●         | —                 | 6'9●         | 4'2●               |
| —                 | —               | —                           | —           | —                  | —            | —                 | —            | —                  |
| 2'8● $\mathbb{R}$ | 7'1●            | 4'3●                        | 2'0●        | 3'3● $\mathbb{R}$  | —            | —                 | —            | —                  |
| —                 | 0'8●            | 2'3●                        | —           | 0'5●               | 8'6●         | 3'4●              | 10'6●        | 10'0●              |
| —                 | 0'3●            | —                           | 0'2●        | 0'1●               | 7'3●         | —                 | 0'3●         | 0'9●               |
| —                 | 5'1●            | —                           | 0'5●        | 0'8●               | —            | —                 | 0'3●         | —                  |
| 0'5●              | 0'1●            | 5'7●                        | 6'6●        | 5'3●               | —            | —                 | —            | 7'8●               |
| 10'0●             | 4'6●            | 1'2●                        | 1'2●        | 0'9●               | 5'5●         | 3'8●              | 8'4●         | 2'4●               |
| 13'0●             | 0'7●            | 6'9●                        | 11'4●       | 11'5●              | —            | 1'4●              | 7'3●         | 3'3●               |
| 9'5●              | —               | 0'1●                        | 4'6●        | 3'5●               | 1'4●         | 3'2●              | 1'6●         | 2'8●               |
| 1'5●              | 1'2●            | —                           | —           | —                  | —            | 2'2●              | —            | —                  |
| 0'8●              | —               | 2'6●                        | 1'0●        | 2'2●               | —            | —                 | 2'6●         | 1'7●               |
| —                 | —               | —                           | —           | —                  | 2'7●         | 3'0●              | 0'5●         | 0'7●               |
| —                 | —               | —                           | —           | —                  | —            | —                 | —            | —                  |
| 92'4              | 58'3            | 77'1                        | 81'7        | 73'9               | 59'3         | 70'4              | 97'2         | 87'9               |

## Ilość opadu

Maj 1899 roku.

| Dzień         | Prze-<br>myśl      | Łomna | Chyrów            | Stare-<br>miasto  | Sambor | Dolina | Lwów               |
|---------------|--------------------|-------|-------------------|-------------------|--------|--------|--------------------|
| 1             | 1'0●               | —     | 0'3●              | —                 | 4'1●   | 2'2●   | 6'2●               |
| 2             | —                  | —     | —                 | —                 | 1'3●   | 2'0●   | 0'1●               |
| 3             | 3'0●               | —     | 1'6●              | —                 | —      | —      | —                  |
| 4             | 2'8●               | —     | 3'5●              | 4'0●              | 2'1●   | 6'0●   | 2'1●               |
| 5             | 1'9●               | —     | 2'6●              | 3'9●              | 1'9●   | 0'6●   | 1'9●               |
| 6             | 8'5● <sub>4</sub>  | —     | 1'3●              | 2'6●              | 6'0●   | 18'5●  | 1'5●               |
| 7             | —                  | —     | 1'1●              | 2'2●              | 1'2●   | 2'3●   | 19'0●              |
| 8             | 3'8●               | —     | 2'5●              | 2'0●              | 2'5●   | 1'1●   | 0'8●               |
| 9             | 6'8●               | 1'1●  | 6'0●              | 6'0●              | 6'0●   | —      | —●                 |
| 10            | 2'1●               | 1'6●  | 1'5●              | 1'3●              | —      | 0'6●   | —●                 |
| 11            | 0'9●               | 1'1●  | 0'2●              | 2'4●              | 3'5●   | —      | 6'0●               |
| 12            | —                  | —     | 0'7●              | 0'2●              | —      | —      | 1'6●               |
| 13            | —                  | —     | —                 | —                 | —      | 0'6●   | —                  |
| 14            | —                  | —     | —                 | 4'0● <sub>R</sub> | 4'1●   | 3'1●   | —●                 |
| 15            | —                  | —     | —                 | —                 | —      | —      | —                  |
| 16            | 21'5● <sub>R</sub> | 0'6●  | 7'6● <sub>R</sub> | 8'6● <sub>R</sub> | 1'3●   | —      | —● <sub>R</sub>    |
| 17            | 12'8●              | 10'1● | 12'7●             | 11'3●             | 9'5●   | 0'7●   | 21'0●              |
| 18            | —                  | —     | —                 | —                 | —      | 9'1●   | 20'7● <sub>R</sub> |
| 19            | —                  | —     | —                 | —                 | —      | 0'2●   | —                  |
| 20            | 1'4● <sub>4</sub>  | —     | 0'5●              | —                 | 1'6●   | 13'3●  | —                  |
| 21            | 1'4●               | 0'1●  | 2'7●              | 4'8●              | —      | 3'5●   | 0'5●               |
| 22            | —                  | —     | 0'1●              | 2'9●              | —      | 1'5●   | 0'6●               |
| 23            | —                  | —     | —                 | —                 | —      | —      | —                  |
| 24            | 0'8●               | —     | 0'7●              | 0'4●              | —      | —      | 0'1●               |
| 25            | 2'2●               | 0'2●  | 1'3●              | 0'1●              | 1'4●   | 1'5●   | 0'2●               |
| 26            | 0'2●               | —     | 0'9●              | 0'9●              | —      | 1'8●   | —●                 |
| 27            | 5'9●               | —     | 1'2●              | 0'2●              | 0'3●   | —      | 0'6●               |
| 28            | 0'8●               | —     | 1'8●              | 3'1●              | 0'7●   | —      | —                  |
| 29            | 0'2●               | 10'1● | 5'0●              | 11'0              | 6'3●   | 11'8●  | 9'2●               |
| 30            | 0'2●               | —     | 0'3●              | —                 | 1'3●   | 12'6●  | 9'3●               |
| 31            | —                  | —     | —                 | —                 | —      | —      | —                  |
| Suma<br>opadu | 78'2               | 24'9  | 56'1              | 71'9              | 55'1   | 93'0   | 101'4              |



w milimetrach.

| Du-<br>blany | Dela-<br>tyn | Oży-<br>dów | Krzy-<br>wo-<br>równia | Koło-<br>myja | Ober-<br>tyn | Tar-<br>nopol | Jagiel-<br>nica |
|--------------|--------------|-------------|------------------------|---------------|--------------|---------------|-----------------|
| 0'10●        | 9'6●         | —           | 1'9●                   | 0'10●         | 1'3●         | 0'4●          | —               |
| —            | —            | —           | 9'5●                   | 4'5●          | —            | —             | 3'7●            |
| —            | —            | —           | —●                     | —             | 0'2●         | —             | —               |
| 4'1●         | 2'1●         | 5'8●        | 0'9●                   | 0'3●          | 0'1●         | 3'8=●         | 3'3●            |
| 1'2●         | 0'9●         | 0'3●        | 1'8●R                  | 0'4●          | 3'0●         | 0'3=●         | 2'8●            |
| 14'6●        | 11'7●        | 22'6●       | 4'0●                   | 6'1●          | 6'3●         | 9'4●R         | 2'0●            |
| 3'8●         | 0'6●         | 2'9●        | 13'0●                  | 16'3●         | 3'7●         | 8'5●          | 5'4●            |
| —            | 1'2●         | —           | 4'2●                   | 5'4●          | —            | —             | 23'0●           |
| —            | 0'1●         | —           | 0'7●                   | 0'2●          | —            | —             | 1'3●            |
| 2'9●         | —            | 0'4●        | —●                     | 0'4●          | 0'1●         | 0'2●          | —               |
| 3'1●         | 1'0●         | 4'6●        | —                      | —             | —            | 2'2●          | —               |
| —            | 0'1●         | 0'4●        | 3'9●                   | 2'1●          | 0'1●         | 0'4●          | —               |
| —            | 1'5●         | —           | 2'2●                   | 10'2●         | —            | —=            | —               |
| 0'4●         | 2'1●         | —           | 15'8●R                 | —             | —            | —             | —               |
| —            | —            | —           | 1'1●                   | —             | —            | —             | —               |
| 25'2●R       | 0'1●         | —           | —                      | —             | —            | 0'4●R         | —               |
| 26'5●        | 14'1●R       | 11'4●       | 25'8●R                 | 27'3●         | 17'2●R       | 12'9●R        | 15'5●           |
| —            | 0'1          | —           | 2'4●                   | —             | —            | 0'3=●         | 1'5●            |
| —            | —            | —           | —●                     | —             | —            | —=            | —               |
| —            | 11'1●ΔR      | —           | —                      | 8'4●          | —            | —=            | —               |
| 3'3●         | 0'1●         | 1'5●        | 3'6●                   | 20'4●         | 3'0●R        | 0'8●R         | 4'3●            |
| —            | 9'2●         | —           | 8'0●                   | 2'1●          | 0'4●         | 0'4●=         | 0'5●            |
| —            | 0'1●         | —           | 1'0●                   | —             | —            | —             | —               |
| 0'6●         | 0'6●         | 0'6●        | 3'2●R                  | 2'4●          | 3'2●         | —=            | 1'5●            |
| —            | 0'8●         | —           | 3'7●                   | 3'2●          | 2'3●         | 4'9●R         | 13'0●R          |
| 1'2●         | —            | 2'3●        | 3'1●                   | 1'3●          | 1'8●         | 4'1●R         | 1'9●            |
| —            | —            | —           | —                      | —             | —            | —=            | —               |
| 5'1●         | 17'5●        | 11'4●       | 14'4●                  | —             | 12'3●        | 3'4●          | 11'6●           |
| 16'4●        | 10'2●        | 24'6●       | 13'3●                  | 11'4●         | 10'1●        | 10'5●         | 23'2●           |
| —            | 0'2●         | —           | 2'7●                   | 7'3●          | 1'4●         | 0'3●=         | —               |
| —            | —            | —           | —                      | —             | —            | —=            | —               |
| 108'5        | 95'0         | 88'8        | 140'2                  | 129'8         | 66'5         | 63'2          | 114'5           |

## Ilość opadu

Czerwiec 1899 roku.

| Dzień         | Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków |
|---------------|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|
| 1             | —                       | —            | —           | —             | —                    | —             | —           |
| 2             | —                       | —            | —           | —             | —                    | —●            | —■          |
| 3             | —                       | —            | —           | —             | —                    | —             | —■          |
| 4             | 10·8●ΔR                 | 11·7●ΔR      | 2·8●R       | 15·0●R        | 20·1●R               | 6·6●          | 15·35●ΔR    |
| 5             | —                       | —            | —           | —             | —                    | —             | —■          |
| 6             | —                       | —            | —           | —             | —                    | —             | —■          |
| 7             | 3·7●=                   | 3·6●         | 4·3●        | 5·0●          | 6·5●                 | 6·3●          | 4·60●=      |
| 8             | —                       | —            | —           | —             | —                    | —             | —           |
| 9             | —                       | 8·4●         | 6·7●        | —             | 12·0●                | 7·6●          | 0·35●=      |
| 10            | 12·8●Δ=                 | 9·9●         | 15·5●       | 3·5●          | 6·1●                 | 7·0●          | 11·20●      |
| 11            | —                       | —●           | —           | —             | —                    | 10·6●         | 0·55●Δ      |
| 12            | —                       | 6·8●         | 8·4●        | —             | 5·7●                 | 2·9●          | 0·05●       |
| 13            | 8·7●Δ=                  | 15·4●ΔR      | 0·9●        | 12·0●         | 14·5●                | 8·2●          | 22·70●      |
| 14            | —                       | —            | —           | —             | —                    | —             | 0·20●       |
| 15            | 4·8●                    | 3·2●         | —           | —             | —                    | —             | —■          |
| 16            | 3·8●                    | —            | —           | —             | —                    | —             | 0·10●=      |
| 17            | —                       | —            | —           | —             | —                    | —             | —■          |
| 18            | 0·7●=                   | 7·4●         | 16·0●       | 21·8●         | 25·4●                | 73·0●R        | 25·60●R     |
| 19            | 2·8●=                   | 2·9●=        | 2·3●        | —             | 2·7●                 | 0·5●          | —●          |
| 20            | —                       | —            | —           | —             | —                    | —             | —           |
| 21            | 0·5●R                   | 0·3●R        | 0·2●        | 3·6●          | 0·8●R                | 32·8●ΔR       | 0·10●R      |
| 22            | 7·4●=R                  | 16·2●R       | 0·4●        | 8·0●R         | 17·5●R               | 4·5●          | 4·40●R      |
| 23            | 3·2●=                   | 11·9●=       | 7·8●        | —             | 3·5●                 | 27·0●         | 8·70●=      |
| 24            | 5·5●=                   | 0·9●         | 1·0●        | 5·6●          | —                    | 1·6           | 3·10●       |
| 25            | —                       | 3·2●         | 3·0●        | —             | 2·6●R                | —             | —           |
| 26            | 8·3●                    | 6·8●R        | 3·4●        | 4·4●          | —●                   | 4·9●R         | 5·00●R      |
| 27            | 9·7●=R                  | 12·7●=       | 36·2●       | 2·5●          | 0·4●                 | 10·5●         | 0·55●=      |
| 28            | 28·4●=                  | 8·6●         | 12·2●       | 5·1●=         | 2·3●                 | 13·0●         | 0·40●       |
| 29            | —                       | —            | —           | —             | —                    | —             | —           |
| 30            | —                       | 0·2●         | 3·4●        | —             | —                    | —             | —           |
| Suma<br>opadu | 111·1                   | 130·1        | 135·5       | 86·5          | 120·1                | 217·0         | 103·85      |

w milimetrach.

| Bochnia | Szczawnica | Krynica | Tarnów | Pilzno | Iwonicz | Rzeszów | Smolnik | Sanok  |
|---------|------------|---------|--------|--------|---------|---------|---------|--------|
| —       | —          | —       | 0'7●   | —      | —       | —       | —       | —      |
| —       | —          | —       | —      | —      | —       | —       | —       | —      |
| —       | —          | —       | —      | —      | —       | —       | —       | —      |
| 11'5●R  | 6'5●       | 7'1●R   | 5'4●   | 2'2●R  | 4'2●    | 12'3●R  | 1'7●    | 13'3●R |
| —       | —          | —       | —      | —      | —       | —       | —       | —      |
| 7'1●    | 2'2●       | 5'5●    | 6'4●   | 6'2●   | 2'8●    | 5'2●    | 1'1●    | 2'7●   |
| —       | —          | —       | —      | —      | —       | —       | —       | —      |
| —       | 3'9●       | —       | 10'0●  | 12'4●  | —       | —       | 2'9●    | —      |
| 21'2●   | 13'8●      | —       | 10'6●  | 6'1●   | 10'6●   | 4'8●    | 10'3●   | 3'2●   |
| 1'5●    | 0'6●       | 3'1●Δ   | 0'3●   | 2'5●   | 2'5●    | 2'4●    | 2'1●    | 5'8●Δ  |
| 7'0●    | 3'1●       | 4'3●    | 9'8●   | 11'2●  | 2'7●    | 2'0●    | —       | 2'9●   |
| 7'2●    | 8'2●       | 15'3●   | 11'0●  | 3'3●   | —       | 7'2●    | 22'6●   | 10'4●  |
| 0'3●    | —          | —       | —      | 6'2●   | —       | —       | —       | 0'2●   |
| —       | —          | 1'5●    | 0'2●   | 3'6●   | 4'8●    | 5'2●    | 8'2●    | 11'1●  |
| —       | —          | —       | —      | —      | —       | —       | —       | —      |
| —       | —          | —       | —      | —      | —       | —       | —       | —      |
| —       | —          | 0'9●    | —      | —R     | 0'6●Δ   | 1'2●    | —       | —      |
| —       | 2'4●       | 1'7●R   | —      | —      | 12'3●   | 1'4●    | —       | —      |
| —       | —          | —       | —      | —      | —       | —       | —       | —      |
| 0'3●R   | 3'5●       | 0'1●R   | 17'0●R | 1'5●R  | —R      | 3'2●R   | —       | —      |
| —       | —          | —       | 12'0●  | 3'8●R  | —       | 2'4●    | —       | —      |
| 8'0●    | 23'3●      | 35'6●■  | 9'0●   | 6'4●   | 58'3●   | 3'8●    | 84'0●   | 65'0●R |
| 4'5●    | 0'7●       | 1'0●    | —      | 0'7●   | —       | 3'4●    | 1'6●    | 2'1●   |
| —       | —          | —       | —      | —Δ     | —       | —       | —       | —      |
| —       | 1'5●       | 2'6●    | —      | —      | —       | —       | —       | —      |
| 3'2●    | 12'9●      | 14'0●   | 9'4●   | 10'7●  | 5'2●    | 7'0●    | 8'4●    | 10'2●  |
| 0'9●    | 9'4●       | 13'2●   | —      | 5'9●Δ  | 1'4●    | 6'8●    | 34'4●   | 11'5●Δ |
| 0'6●    | —          | —       | 0'9●   | —      | —       | —       | —       | —      |
| —       | —          | —       | —      | —      | —       | —       | —       | —      |
| 78'3    | 92'0       | 105'9   | 102'7  | 82'7   | 105'4   | 68'3    | 177'3   | 138'4  |

## Ilość opadu

Czerwiec 1899 roku.

| Dzień         | Prze-<br>myśl        | Łomna              | Chyrów            | Stare-<br>miasto   | Sambor            | Dolina             | Lwów                     |
|---------------|----------------------|--------------------|-------------------|--------------------|-------------------|--------------------|--------------------------|
| 1             | —                    | —                  | —                 | —                  | —                 | 2'9●               | —                        |
| 2             | —                    | 1'0●               | —                 | —                  | —                 | 1'6●               | 0'4●                     |
| 3             | —                    | —                  | —                 | —                  | —                 | —                  | —                        |
| 4             | 13 0'0● $\mathbb{K}$ | —                  | 8'4● $\mathbb{K}$ | 5'9●               | 8'3● $\mathbb{K}$ | 1'6●               | 15'0● $\Delta\mathbb{K}$ |
| 5             | —                    | —                  | —                 | —                  | —                 | —                  | —                        |
| 6             | —                    | —                  | —                 | —                  | —                 | —                  | —                        |
| 7             | 1'5●                 | —                  | 0'8●              | 0'4●               | 0'4●              | 2'6●               | 1'0●                     |
| 8             | —                    | —                  | —                 | —                  | —                 | —                  | —●                       |
| 9             | —                    | —                  | —                 | —                  | 0'9●              | 0'2●               | —                        |
| 10            | 3'1●                 | 0'8● $\ast\Delta$  | 4'8●              | 10'7●              | 2'1●              | 7'2●               | 3'0●                     |
| 11            | —                    | —                  | —                 | —                  | —                 | —                  | 5'3●                     |
| 12            | 0'2●                 | —                  | —                 | 1'2●               | —                 | —                  | —                        |
| 13            | 8'2●                 | 3'5●               | 6'1●              | 12'7●              | 14'2●             | 1'3●               | 4'5●                     |
| 14            | —                    | —                  | —                 | —                  | —                 | —                  | 5'5●                     |
| 15            | 6'4●                 | 2'9●               | 5'7●              | 6'1●               | 9'5●              | 12'4●              | 10'3● $\ast$             |
| 16            | —                    | —                  | —                 | —                  | —                 | 0'3●               | —                        |
| 17            | —                    | —                  | —                 | —                  | —                 | —                  | —                        |
| 18            | —                    | —                  | —                 | —                  | —                 | —                  | —                        |
| 19            | 6'5●                 | 8'0● $\mathbb{K}$  | —                 | 24'8●              | 22'3●             | 0'9●               | —●                       |
| 20            | —                    | 2'4●               | 7'1●              | 1'6●               | 1'9●              | 0'5●               | 9'1●                     |
| 21            | — $\leftarrow$       | —                  | — $\leftarrow$    | —                  | 1'8●              | —                  | 3'1●                     |
| 22            | —                    | 1'9●               | —                 | —                  | —                 | 1'6●               | 0'6● $\mathbb{K}$        |
| 23            | 27'2● $\mathbb{K}$   | 44'0● $\mathbb{K}$ | 43'2●             | 73'9● $\mathbb{K}$ | —                 | 26'2● $\mathbb{K}$ | 0'4● $\mathbb{K}$        |
| 24            | 0'2●                 | 0'8●               | 0'3●              | 1'6●               | —                 | 0'3●               | 23'9●                    |
| 25            | —                    | —                  | —                 | —                  | —                 | —                  | —                        |
| 26            | 10'9●                | —                  | —                 | 0'9●               | 1'8●              | 2'4●               | —                        |
| 27            | 2'5●                 | 2'0● $\mathbb{K}$  | 4'6●              | 2'9●               | 2'3●              | 10'5●              | 0'6●                     |
| 28            | 11'1●                | 3'0● $\mathbb{K}$  | 23'7●             | 23'8●              | 9'2●              | 11'1●              | 7'1● $\Delta\mathbb{K}$  |
| 29            | —                    | —                  | —                 | —                  | —                 | —                  | 12'8●                    |
| 30            | —                    | —                  | —                 | —                  | —                 | —                  | —                        |
| Suma<br>opadu | 90'8                 | 70'3               | 104'7             | 166'5              | 74'7              | 83'6               | 102'6                    |

w milimetrach.

| Du-<br>blany | De-<br>latyn | Oży-<br>dów | Krzy-<br>wo-<br>równia | Koło-<br>myja | Ober-<br>tyn | Tar-<br>nopol | Jagiel-<br>nica |
|--------------|--------------|-------------|------------------------|---------------|--------------|---------------|-----------------|
| 0'6●         | —            | —           | —                      | —             | 11'0●Δ       | —■            | —               |
| —            | —            | —           | —                      | 2'5●          | 0'9●         | —■            | —               |
| —            | —            | —           | —                      | —             | —            | —■            | —               |
| 10'4●R       | 0'2●R        | 8'6●R       | 2'1●                   | 1'3●          | 3'3●R        | 6'4●R         | 1'2●            |
| —            | —            | —           | —                      | —             | —            | —●■           | —               |
| —            | —            | —           | —                      | —             | —            | —●■           | 4'5●            |
| 1'2●         | 2'5●         | 0'2●        | 0'6●                   | 1'4●          | 0'2●         | 1'2●■         | —               |
| —            | —            | —           | —                      | —             | —            | —■            | —               |
| 0'2●         | —            | —           | 1'1●                   | —             | —            | —■            | —               |
| 3'7●         | 10'5●        | 4'5●        | 23'9●                  | 10'5●         | 5'0●         | 1'0●■         | —               |
| —            | —            | —           | —                      | 0'5●          | —            | 0'4●          | 1'0●            |
| 2'8●         | —            | —           | 0'8●                   | —             | —            | —■            | 0'8●            |
| 8'0●         | 4'2●         | 6'6●Δ       | 6'9●                   | 4'3●          | 3'1●         | 6'5●          | —               |
| —            | —            | —           | —                      | —             | —            | 0'2●■         | —               |
| 7'2●         | 6'0●         | —           | 2'2                    | 4'5●          | 7'5●R        | 5'8●R         | 2'3●            |
| —            | 0'1●         | —           | —■                     | 0'3●          | —            | 2'3●■         | —               |
| —            | 1'8●R        | 4'8●        | 0'5●■                  | —             | —            | —■            | 7'4●            |
| —            | 0'9●         | 0'3●        | —                      | 14'3●         | —            | —■            | —               |
| 11'4●        | 6'5●         | 14'0●       | 12'9●                  | 4'4●          | 1'2●         | 0'3●■         | —               |
| 0'9●         | 6'0●         | 21'2●       | 1'8●                   | 0'4●          | —            | —R■           | 10'3●           |
| 0'8●         | —            | 5'6●        | 0'9●R                  | 1'5●          | 0'5●         | —R■           | 12'5●           |
| 0'8●         | 0'8●         | 3'7●        | 0'8●                   | 1'4●          | 0'1●         | 3'4●R         | —               |
| 26'5●R       | 17'5●R       | 3'1●R       | 40'6●                  | 34'4●R        | 40'5●R       | 28'6●R        | 0'9●            |
| 0'3●         | 0'6●         | 9'6●        | —                      | 4'2●R         | 0'3●         | 0'3●          | 3'9●            |
| —            | —            | 2'2●        | —                      | —             | —            | —             | —               |
| 0'7●         | 1'3●         | —           | 0'8●                   | 8'1●          | 4'3●         | 1'1●■         | —               |
| 5'8●         | 8'2●         | 11'1●       | 1'4●                   | 5'2●          | 5'7●         | 4'5●■         | —               |
| 14'2●Δ       | 5'0●         | 6'6●        | 22'4●R                 | 4'1●          | 4'2●         | 3'5●■         | 9'3●            |
| —            | 2'8●         | 14'5●       | —                      | 0'6●          | 0'1●         | 0'1●■         | 8'2●            |
| —            | —            | 1'2●        | —                      | —             | —            | —■            | —               |
| 95'5         | 74'9         | 117'8       | 119'7                  | 103'9         | 87'9         | 65'6          | 62'3            |

## Ilość opadu

Lipiec 1899 roku.

| Dzień         | Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków |
|---------------|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|
| 1             | 0'8●=K                  | 1'5●=        | 2'0●        | 0'5●          | —                    | 3'9●K         | —●          |
| 2             | 1'7●=                   | 0'6●K        | 1'4●        | 1'5●          | 0'4●                 | 1'7●          | 0'50●K      |
| 3             | 0'4●=                   | 2'3●         | 2'6●        | 4'5●          | 1'6●                 | 5'9●          | 23'05●      |
| 4             | —                       | —            | 0'3●        | 1'7●          | 7'0●                 | —             | 5'00●       |
| 5             | 1'9●=                   | 4'7●         | 2'3●        | 11'9●         | 5'6●K                | 6'3●          | 3'10●K      |
| 6             | 29'5●=K                 | 23'2●K       | 22'5●       | 7'5●          | 8'9●                 | 18'2●         | 6'15●       |
| 7             | 40'9●=K                 | 31'6●K       | 52'0●K      | 18'5●=        | 4'9●                 | 35'0●         | 6'50●       |
| 8             | 71'1●=                  | 44'1●        | 73'0●       | 29'6●K        | 27'4●K               | 35'3●         | 15'95●K     |
| 9             | 20'7●=K                 | 26'2●=K      | 24'6●       | 19'8●K        | 27'7●K               | 5'8●          | 32'00●K     |
| 10            | —                       | —=           | —           | —             | 37'9●                | 14'6●         | 2'95●       |
| 11            | 0'4●                    | —            | —           | —             | 3'8●                 | —             | —           |
| 12            | —                       | —            | —           | —             | —                    | —             | —           |
| 13            | —                       | —            | —           | —             | —                    | —             | —           |
| 14            | —                       | —            | —           | —             | —                    | —             | —           |
| 15            | —                       | —            | —           | —             | —                    | 0'8●          | —           |
| 16            | —                       | —            | —           | —             | —K                   | 2'0●K         | 1'50●K      |
| 17            | —K                      | 11'6●K       | 11'8●       | —●Δ           | 5'4●K                | 3'2●          | 0'15●K      |
| 18            | 5'3●K                   | 5'4●K        | 4'7●        | 11'0●         | 7'3●K                | 1'0●          | 15'35●K     |
| 19            | —                       | —=           | —           | —             | 1'3●K                | —             | 30'90●ΔK    |
| 20            | —                       | 0'7●=K       | —=          | —             | —                    | 2'8●          | 0'25●K      |
| 21            | —                       | —            | —           | —             | —                    | —             | 0'15●=      |
| 22            | —                       | —            | —           | —             | —                    | —             | —=          |
| 23            | 5'2●K                   | 0'9●K        | 4'7●K       | —             | 14'7●                | 2'1●K         | —=●         |
| 24            | 6'1●                    | 4'2●=K       | 45'3●K      | —             | 8'6●K                | 15'2●K        | 8'45●K      |
| 25            | 7'8●=                   | 0'6●=K       | 19'8●K      | —             | 1'7●                 | 26'3●K        | 0'35●K      |
| 26            | —                       | —            | —           | —             | —                    | —             | —=          |
| 27            | 13'5●K                  | 8'7●K        | 6'4●        | 21'0●K        | 18'6●K               | 8'5●K         | 32'75●K     |
| 28            | —                       | 0'1●         | —           | —             | —                    | —             | 0'20●=      |
| 29            | 4'4●=                   | 0'9●         | —           | —             | 1'3●                 | 0'3K          | 0'10●=●     |
| 30            | 4'9●=                   | 3'4●         | 1'9●        | —             | 1'6●                 | 2'8●          | 3'75●       |
| 31            | 2'1●=                   | 0'8●=        | 0'6●        | —             | —                    | 0'7●          | 0'40●       |
| Suma<br>opadu | 216'7                   | 171'5        | 275'9       | 157'5         | 185'7                | 192'4         | 191'50      |

w milimetrach.

| Szczaw-<br>nica | Kry-<br>nica | Tar-<br>nów | Pilzno | Iwo-<br>niec | Rze-<br>szów | Smol-<br>nik | Sanok  |
|-----------------|--------------|-------------|--------|--------------|--------------|--------------|--------|
| 8.6●            | —            | —           | 1.5●   | —            | —            | —            | —      |
| 0.2●            | 1.3●≡        | 2.0●        | 1.3●   | —            | 6.0●K        | 7.0●         | 1.9●   |
| 13.3●           | 24.3●        | 15.0●       | 21.0●  | 15.7●        | 28.0●        | 54.0●        | 31.4●  |
| —               | 0.3●         | 0.4●        | —      | —            | 1.4●         | —            | —      |
| 5.1●            | 3.0●         | 5.0●        | 7.0●   | 3.5●         | 5.0●         | 7.6●         | 11.0●  |
| 16.9●           | 23.1●        | 20.8●       | 25.3●K | 26.7●        | 8.0●         | 15.3●        | 21.8●K |
| 12.6●           | 7.3●         | 12.4●       | 13.7●K | 9.6●         | 17.6●        | 3.7●         | 21.0●K |
| 39.8●           | 18.4●        | 22.5●       | 15.9●K | 16.3●        | 11.4●        | 31.8●        | 11.6●K |
| 13.6●           | 6.7●         | 11.6●       | 15.0●K | 24.5●        | 11.0●        | 1.8●         | 10.7●K |
| 30.0●           | 10.7●        | 37.7●       | 4.5●   | 22.8●        | 19.0●        | 8.2●≡        | 11.1●  |
| —               | 0.1●         | —           | —      | —            | —            | —            | —      |
| —               | —            | —           | —      | —            | —            | —            | —      |
| —               | —            | —           | —      | —            | —            | —            | —      |
| —               | —            | —           | —      | —            | —            | —            | —      |
| 14.2●           | 2.1●         | 14.5●K      | 2.7●K  | —            | 1.4●K        | 2.5●         | 8.8●ΔK |
| 7.1●            | —            | 3.0●        | 2.1●K  | —            | 0.6●         | 0.5●         | 11.9●K |
| 1.9●            | 6.6●         | 13.5●K      | —      | 18.5ΔK●      | 0.2●         | 20.0●≡       | —      |
| 0.5●            | —            | —           | 0.8●K  | —●           | —            | —            | —      |
| —               | —            | 1.6●        | —      | —            | —            | —            | —      |
| —               | —            | —           | —      | —            | —            | —            | —      |
| 0.7●            | —            | —           | —      | —            | —            | —            | —      |
| 10.3●           | 1.3●         | —           | —      | —            | —            | —            | 8.4●K  |
| 3.8●            | 15.1●        | 12.8●       | 0.6●   | —            | 4.2●         | 2.6●         | —      |
| —               | —            | 4.2●        | 13.2●K | 4.6●         | 1.2●         | 0.5●         | 1.2●K  |
| 9.2●            | 0.6●         | —           | 6.9●K  | 14.2●        | —            | 0.5●≡        | —      |
| —               | 6.1●K        | —           | —      | —            | —            | —≡           | —      |
| 1.1●            | —            | 8.5●        | 7.7●   | 6.3●         | —            | —            | 5.1●   |
| 0.9●            | 0.8●         | —           | 0.6●   | —            | —            | 2.8●         | 0.5●   |
| —               | 0.9●         | 12.2●       | 6.6●   | —            | 1.4●         | —            | 1.7●   |
| —               | 0.6●         | 0.3●        | 3.1●   | 0.4●         | 0.4●         | 0.7●         | —      |
| 189.8           | 129.3        | 198.0       | 149.5  | 163.1        | 116.8        | 159.5        | 158.1  |

## Ilość opadu

Lipiec 1899 roku.

| Dzień         | Prze-<br>myśl        | Lomna             | Chyrów             | Stare-<br>miasto   | Sam-<br>bor | Dolina | Lwów                     |
|---------------|----------------------|-------------------|--------------------|--------------------|-------------|--------|--------------------------|
| 1             | —                    | —                 | —                  | —                  | —           | —      | —                        |
| 2             | 0'1●                 | —                 | 2'0● $\mathbb{R}$  | 11'8● $\mathbb{R}$ | 0'6●        | 5'4●   | —                        |
| 3             | 22'2●                | 14'1●             | 18'2●              | 20'0●              | 11'9●       | —      | 0'8● $\triangleleft$     |
| 4             | 0'2●                 | —                 | —                  | —                  | —           | —      | 27'8●                    |
| 5             | 15'3●                | 0'2●              | 12'0●              | 3'7●               | 7'9●        | 0'5●   | —                        |
| 6             | 2'5●                 | 0'1●              | 1'7●               | 2'0● $\mathbb{R}$  | 0'8●        | 1'5●   | 9'3●                     |
| 7             | 18'5●                | 7'2●              | 18'1●              | 7'2●               | 0'6●        | 1'0●   | 2'2●                     |
| 8             | 4'5● $\mathbb{R}$    | 1'0●              | 3'2●               | 0'5●               | 0'1●        | 8'4●   | 4'1● $\mathbb{R}$        |
| 9             | 1'7● $\triangleleft$ | 0'8● $\mathbb{R}$ | 3'6●               | 3'8●               | 3'2●        | —      | —                        |
| 10            | 18'1●                | —                 | 30'7●              | 74'8●              | 9'2●        | 1'9●   | —                        |
| 11            | —                    | —                 | —                  | —                  | —           | 15'0●  | 6'6●                     |
| 12            | —                    | —                 | —                  | —                  | —           | —      | —                        |
| 13            | —                    | —                 | —                  | —                  | —           | —      | —● $\mathbb{R}$          |
| 14            | —                    | —                 | —                  | —                  | —           | —      | —                        |
| 15            | —                    | —                 | —                  | —                  | —           | —      | —                        |
| 16            | 1'5● $\mathbb{R}$    | — $\mathbb{R}$    | — $\mathbb{R}$     | 21'8● $\mathbb{R}$ | 1'7●        | 4'8●   | —                        |
| 17            | 9'5● $\mathbb{R}$    | 8'1●              | 26'0● $\mathbb{R}$ | 0'1●               | 2'3●        | —      | 13'1● $\Delta\mathbb{R}$ |
| 18            | —                    | 7'4●              | 4'3●               | —                  | —           | —      | 1'3● $\mathbb{R}$        |
| 19            | 0'8●                 | —                 | —                  | —                  | —           | 0'9●   | — $\mathbb{R}$           |
| 20            | 0'1●                 | —                 | —                  | —                  | —           | 0'5●   | —                        |
| 21            | —                    | —                 | —                  | —                  | —           | 0'3●   | —                        |
| 22            | —                    | —                 | —                  | —                  | —           | 2'8●   | 5'0●                     |
| 23            | —                    | —                 | —                  | 8'0● $\mathbb{R}$  | 0'6●        | —      | —                        |
| 24            | 7'0● $\triangleleft$ | —                 | 1'8●               | —                  | 1'1●        | —      | —                        |
| 25            | —                    | 5'0●              | 0'3●               | 0'7●               | 2'6●        | 3'4●   | 2'2● $\mathbb{R}$        |
| 26            | —                    | —                 | —                  | —                  | —           | —      | —●                       |
| 27            | 4'9●                 | —                 | 4'4●               | 1'9●               | —           | 4'5●   | — $\mathbb{R}$           |
| 28            | —                    | —                 | —                  | —                  | —           | —      | —●                       |
| 29            | —                    | —                 | —●                 | 2'9●               | —           | 0'2●   | 12'2● $\mathbb{R}$       |
| 30            | —                    | —                 | 1'8●               | —                  | 1'0●        | 0'4●   | —                        |
| 31            | —                    | —                 | 0'1●               | —                  | 0'9●        | 2'4●   | 3'6●                     |
| Suma<br>opadu | 106'9                | 43'9              | 128'2              | 159'2              | 44'6        | 53'9   | 83'8                     |



w milimetrach.

| Du-<br>blany | Dela-<br>tyn | Oży-<br>dów | Krzy-<br>wo-<br>równia | Koło-<br>myja | Ober-<br>tyn | Tar-<br>nopol | Jagiel-<br>nica |
|--------------|--------------|-------------|------------------------|---------------|--------------|---------------|-----------------|
| —            | —            | —           | —                      | 0'10          | —            | —             | —               |
| —            | 1'9●R        | —           | —●R                    | —             | —            | —             | —               |
| 21'9●R       | —            | 2'8●        | 2'5●                   | —             | 2'1●         | 4'3●          | 1'5●            |
| 0'4●         | 0'10         | —           | 4'8●                   | —             | —            | —             | —               |
| 7'8●         | 7'7●         | 12'4●       | 1'6●                   | 1'2●          | 3'5●         | 5'6●          | 5'2●            |
| 2'1●         | 23'8●R       | —           | 1'1●                   | 3'1●          | 0'8●         | 3'5●          | 1'4●            |
| 3'5●         | —            | 1'5●        | 7'5●                   | 3'4●          | 9'2●         | —●            | 0'9●            |
| 1'6●         | 1'6●         | 0'8●=       | 1'7●R                  | 9'0●          | 4'3●         | 3'9●R         | 0'5●R           |
| 0'10         | 5'4●R        | 6'4●        | 5'8●                   | 9'9●          | —            | —             | 6'5●R           |
| 5'1●         | —            | 14'4●       | 7'7●                   | 19'0●         | 3'0●         | 3'5●R         | 14'5●           |
| —            | —            | —           | 1'5●                   | 19'0●         | —            | —             | —●              |
| —            | —            | —           | —                      | —             | —            | —             | —               |
| 1'6●         | —            | 3'5●        | —R●                    | —             | —            | 1'0●          | 13'4●           |
| —            | 23'1●R       | —           | 13'5●ΔR                | —             | —            | —             | 0'10            |
| —            | —R           | —           | 1'7●                   | —             | —            | —R            | —               |
| 0'10         | 0'8●         | —           | 9'0●                   | —             | 3'8●R        | —R            | 1'5●            |
| 14'3●        | 10'9●        | 10'8●R      | 0'7●R                  | 11'0●         | —            | 0'5●R         | —               |
| —            | 0'2●         | —           | 0'3●R                  | 3'0●          | —            | 0'4●=         | —               |
| —            | —            | —           | 0'2●                   | —             | —            | —             | —               |
| —            | 2'3●         | 1'6●        | 7'5●R                  | —             | 0'2●         | 2'9●R         | 19'7●R          |
| 0'2●         | 6'3●         | —           | 21'4●                  | —             | 11'2●R       | 3'4●          | 12'6●R          |
| —            | 3'4●         | 3'1●        | 13'9●                  | 24'6●         | 1'4●         | —●            | —               |
| 0'8●         | —            | 0'9●        | —                      | 2'3●          | —            | 0'3●          | 0'8●            |
| 14'7●        | —            | 14'5●R      | —●R                    | —             | —            | —             | 0'4●            |
| —            | —R           | —           | 0'2●                   | 0'10          | 15'2●        | —             | —               |
| —            | —            | —           | —                      | 3'3●          | —            | 0'2●=●        | 0'5●            |
| 5'9●         | 0'3●         | 1'8●<       | 0'3●                   | —             | —            | 0'6●=●        | —               |
| —            | —            | —           | —                      | —             | —            | —             | —               |
| —            | 0'8●         | —           | —                      | —             | —            | —             | —               |
| 0'4●         | —            | 6'8●        | —                      | —             | —            | —             | —               |
| —            | 3'8●         | —           | —                      | —             | —            | 2'2●=         | —               |
| 80'5         | 92'4         | 81'3        | 102'9                  | 109'0         | 55'7         | 32'3          | 79'5            |

## Ilość opadu

Sierpień 1899 roku.

| Dzień         | Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków |
|---------------|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|
| 1             | —                       | —            | —           | —             | 1'1●                 | —             | —■          |
| 2             | —                       | —            | —           | —             | —                    | —             | —■          |
| 3             | —                       | —            | —           | —             | —                    | —             | —■          |
| 4             | 0'3●R                   | —            | —           | —             | —                    | 7'4●          | —■          |
| 5             | 3'5●R                   | 5'1●R        | 4'3●        | 3'9●          | 4'3●R                | 1'2●          | 1'80●R      |
| 6             | 12'2●R                  | 11'2●R       | 2'2●        | 2'3●◁         | 5'7●R                | 0'3●R         | 4'90●R      |
| 7             | —                       | 1'6●R        | 4'2●        | —◁            | —                    | —             | 0'90●R      |
| 8             | 3'9●■                   | 23'3●■       | 23'2●       | —             | 7'6●                 | 6'4●          | 0'15●       |
| 9             | 34'8●■                  | 23'6●        | 32'1●       | 5'8●          | 25'7●                | 20'1●         | 37'00●      |
| 10            | 2'7●■                   | —■           | 1'2●        | —             | —                    | 12'4●         | 1'65●       |
| 11            | —                       | —■           | 0'3●        | —             | 0'2●                 | 0'6●          | 0'25●■      |
| 12            | 5'1●■                   | 2'3●■        | 9'2●        | 7'8●          | 5'1●                 | 2'8●          | 10'05●      |
| 13            | 3'4●■                   | —            | 1'9●        | 3'5●          | —                    | —             | 1'25●       |
| 14            | —                       | —            | —           | —             | —                    | —             | —■          |
| 15            | —                       | —            | —           | —             | —                    | —             | —■          |
| 16            | 0'3●                    | —■           | 0'3●        | —             | 1'6●                 | 1'2●          | 3'05●■      |
| 17            | —                       | 4'6●         | 7'6●        | 2'5●          | —                    | 9'7●          | 0'35●■      |
| 18            | 23'5●                   | 12'0●Δ       | 4'0●        | 2'9●          | 6'7●                 | 2'2●          | 1'95●       |
| 19            | 24'7●■R                 | 6'0●R        | 21'7●       | 7'7●          | 7'8●                 | 16'4●         | 8'50●       |
| 20            | 12'8●■                  | 9'6●         | 10'5●       | —             | 7'4●                 | 4'0●          | 9'55●       |
| 21            | 21'6●■                  | 3'2●         | 7'2●        | —             | 1'6●                 | 5'3●          | 3'95●       |
| 22            | 1'2●■                   | —            | 0'2●        | —             | —                    | 2'6●          | —           |
| 23            | —                       | —            | 1'6●        | —             | —                    | —             | —■          |
| 24            | 22'8●■                  | 11'7●        | 14'3●       | 1'8●■         | 2'1●                 | —             | 1'45●■      |
| 25            | 6'6●■R                  | 3'9●         | 4'6●        | 2'1●          | 0'9●                 | 8'2●          | 1'00●       |
| 26            | 0'6●■                   | 0'4●         | 0'5●        | —             | 1'4●                 | 3'0●          | 1'45●■      |
| 27            | —                       | —            | —           | —             | —                    | 6'4●          | —■          |
| 28            | —                       | 4'9●         | 1'5●        | —             | 4'2●                 | —             | —■          |
| 29            | 12'3●■                  | 3'4●         | 5'3●        | 5'5●■         | 7'2●                 | 1'0●          | 5'05●       |
| 30            | —                       | —            | —           | —             | —                    | —             | —■          |
| 31            | 9'8●R                   | 2'5●R        | 4'1●R       | 6'0●R         | —                    | —             | 2'15●R      |
| Suma<br>opadu | 202'1                   | 128'3        | 162'0       | 51'8          | 90'6                 | 111'8         | 96'40       |

w milimetrach.

| Boch-<br>nia | Szezaw-<br>nica | Kry-<br>nica | Tar-<br>nów | Pilzno | Iwo-<br>nicz | Rze-<br>szów | Smol-<br>nik | Sanok |
|--------------|-----------------|--------------|-------------|--------|--------------|--------------|--------------|-------|
|              | —               | —            | 0'8●        | —      | —            | —            | 1'0●         | —     |
|              | —               | —            | —           | —      | —            | —            | —            | —     |
|              | —               | —            | —           | —      | —            | —            | —            | —     |
|              | 10'7●           | —            | —           | —      | —            | —            | —            | —     |
|              | 6'2●            | 12'2●<       | —           | —      | 3'2●         | 20'0●R       | —            | 2'5●R |
|              | —               | —R=          | 5'8●        | 0'4●R  | —            | 3'0●         | —            | —     |
|              | 0'2●            | 3'5●         | —           | 1'1●R  | —            | 9'0●         | —            | —     |
|              | 7'3●            | 16'9●        | 2'7●R       | 4'0●   | —            | 22'0●        | —            | 4'5●  |
|              | 24'6●           | 11'0●        | 36'9●       | 21'6●  | 16'7●        | 11'0●        | 23'8●        | 17'1● |
|              | 46'0●           | 0'4●         | 4'2●        | 10'5●  | 4'2●         | —            | 13'3●≡       | —     |
|              | —               | 0'9●         | —           | —      | —            | 0'6●         | —            | 21'2● |
|              | 4'2●            | 1'8●         | 3'3●        | —      | —            | 0'8●         | —            | —     |
|              | 2'3●            | —            | —           | —      | —            | —            | 1'8●         | 0'5●  |
|              | —               | —            | —           | —      | —            | —            | —            | —     |
|              | —               | —            | —           | —      | —            | 10'0●        | —            | —     |
|              | 2'2●            | 1'8●=        | 5'5●        | 5'5●   | —            | 16'0●R       | —            | 5'7●  |
|              | 7'5●            | 5'4●         | 4'2●<       | 16'0●R | 4'5●         | 7'2●         | 1'9●         | 5'3●R |
|              | 3'7●            | 2'3●         | 7'5●        | 4'8●   | 6'2●         | 1'4●         | —            | 1'4●  |
|              | 7'5●            | 4'1●         | 5'4●        | 3'6●   | 4'7●         | 6'0●         | 9'6●         | 4'8●  |
|              | 2'4●            | 4'6●         | 5'3●        | 4'6●   | 5'3●         | 3'0●         | 12'0●        | 17'2● |
|              | 7'3●            | 2'1●         | 21'5●       | 3'2●R  | 4'4●         | 1'4●         | 9'5●         | 6'1●  |
|              | 3'2●            | 10'7●        | 0'3●        | 0'1●   | 2'0●         | —            | 1'3●         | 0'4●  |
|              | —               | —=           | —           | —      | —            | —            | —            | —     |
|              | 4'1●            | 0'4●         | —           | 0'3●   | —            | 0'6●         | —=           | —     |
|              | 3'5●            | 1'7●         | 1'4●        | 1'0●Δ  | 2'6●         | 0'6●         | 1'8●         | 1'1●  |
|              | 0'8●            | 2'7●         | —           | 0'6●   | 0'4●         | —            | 0'6●         | 3'6●  |
|              | —               | —            | —           | —      | —            | —            | —            | —     |
|              | —               | —            | —           | —      | —            | 4'2●         | —            | —     |
|              | 0'6●            | 5'0●=        | 3'2●        | 4'1●   | 1'7●         | 4'4●         | 1'5●         | 2'3●  |
|              | —               | —=           | —           | —      | —            | —●           | —            | 4'6●  |
|              | 6'9●            | 2'5●=        | 17'1●R      | 34'7●R | —            | 12'2●R       | —            | —     |
|              | 151'2           | 90'0         | 133'1       | 116'1  | 55'9         | 133'4        | 78'1         | 98'3  |

Nie zapisywano spostrzeżeń.

## Ilość opadu

Sierpień 1899 roku.

| Dzień         | Prze-<br>myśl | Lomna  | Chyrów | Stare-<br>miasto | Sambor | Dolina | Lwów   |
|---------------|---------------|--------|--------|------------------|--------|--------|--------|
| 1             | 0'1●=         | —      | —      | —                | —      | —      | —●     |
| 2             | —=            | —      | —      | —                | —      | —      | —      |
| 3             | —             | —=     | —      | —                | —      | —      | —      |
| 4             | —             | —=     | —      | —                | —      | —      | —      |
| 5             | 0'7●K         | —=     | 0'7●K  | 8'2●K            | —      | 4'7●   | —=     |
| 6             | 1'5●K         | —K     | 0'4●K  | 5'2●K            | 0'5●   | —      | 0'8●K  |
| 7             | —             | —      | —<     | —                | —      | —      | 4'8●=  |
| 8             | 2'4●          | —      | 1'2●   | 1'4●             | 1'1●   | —      | —      |
| 9             | 27'5●         | 7'8●   | 9'1●   | 20'4●K           | 6'5●   | 21'2●  | 8'9●K  |
| 10            | 13'4●         | 10'0●= | 25'0●  | 19'6●            | 1'4●   | 11'2●  | 10'9●= |
| 11            | 0'5●          | 1'0●   | 1'5●   | 2'2●             | —      | 18'0●  | 7'8●=  |
| 12            | 0'6●          | —      | 0'3●   | 2'3●             | 0'7●   | 1'5●   | 2'4●   |
| 13            | 0'2●          | 4'6●   | 10'6●K | 14'7●K           | 2'9●   | 1'7●   | 6'7●K  |
| 14            | —             | —      | —      | —                | —      | —      | 5'3●=  |
| 15            | —             | —K     | 1'2●   | 0'8●K            | 1'1●   | —      | 0'5●   |
| 16            | 0'8●          | —      | 0'3●   | —                | 0'2●   | —      | —      |
| 17            | 33'6●K        | 0'9●   | 5'0●K  | 7'8●             | 1'9●   | 4'6●   | 0'4●K  |
| 18            | 3'8●          | —      | 1'1●   | —                | 3'1●   | —      | 18'9●K |
| 19            | 0'1●          | 4'0●   | 5'3●   | 4'6●             | 2'6●   | 13'3●  | 8'6●   |
| 20            | 5'5●          | 3'2●   | 6'2●   | 5'7●             | 4'7●   | 2'5●   | 1'1●   |
| 21            | 2'2●          | 10'4●  | 20'7●  | 5'0●             | 1'2●   | 0'2●   | 6'5●   |
| 22            | —             | —      | —      | 0'6●             | 9'7●   | 0'6●   | 4'0●=  |
| 23            | —=            | —      | —      | —                | 1'1●   | —      | —      |
| 24            | —=            | —      | 0'7●   | —                | 1'3●   | —      | —      |
| 25            | 2'1●          | 2'0●   | 5'0●Δ  | 1'3●             | 0'1●   | 4'1●   | 0'6●=  |
| 26            | 0'1●          | —      | 0'2●   | 5'2●             | 0'2●   | 2'0●   | 0'7●Δ  |
| 27            | —             | —      | —      | —                | 0'1●   | —      | 1'2●   |
| 28            | —             | —=     | —      | —                | 0'1●   | —      | 0'3●   |
| 29            | 1'1●<         | —=     | 1'3●   | —                | 0'1●   | —      | —      |
| 30            | 1'0●          | —      | —      | —                | —      | —      | —      |
| 31            | 0'8●          | 1'2●=  | 5'2●   | 5'5●             | 4'7●   | —      | —      |
| Suma<br>opadu | 98'0          | 44'1   | 101'0  | 110'5            | 45'3   | 85'6   | 90'4   |

w milimetrach.

| Du-<br>blany | De-<br>latyn       | Oży-<br>dów           | Krzy-<br>wo-<br>równia | Koło-<br>myja | Ober-<br>tyn | Tar-<br>nopol     | Jagiel-<br>nica |
|--------------|--------------------|-----------------------|------------------------|---------------|--------------|-------------------|-----------------|
| 0'4●         | —                  | —                     | 12'9●                  | —             | —            | 0'2●              | —               |
| —            | —                  | —                     | —                      | —             | —            | —                 | —               |
| —            | —                  | —                     | —                      | —             | —            | —                 | —               |
| —            | —                  | —                     | —                      | —             | —            | —                 | —               |
| 2'8●         | 18'0● $\mathbb{R}$ | 20'6● $\triangleleft$ | 0'4● $\mathbb{R}$      | 1'1●          | —            | 5'8● $\equiv$     | —               |
| 1'6●         | 4'0● $\mathbb{R}$  | 4'1● $\mathbb{R}$     | 15'8● $\mathbb{R}$     | —             | —            | 3'1● $\equiv$     | —               |
| 0'3●         | 4'0●               | —                     | 2'8● $\mathbb{R}$      | 1'6●          | —            | —                 | —               |
| —            | 9'0●               | —                     | —                      | 14'6●         | —            | —                 | 2'0●            |
| 15'0●        | 11'0●              | 9'5●                  | 22'6● $\mathbb{R}$     | 15'1●         | 18'4●        | 11'9● $\equiv$    | —               |
| 5'5●         | 16'0●              | 6'1●                  | 17'5●                  | 6'5●          | 31'2●        | 14'8●             | 16'0●           |
| 0'2●         | 8'3●               | —                     | 15'8●                  | 4'1●          | 7'6●         | 1'6● $\equiv$     | 37'7●           |
| 7'6●         | 23'2●              | 6'5● $\mathbb{R}$     | 3'8●                   | 2'1●          | —            | 3'2● $\equiv$     | —               |
| 6'7●         | —                  | —                     | 1'2●                   | —             | —            | 0'9● $\equiv$     | —               |
| —            | —                  | —                     | 3'4●                   | —             | —            | —                 | —               |
| 1'4●         | —                  | —                     | —                      | —             | —            | 1'4● $\equiv$     | —               |
| —            | —                  | —                     | —                      | —             | —            | —                 | —               |
| 26'8●        | —                  | 12'8● $\triangleleft$ | 2'6● $\mathbb{R}$      | 10'1●         | —            | —                 | —               |
| 1'8●         | —                  | 5'9●                  | —                      | 4'3●          | —            | —                 | —               |
| 6'4●         | 11'1●              | 4'4●                  | —                      | 1'3●          | 6'8●         | 2'9● $\mathbb{R}$ | 4'3●            |
| 5'8●         | 0'3●               | 4'5●                  | 1'9●                   | —             | 6'2●         | 1'0● $\equiv$     | —               |
| —            | —                  | 6'6●                  | 1'2●                   | —             | 2'5●         | —                 | —               |
| 3'6●         | —                  | 0'3●                  | 2'6●                   | —             | —            | 1'0● $\equiv$     | —               |
| —            | —                  | —                     | —                      | —             | —            | —                 | —               |
| —            | —                  | —                     | —                      | —             | —            | —                 | —               |
| 0'8●         | 2'6●               | 0'8●                  | —                      | —             | —            | —                 | —               |
| —            | —                  | 1'9●                  | 5'9●                   | 5'1●          | 29'1●        | —                 | —               |
| 0'7●         | 0'1●               | 0'8●                  | 0'5●                   | 0'6●          | 0'8●         | 4'6●*             | —               |
| —            | —                  | —                     | —                      | —             | 0'1●         | 0'2●              | —               |
| —            | —                  | —                     | —                      | —             | —            | —                 | —               |
| 0'4●         | —                  | 1'2●                  | —                      | —             | —            | 1'6●              | —               |
| 2'1●         | —                  | 4'7●                  | —                      | —             | —            | 3'3● $\equiv$     | —               |
| 1'4●         | 2'9●               | 2'5●                  | 3'4●                   | —             | —            | —                 | —               |
| 90'9         | 110'5              | 92'6                  | 131'4                  | 66'5          | 102'7        | 57'6              | 60'0            |

## Ilość opadu

Wrzesień 1899 roku.

| Dzień         | Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków |
|---------------|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|
| 1             | 2·5●R                   | —            | 0·2●        | 1·5●R         | 2·3●R                | 4·2●          | 1·45●R      |
| 2             | 12·8●R                  | 4·8●R        | 13·7●       | 1·9●R         | 3·4●R                | —             | 0·80●R      |
| 3             | 14·9·Δ=R                | 5·2●R        | 8·6●R       | 4·0●ΔR        | 11·7●R               | 12·0●         | 12·65●      |
| 4             | —                       | —            | —           | —             | 3·7●                 | 10·0●         | 0·15●       |
| 5             | —                       | —            | —           | —             | —                    | —             | —           |
| 6             | —                       | —            | —           | —             | —                    | —             | —           |
| 7             | 5·7●ΔR                  | 5·6●R        | 1·0●        | 1·7●R         | —R                   | —             | 0·80●R      |
| 8             | 7·4●R                   | 4·9●R        | 10·7●       | 2·0●          | —●                   | 8·0●          | 0·05●       |
| 9             | 11·1●=                  | 10·2●=       | 2·3●        | 1·1●          | 5·5●                 | 15·5●         | 5·45●       |
| 10            | 10·4●=R                 | 5·5●Δ        | 7·3●        | 3·0●          | 3·0●                 | 1·0●          | 7·00●       |
| 11            | 38·1●* =                | 32·8●        | 33·2●       | 6·6●=         | 7·5●                 | 13·2●         | 33·15●      |
| 12            | 19·4●=                  | 20·0●        | 19·1●       | 1·6●          | 29·6●                | 33·5●         | 35·50●      |
| 13            | 3·1●                    | 2·2●         | 1·8●        | —             | 30·8●                | 14·0●         | 0·10●       |
| 14            | 8·1●R                   | 4·9●=        | 11·8●       | 1·2●          | 12·2●                | 5·5●          | 5·10●       |
| 15            | 6·9●=                   | 5·9●         | 3·2●        | 1·5●          | 10·2●                | 35·1●         | 0·10●       |
| 16            | —                       | —            | —           | —             | —                    | 0·5●          | 7·90●       |
| 17            | 8·8●=                   | 4·2●         | 9·2●        | 2·1●          | 9·4●                 | —             | 4·90●       |
| 18            | 0·2●                    | —            | —           | —             | —                    | 9·5●          | 1·90●       |
| 19            | 0·1●                    | 0·6●         | 0·3●        | 1·0●          | —                    | —             | 0·05●       |
| 20            | 8·4●R                   | 5·6●         | 2·2●        | —             | 5·6●                 | —             | —           |
| 21            | —                       | —            | —           | —             | —                    | 2·5●          | 7·70●       |
| 22            | —                       | —            | —           | —             | —                    | —             | —           |
| 23            | 27·8●=                  | 25·6●=       | 37·0●       | 3·0●=         | 18·5●                | 0·2●          | 1·95●       |
| 24            | 0·1●=                   | 0·9●         | 4·5●        | 1·9●          | 1·3●                 | 30·9●         | 25·65●      |
| 25            | 7·8●                    | 1·9●         | 1·4●        | 2·5●          | 4·0●                 | 6·9●          | 0·50●       |
| 26            | —                       | —            | —           | —             | —                    | 0·7●          | 0·70●       |
| 27            | —                       | —            | —           | —             | —                    | —             | —           |
| 28            | —                       | —            | —           | —             | —                    | —             | —           |
| 29            | 1·4●=                   | 2·3●         | 0·8●        | —             | —                    | —             | —           |
| 30            | —                       | —            | —           | —             | —                    | 9·7●          | 0·40●       |
| Suma<br>opadu | 195·0                   | 143·1        | 168·3       | 36·6          | 157·7                | 212·9         | 153·95      |

w milimetrach.

| Boch-<br>nia | Szczaw-<br>nica | Kry-<br>nica | Tar-<br>nów | Pilzno | Iwo-<br>niez | Rze-<br>szów | Smol-<br>nik | Sanok  |
|--------------|-----------------|--------------|-------------|--------|--------------|--------------|--------------|--------|
| 4'6"R        | 4'4"●           | 2'7"●<       | 2'7"●       | 3'5"●R | 1'4"●R       | 0'6"●        | —            | —R     |
| 13'5"●       | 4'4"●           | 7'0"●=       | 8'0"●       | 3'6"●R | —            | —            | —            | —      |
| 0'5"●R       | —               | —            | 4'3"●       | 2'3"●  | 0'7"●        | 5'4"●R       | 12'1"●       | 4'5"●R |
| —            | —               | —            | —           | 0'3"●  | —            | 0'6"●        | 0'5"●        | 0'3"●  |
| —            | —               | —=           | —           | —      | 1'5"●        | 0'4"●        | —            | —      |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| 0'2"●R       | 10'7"●          | 13'9"●<=     | 0'7"●R      | —      | —            | 17'2"●R      | 2'8"●        | 9'6"●R |
| 0'1"●        | 16'6"●          | 9'0"●<       | 8'4"●       | 5'4"●  | 11'6"●R      | 5'4"●        | —            | —      |
| 8'2"●        | 0'2"●           | 0'2"●        | 0'2"●       | —      | —            | —            | 9'1"●        | 4'4"●  |
| 4'6"●        | 9'7"●           | 3'3"●=       | 8'2"●       | 3'0"●  | —            | 9'0"●        | —            | 7'1"●  |
| 33'5"●       | 25'7"●          | 9'5"●        | 24'8"●      | 22'0"● | 18'2"●       | 5'0"●        | 6'7"●        | 5'3"●  |
| 28'5"●       | 18'3"●          | 19'5"●       | 25'5"●      | 15'2"● | 18'4"●       | 13'0"●       | 8'0"●        | 15'2"● |
| —            | 1'8"●           | 3'0"●        | 0'5"●       | 0'2"●  | 3'2"●        | —            | —            | 3'2"●  |
| —            | 15'5"●          | 7'3"●=       | 14'6"●      | 16'8"● | 1'4"●        | 1'4"●        | 2'2"●        | 1'0"●  |
| 24'0"●       | 3'0"●           | 11'0"●=      | 1'5"●       | 1'2"●  | 2'3"●        | —            | 2'3"●        | —      |
| 5'5"●        | 1'9"●           | 7'9"●        | —           | —      | 1'3"●        | —            | —            | 27'2"● |
| 9'0"●        | 12'2"●          | 14'4"●       | 6'2"●       | 7'0"●  | —            | 17'2"●       | 18'5"●       | 7'2"●  |
| —            | —=              | —=           | —           | —      | 21'2"●R      | —            | 3'5"●        | 1'6"●  |
| —            | —               | 0'5"●=       | 1'2"●       | —      | —            | —            | 8'0"●        | 0'7"●  |
| —            | 0'2"●           | —            | —           | —●     | —            | —            | —            | —      |
| 2'5"●        | —               | 1'6"●        | —           | 0'5"●  | —            | 4'0"●        | 14'9"●       | 17'0"● |
| —            | —               | —=           | —           | —      | 5'4"●        | —            | —            | —      |
| —            | 24'6"●          | 16'7"●       | 27'1"●      | 18'2"● | —            | 3'2"●        | 7'4"●        | 9'6"●  |
| 25'0"●       | 7'9"●           | 5'8"●        | 7'2"●       | 10'0"● | 2'5"●        | 3'5"●        | 12'1"●       | 5'9"●  |
| —            | 0'8"●           | 1'4"●        | 2'7"●       | 2'4"●  | 9'8"●        | —            | —            | —      |
| 5'0"●        | —               | —            | —           | —      | 0'6"●        | —            | 2'7"●        | —      |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| 7'5"●        | 8'5"●           | 29'0"●<      | 11'5"●      | 20'7"● | —            | 6'0"●        | 2'6"●        | —      |
| —            | —               | 0'1"●        | —           | 5'6"●  | 6'8"●        | —            | —=           | 4'9"●  |
| 172'2        | 166'4           | 153'9        | 165'3       | 137'9  | 106'3        | 91'9         | 113'4        | 124'7  |

## Ilość opadu

Wrzesień 1899 roku.

| Dzień         | Prze-<br>myśl     | Łomna | Chyrów            | Stare-<br>miasto | Sam-<br>bor       | Dolina | Lwów               |
|---------------|-------------------|-------|-------------------|------------------|-------------------|--------|--------------------|
| 1             | —                 | —     | —                 | 2'0●             | —                 | —      | 2'6●               |
| 2             | 0'1●              | —     | —                 | —                | —●                | —      | —                  |
| 3             | 2'5● $\mathbb{R}$ | —     | 6'1● $\mathbb{R}$ | 6'8●             | 9'1●              | 5'8●   | 7'3●               |
| 4             | 0'5●              | —     | 1'1●              | 0'6●             | 2'1●              | —      | —●                 |
| 5             | —                 | —     | —                 | —                | —                 | —      | —                  |
| 6             | —                 | —     | —                 | —                | —                 | —      | —                  |
| 7             | 7'9● $\mathbb{R}$ | —     | 3'2● $\mathbb{R}$ | 3'9●             | —                 | 4'9●   | 11'3● $\mathbb{R}$ |
| 8             | 23'5●             | 2'2●  | 5'6●              | 2'8●             | 5'7● $\mathbb{R}$ | —      | 33'3●              |
| 9             | 2'3●              | 3'6●  | 5'2●              | 6'1●             | 1'1●              | 9'3●   | 0'4●               |
| 10            | 7'4●              | —     | 14'2●             | 8'7●             | 0'4●              | 7'7●   | 28'3●              |
| 11            | 6'4●              | 6'4●  | 6'5●              | 6'4●             | 2'1●              | 25'0●  | 2'9●               |
| 12            | 12'5●             | 7'2●  | 10'6●             | 7'1●             | 1'8●              | 9'8●   | 9'2●               |
| 13            | 0'1●              | —     | —                 | —                | 29'2●             | 4'3●   | —                  |
| 14            | 0'1●              | —     | 0'5●              | —                | —                 | 6'5●   | —                  |
| 15            | —                 | —     | —                 | —                | —                 | —      | 0'2●               |
| 16            | 0'1●              | —     | 0'3●              | —                | —                 | —      | —                  |
| 17            | 14'6●             | 1'4●  | 8'5●              | 5'8●             | 0'9●              | —      | 2'2●               |
| 18            | 2'0●              | 2'1●  | 2'9●              | 3'8●             | 1'6●              | 1'7●   | 1'2●               |
| 19            | 0'1●              | —     | 1'1●              | —                | 1'1●              | —      | —                  |
| 20            | —                 | —     | 1'3●              | —                | 2'1●              | —      | 9'2●               |
| 21            | 15'0●             | —     | 22'6●             | 21'0●            | 10'0●             | 9'6●   | 5'7●               |
| 22            | —                 | —     | —                 | —                | —                 | —      | —                  |
| 23            | 1'8●              | —     | 0'2●              | 0'2●             | —                 | —      | —                  |
| 24            | 0'2●              | 8'6●  | 3'9●              | 6'7●             | 4'2●              | 5'2●   | 4'1●               |
| 25            | —                 | —     | —                 | —                | —                 | —      | 1'2●               |
| 26            | —                 | —     | 0'8●              | —                | —                 | —      | —                  |
| 27            | —                 | —     | —                 | —                | —                 | —      | —                  |
| 28            | —                 | —     | —                 | —                | —                 | —      | —                  |
| 29            | — $\mathbb{R}$    | —     | —                 | —                | 0'1●              | —      | —                  |
| 30            | —                 | —     | —                 | —                | —                 | —      | —                  |
| Suma<br>opadu | 97'1              | 31'5  | 94'6              | 81'9             | 71'5              | 89'8   | 119'2              |



w milimetrach.

| Du-<br>blany | Delatyn | Oży-<br>dów       | Krzy-<br>wo-<br>równia | Koło-<br>myja     | Ober-<br>tyn                | Tar-<br>nopol      | Jagiel-<br>nica |
|--------------|---------|-------------------|------------------------|-------------------|-----------------------------|--------------------|-----------------|
| —            | —       | —                 | 0·6●                   | —                 | Nie zapisywano spostrzeżeń. | 1·6●               | —               |
| —            | 0·2●    | —                 | —                      | —                 |                             | 3·0●               | 6·0●            |
| 5·9●         | 0·9●    | 3·2●              | 0·4●                   | 2·1●              |                             | 1·1●               | —               |
| —            | 2·9●    | —                 | 0·8●                   | —                 |                             | 0·5●               | 4·0●            |
| —            | —       | —                 | 0·8●                   | —                 |                             | —                  | —               |
| —            | —       | —                 | —                      | —                 |                             | —                  | —               |
| 10·3●        | 0·5●    | 14·6●             | —                      | 10·2●             |                             | 1·3●               | —               |
| 10·7●        | 4·5●    | 0·5●              | —                      | 16·3●             |                             | —                  | —               |
| 6·9●         | 32·6●   | 14·1●             | 4·2● <sub>K</sub>      | 1·2●              |                             | 13·1●              | —               |
| 10·8●        | 20·4●   | 8·8●              | 16·5● <sub>=</sub>     | 17·4●             |                             | 13·3●              | 18·2●           |
| 11·2●        | 8·2●    | 19·4●             | 18·6● <sub>=</sub>     | 6·1●              |                             | 29·4●              | 19·4●           |
| 6·4●         | 0·5●    | 6·9● <sub>=</sub> | 9·8●                   | —                 |                             | 13·7●              | 2·4●            |
| —            | —       | —                 | —                      | 3·4● <sub>=</sub> |                             | —                  | 9·2●            |
| —            | 0·2●    | —                 | —                      | 1·3●              |                             | —                  | —               |
| 1·4●         | 1·1●    | 5·5● <sub>=</sub> | 2·8●                   | 1·6●              |                             | 3·2●               | 2·0●            |
| 1·0●         | 0·4●    | —                 | —                      | —                 |                             | —                  | 10·4●           |
| 1·4●         | —       | —                 | —                      | 1·7●              |                             | —                  | —               |
| 0·3●         | 0·1●    | 1·8●              | —●                     | 0·3●              |                             | 6·4●               | —               |
| —            | 0·2●    | —                 | —●                     | —                 |                             | 0·4●               | 2·2●            |
| —            | —       | —                 | —                      | 5·9●              |                             | —                  | —               |
| 14·2●        | 6·8●    | 13·2●             | 9·0●                   | —                 |                             | 12·5● <sub>Δ</sub> | —               |
| —            | —       | —                 | —                      | —                 |                             | —                  | —               |
| —            | —       | —                 | —●                     | —                 |                             | —                  | —               |
| 3·9●         | —       | 8·8●              | 5·9●                   | 6·1●              |                             | 10·4●              | —               |
| 0·3●         | —       | —                 | —                      | —                 |                             | —                  | —               |
| —            | —       | 1·2●              | —                      | —                 |                             | —                  | 4·0●            |
| —            | —       | —                 | —                      | —                 |                             | —                  | —               |
| —            | —       | —                 | —●                     | —                 |                             | —                  | —               |
| 0·5●         | —       | 0·4●              | —                      | —                 | —                           | —                  |                 |
| —            | —       | —                 | —                      | —                 | —                           | —                  |                 |
| 85·2         | 79·5    | 98·4              | 69·4                   | 73·6              | 111·1                       | 77·8               |                 |

## Ilość opadu

Październik 1899 roku.

| Dzień         | Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wado-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków |
|---------------|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|
| 1             | —                       | —            | —           | —             | —                    | —             | —           |
| 2             | —                       | —            | —           | —             | —                    | —             | —           |
| 3             | 1'4●=                   | 1'6●         | 1'5●        | 3'5●=         | —                    | 0'7●          | 0'60●       |
| 4             | —                       | —            | —           | —             | —●                   | —             | 0'55=       |
| 5             | —                       | 9'7●         | 0'6●        | —             | 6'5●                 | —             | 0'40=       |
| 6             | 20'0●=                  | 5'7●=        | 9'9●        | 6'9●=         | 2'9●                 | 14'0●         | 9'55●       |
| 7             | 0'8●=                   | 5'0●=        | 6'5●        | 2'1●=         | 2'9●                 | 14'7●         | 1'45●       |
| 8             | 15'4* =                 | 2'1●Δ        | 4'8●        | 2'4●*         | 0'8●                 | 7'6●          | 2'40●       |
| 9             | —                       | —            | —           | —             | —                    | —             | —           |
| 10            | —                       | —            | —           | —             | —                    | —             | 0'15=       |
| 11            | —                       | —            | —           | —             | —                    | —             | —           |
| 12            | —                       | —            | —           | —             | —                    | —             | 0'25=       |
| 13            | 12'2●*                  | 18'7●        | 27'8●       | 15'1●         | 13'1●                | 32'8●         | 2'80●       |
| 14            | 18'3* =                 | 4'5●*        | 13'0●       | —             | 1'4●                 | 5'1*          | 17'00●      |
| 15            | 0'3*                    | —            | —           | —             | —                    | 3'0*          | 1'80●       |
| 16            | —                       | —            | —           | —             | —                    | —             | 0'10=       |
| 17            | 2'5* =                  | 4'0●* =      | 3'2●        | 3'5●          | 2'4●=                | 4'3*Δ         | 0'15●       |
| 18            | 3'9* =                  | 3'0●         | 3'0●        | 1'7●=         | 1'8●                 | 3'7*          | 2'55●       |
| 19            | —                       | —            | —           | —             | —                    | —             | —           |
| 20            | —                       | —            | —           | —             | —                    | —             | —           |
| 21            | —                       | —            | —           | —             | —                    | —             | —           |
| 22            | —                       | —            | —           | —             | —                    | —             | —           |
| 23            | —                       | —            | —           | —             | —                    | —             | 0'30=       |
| 24            | 3'4* =                  | 6'7●*        | 3'0●        | 2'4●          | 2'7●*                | 5'3●          | 0'45●       |
| 25            | —                       | —*           | —           | 4'1●          | 0'2●                 | —             | 1'55●       |
| 26            | —                       | —            | —           | —             | —                    | —             | —           |
| 27            | —                       | —            | —           | —             | —                    | —             | 0'10=       |
| 28            | 0'3●                    | 1'2●         | 0'4●        | —             | —                    | —             | —           |
| 29            | 2'4●                    | 0'1●         | —           | —             | —                    | —             | —           |
| 30            | —                       | —            | —           | —             | —                    | —             | —           |
| 31            | 15'2●=                  | 11'3●        | 5'6●        | —             | —                    | 6'8●          | 4'30●       |
| Suma<br>opadu | 96'1                    | 73'6         | 79'3        | 41'7          | 34'7                 | 98'0          | 46'43       |

w milimetrach.

| Boch-<br>nia | Szczaw-<br>nica | Kry-<br>nica | Tar-<br>nów | Pilzno | Iwo-<br>nicz | Rze-<br>szów | Smol-<br>nik | Sanok  |
|--------------|-----------------|--------------|-------------|--------|--------------|--------------|--------------|--------|
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| —            | —               | 2'7●         | —           | 2'4●   | 5'2●         | 6'0●         | 2'5●         | 8'3●   |
| 2'5●         | —               | —            | —           | —      | —            | —            | —            | —      |
| —            | —               | —            | 1'0●        | 2'5●   | —            | —            | —            | —      |
| —            | 7'1●            | 4'2●         | 5'7●        | 6'7●   | 4'3●         | 7'0●         | 6'6●         | 6'6●   |
| 0'2●         | 8'3●            | 11'2●        | —           | 7'4●   | 16'4●        | 6'0●         | 19'8●        | 21'9●  |
| —            | 2'7●*           | 3'6●*        | 7'8●        | 2'3●   | 1'3●*        | 2'0●         | 3'3●         | 8'7●   |
| 0'3●         | 1'2●*           | —            | —           | —      | —            | 1'4●         | 0'6*         | —      |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| —            | —               | 10'6●        | 6'7●        | 7'4●   | 8'6●         | —            | —            | —      |
| —            | 20'0●* =        | 5'9●*Δ       | 7'2●        | 5'1●   | 3'7*         | 4'0●         | 18'0●        | 17'7●  |
| —            | 4'2●            | —            | —           | —      | —            | 3'4●         | —            | 1'8●   |
| 16'0●        | —               | —            | 0'2●        | 2'4●   | —            | 3'2●         | —            | 0'3●   |
| —            | 5'1●            | 3'4●         | 8'7●        | 6'6●   | 1'5●*        | 3'2●         | 6'7●*        | 11'2●  |
| —            | 3'5●*           | 5'5*Δ        | 0'7●        | 1'6●   | 1'4●         | 2'0●         | 4'7●*        | 0'7●   |
| 2'0●         | —               | —            | —           | —      | 1'2●         | 2'4●         | —            | 0'2●   |
| 6'0●         | —               | —            | —           | —      | —            | —            | 0'1●         | —      |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| —            | —               | —            | —           | —      | 0'3*         | —            | —            | —      |
| —            | —               | —            | —           | 0'9●   | —            | —            | —            | 1'8●*  |
| —            | —               | —            | —           | —*     | —            | —            | —            | 2'4●*Δ |
| —            | —               | 4'7*         | 1'4●        | 0'6●   | —            | —            | —            | —      |
| —            | —               | —            | 0'8●        | —      | —            | —            | —            | —      |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| —            | —               | —            | —           | 0'5●   | —            | —            | —            | —      |
| 0'2●         | —               | —            | —           | —      | —            | —            | —            | —      |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| 4'2●         | 5'1●            | 3'3●         | 4'4●        | 3'1●   | —            | 3'8●         | —            | 5'5●   |
| 31'4         | 57'2            | 55'1         | 44'6        | 49'5   | 43'9         | 44'4         | 62'4         | 87'1   |

## Ilość opadu

Październik 1899 roku.

| Dzień         | Prze-<br>myśl | Łomna | Chyrów | Stare-<br>miasto | Sambor | Dolina | Lwów   |
|---------------|---------------|-------|--------|------------------|--------|--------|--------|
| 1             | —             | —     | —      | —                | —      | —      | —      |
| 2             | —             | —     | —      | —                | —      | —      | —      |
| 3             | 1'5●          | 1'2●  | 13'2●  | 11'0●            | 9'0●   | 4'3●   | 4'3●   |
| 4             | —             | —     | —      | —                | —      | —      | —      |
| 5             | —             | —     | —      | —                | —      | —      | 0'6●   |
| 6             | 7'2●          | 5'0●  | 7'0●   | 6'5●             | 1'4●   | 13'3●  | 3'8●   |
| 7             | 16'0●         | 8'2●  | 23'7●  | 24'5●            | 1'6●   | —      | 28'7●  |
| 8             | 3'5●          | 8'5●* | 6'3●   | 6'6●             | 8'6●   | 19'8●  | 2'5●   |
| 9             | 1'3●Δ         | 1'9●* | —      | —                | 7'2●   | 5'0●   | 0'2●Δ  |
| 10            | —             | —     | —      | —                | 6'5●   | 2'3●   | —      |
| 11            | —             | —     | —      | —                | —      | —      | —      |
| 12            | —             | —     | —      | —                | —      | —      | —      |
| 13            | 0'5●          | —     | 2'6●   | 2'2●             | 8'0●   | —      | 11'6●  |
| 14            | 8'3●          | 1'4●* | 12'7●  | 11'6●            | 2'2●*  | 5'8●   | 1'7●*  |
| 15            | 0'2●Δ         | —     | 0'4●   | —                | 1'8●   | 13'2●  | —      |
| 16            | —             | 2'2●* | 0'3●   | 0'3●             | —      | —      | 0'6●   |
| 17            | 3'0●          | 1'8●  | 4'3●   | 5'1●             | 5'2●   | 2'5●   | 1'2●   |
| 18            | 1'3●          | 0'8●* | 2'5●   | 2'4●             | 7'0●   | 3'0●   | 1'2●*  |
| 19            | —             | —     | —      | —                | —      | 3'0●   | 2'6●   |
| 20            | —             | —     | —      | —                | —      | 0'6●   | —      |
| 21            | —             | —     | —      | —                | —      | —      | —      |
| 22            | —             | —     | —      | —                | —      | —      | —      |
| 23            | —             | —     | —      | —                | —      | —      | 1'1●*Δ |
| 24            | 0'7●          | —     | 2'1●   | 2'5●             | —      | 0'5●   | 2'2●   |
| 25            | 0'6*          | 1'1*  | 0'5●Δ  | 1'5●*            | 0'2●*  | —      | —      |
| 26            | —             | —     | —      | —                | —      | —      | —      |
| 27            | —             | —     | —      | —                | —      | —      | —      |
| 28            | —             | —     | —      | —                | —      | —      | —●     |
| 29            | —             | —     | —      | —                | —      | —      | —●     |
| 30            | —             | —     | —      | —                | —      | —      | —      |
| 31            | 2'2●          | 0'9●  | 2'7●   | 2'4●             | 0'8●   | —      | —      |
| Suma<br>opadu | 46'3          | 33'0  | 78'3   | 76'6             | 59'5   | 73'3   | 62'3   |

w milimetrach.

| Du-<br>blany | De-<br>latyn | Oży-<br>dów | Krzy-<br>wo-<br>równia | Koło-<br>myja | Ober-<br>tyn                | Tar-<br>nopol | Jagiel-<br>nica |
|--------------|--------------|-------------|------------------------|---------------|-----------------------------|---------------|-----------------|
| —            | —            | —           | —                      | —             | Nie zapisywano spostrzeżeń. | —             | —               |
| —            | —            | —           | —                      | —             |                             | —             | —               |
| 7'4●         | 6'1●         | 1'5●        | 2'5●                   | 2'1●          |                             | 6'8●          | 3'2●            |
| —            | 1'8●         | —           | 3'6●                   | 3'4●          |                             | —             | 2'1●            |
| —            | 0'8●         | 1'4●=       | —                      | —             |                             | 2'6●          | —               |
| 4'9●         | 10'3●        | 6'4●        | 6'9●                   | —             |                             | 4'2●          | —               |
| 26'0●        | 20'5●        | 32'5●       | 13'2●                  | 5'3●          |                             | 20'2●         | 0'2●            |
| 1'4●         | 1'3●         | 0'5●        | 4'9●*Δ                 | 11'2●         |                             | 0'6*●         | 3'4●            |
| 0'7●         | —            | 4'2●        | —                      | 4'1●          |                             | 0'6*●         | —               |
| —            | —            | —           | —                      | 1'3●          |                             | —             | —               |
| —            | —            | —           | —                      | —             |                             | —             | —               |
| —            | —            | —           | —                      | —             |                             | —             | —               |
| 0'7●         | —            | —           | —                      | —             |                             | —             | —               |
| 12'0●        | 5'1●         | 12'9●       | 2'8●                   | 2'1●          |                             | 3'2●          | 1'2●            |
| —            | —            | —           | —                      | —             |                             | 0'2●          | 1'0●            |
| 0'3●         | —            | 4'4●        | —                      | —             |                             | 1'9●          | 1'2●            |
| 0'7●         | 0'1●         | 3'1●        | —                      | —             |                             | 1'4●          | —               |
| 1'6●         | 1'1●         | 2'2●=       | 2'0●*Δ                 | 2'5●          |                             | 2'7*●         | 3'0●            |
| 1'8●         | 0'2●         | 5'1●=       | 0'8*                   | 2'0●          |                             | 5'2*●         | —               |
| —            | —            | 0'9●        | —●                     | 1'3●          |                             | 0'4=          | —               |
| —            | —            | —           | —                      | —             |                             | 0'1=          | —               |
| —            | —            | —           | —                      | —             |                             | —             | 3'0●            |
| —            | —            | —           | —                      | —             |                             | —             | —               |
| 0'8●         | 0'5●         | —           | 4'1●*                  | 0'6●          |                             | —             | —               |
| 2'0*Δ        | —            | 0'8●Δ       | —                      | —             |                             | 1'1●*         | 0'2Δ            |
| —            | —            | —           | —                      | —             |                             | —*            | —               |
| —            | —            | —           | —                      | —             |                             | —             | —               |
| —            | —            | —           | —                      | —             |                             | —             | —               |
| —            | —            | —           | —                      | 2'1●          | —●                          | —             |                 |
| —            | —            | —           | —                      | —             | —                           | —             |                 |
| 1'7●         | 0'1●         | 2'1●        | —                      | —             | 0'7●                        | —             |                 |
| 62'0         | 47'9         | 78'0        | 40'8                   | 38'0          | 51'9                        | 27'5          |                 |

## Ilość opadu

Listopad 1899 roku.

| Dzień         | Kami-<br>tzer<br>Platte | Biel-<br>sko | Ży-<br>wiec | Wało-<br>wice | Czer-<br>ni-<br>chów | Zako-<br>pane | Kra-<br>ków |
|---------------|-------------------------|--------------|-------------|---------------|----------------------|---------------|-------------|
| 1             | —                       | —            | —           | —             | 4'5●                 | —             | —           |
| 2             | —                       | —            | —           | —             | —                    | —             | 0'40■       |
| 3             | —                       | —            | —           | —             | —                    | —             | 0'10■       |
| 4             | —                       | —            | —           | —             | —                    | —             | 0'15●       |
| 5             | —                       | —            | —           | —             | —                    | —             | 0'10■       |
| 6             | —                       | —            | —           | —             | —                    | —             | 0'40■       |
| 7             | —                       | —            | —           | —             | —                    | —             | 0'35■       |
| 8             | —                       | —            | —           | —             | —                    | —             | 0'20■       |
| 9             | 3'5●■                   | 3'9●         | 8'6●        | 7'1●■         | 8'0●                 | 14'6●*        | 9'60●●      |
| 10            | 4'9*                    | 2'0●         | 0'7●        | —             | 1'5●                 | 1'6●          | 0'15■       |
| 11            | 7'3●*                   | 3'7●         | 16'4●       | 5'2●■         | 3'5●                 | 8'4●          | 2'90●       |
| 12            | 8'4*                    | 3'4●         | 2'2●        | 7'0●*         | 2'2●                 | —             | 2'20●*      |
| 13            | 4'2*■                   | 2'8●         | 2'4●        | —             | 2'2●*                | 1'4●■         | 0'50●       |
| 14            | —                       | 8'6●*        | 14'2●       | —             | 1'6●                 | 2'5●■         | 2'15■●      |
| 15            | 7'9●*■                  | 3'1●*■       | 11'3●*      | —             | 4'5●*                | 9'5●■         | 4'20●Δ      |
| 16            | 14'7*■                  | 8'5*         | 30'3●*      | 12'0*         | 7'9●*                | —             | 4'70●*      |
| 17            | —                       | 0'3●■        | 8'0*        | —             | —                    | —             | 0'90●*      |
| 18            | —                       | 0'3●■        | 6'9●*       | —             | —                    | —             | —           |
| 19            | —                       | —            | 4'0*        | —             | —                    | —             | —           |
| 20            | —                       | 0'4●■        | 3'4●*       | —             | —                    | 2'4*          | 0'35■       |
| 21            | 2'1*                    | —            | 1'0*        | —             | —                    | —             | 0'05*       |
| 22            | 5'4*■                   | 1'3*         | —           | 2'0*          | 2'2●*                | —             | 1'25*       |
| 23            | 0'6*■                   | 2'3●■        | 2'7●        | —             | 0'5●                 | 1'0●■         | —           |
| 24            | —                       | —            | —           | —             | 0'1●                 | 1'2●■         | 0'80●       |
| 25            | 2'7●*■                  | 2'2●         | 0'5●        | 1'5●          | 0'3●                 | —             | 3'45●       |
| 26            | —                       | —            | —           | —             | —                    | —             | 0'05■       |
| 27            | —                       | 0'6●■        | 0'3●        | 2'1●          | 6'6●                 | 2'8*          | 0'50●       |
| 28            | 3'9●■                   | 3'1●         | 1'2●        | 3'7●■         | 2'7●                 | 3'6●■         | 8'25●       |
| 29            | 5'4●■                   | 3'9●         | 3'6●        | 4'0●■         | 3'6●                 | 3'9●■         | 2'40●●      |
| 30            | 0'7●■                   | 1'9●■        | 0'2●        | 5'2●■         | —                    | 3'5●■         | 1'15●●      |
| Suma<br>opadu | 71'7                    | 52'3         | 117'9       | 49'8          | 51'9                 | 56'4          | 47'25       |

w milimetrach.

| Boch-<br>nia | Szczaw-<br>nica | Kry-<br>nica | Tar-<br>nów | Pilzno | Iwo-<br>nicz | Rze-<br>szów | Smol-<br>nik | Sanok  |
|--------------|-----------------|--------------|-------------|--------|--------------|--------------|--------------|--------|
| —            | —               | —            | —           | —      | 1'4●         | —            | 6'2●         | —      |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| —            | —               | —■           | —           | —      | —            | —            | —            | —      |
| —            | —               | —■           | —           | —      | —            | —            | —            | —      |
| —            | —■              | —■           | —■          | —      | —            | —            | —            | —      |
| —            | —               | —            | —■          | —      | —            | —            | —            | —      |
| 0'1●         | —■              | —■           | 0'1■        | —      | —            | —            | —            | —      |
| 12'0●        | 16'5●           | 13'7●        | 9'5●        | 11'3●  | 3'1●         | 13'2●        | 12'7●        | 20'8●  |
| —            | 0'5●            | 13'2●        | 2'1●        | —      | 1'4●         | —            | —            | 1'8●   |
| 2'2●         | 2'7●            | 4'3●         | 1'9●        | 5'0●   | 1'3●         | 5'6●         | 5'2*         | 5'2●   |
| —            | 1'6●*           | 1'4*         | 1'4●        | 4'4●   | —            | 3'2●         | 0'9●*        | —      |
| 2'5●         | 5'7●*           | 4'8●*Δ       | 0'8●        | 2'4●   | —            | 3'0●         | 6'0*         | 11'4●* |
| —            | 1'6●*           | 0'1*         | —           | —      | —            | —            | —            | —      |
| 4'5●         | 11'2●*          | 13'6●*       | 6'8●        | 12'0●  | —            | 2'4●         | 10'2*        | 9'8●*  |
| 8'3●*        | 13'0*           | 11'1*        | 2'6●*       | 4'0●*  | —            | 1'6●         | 5'7*         | 4'8●*  |
| 2'2●*        | —■              | —            | —           | —      | 5'7*         | 1'2●         | —            | —      |
| 0'5●         | —■              | —            | —           | —      | 4'6*         | —            | —            | —      |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| —            | 0'5*            | —■           | 0'3●        | —      | —            | —            | —            | 0'9*   |
| —            | —               | —            | —           | —      | —            | —            | —            | —      |
| 0'8*         | 1'1*            | 1'5*         | 0'6●        | 0'4*   | 3'4*         | 3'4*         | 2'0*         | 1'2*   |
| —            | 1'8●*           | 0'4*         | 2'5●        | 4'0●   | 6'8●         | 5'0●         | 1'4*         | 2'3●*  |
| 1'5●         | 0'1●            | —            | —           | —      | 4'1●         | 0'4●         | 0'6●*        | 1'7●   |
| 1'6●         | 3'5●            | 6'3●         | 2'2●        | 1'5●   | 6'3●         | 0'6●         | 0'5●*        | —      |
| —            | —               | —            | —           | —      | —            | 1'2●         | —            | —      |
| 2'1●         | 2'7●            | 2'8●         | 3'2●        | 2'0●   | 7'5●*        | 3'0●         | 5'0●*        | 4'7●   |
| 2'0●         | 2'5●            | 5'7●         | 2'5●        | 2'0●   | 8'3●         | 2'3●         | 8'2●         | 5'4●   |
| 1'3●         | 1'6●            | 2'6●         | 0'3●        | 0'3●   | —            | 1'0●         | 1'7●         | 1'1●   |
| 0'2●         | —■              | —            | —           | —      | —            | 6'6●         | 0'7●         | —      |
| 41'8         | 66'6            | 71'5         | 36'8        | 50'2   | 53'9         | 47'6         | 67'0         | 71'1   |

## Ilość opadu

Listopad 1899 roku.

| Dzień         | Prze-<br>myśl | Łomna | Chyrów | Stare-<br>miasto | Sam-<br>bor | Dolina | Lwów  |
|---------------|---------------|-------|--------|------------------|-------------|--------|-------|
| 1             | —             | —     | —      | —                | —           | —      | 2'0●  |
| 2             | —             | —     | —      | —                | —           | —      | —     |
| 3             | —             | —■    | —      | —                | —           | —      | —     |
| 4             | —             | —■    | —      | —                | —           | —      | —     |
| 5             | —             | —■    | —      | —                | —           | —      | —     |
| 6             | —             | —■    | —      | —                | —           | —      | —     |
| 7             | —             | —■    | —      | —■               | —■          | —      | —■    |
| 8             | —             | —■    | —      | —                | —           | —      | —■    |
| 9             | 10'8●         | 1'8●  | 13'3●  | 12'9●            | 4'2●        | 16'5●  | —●■   |
| 10            | 1'2●          | —     | —      | 0'4●             | 1'2●        | —      | 9'0■  |
| 11            | 2'1●          | —     | 0'7●   | 1'0●             | 1'4●        | —      | 1'0●  |
| 12            | —             | —     | 0'8●   | 1'2●             | 2'2●        | 1'0*   | —●    |
| 13            | 6'4●          | 0'2*  | 3'9●   | 6'5●             | —           | 9'8*   | 2'2●* |
| 14            | —             | 0'3*  | 1'0●*  | 1'6●*            | —           | 4'0*   | 3'0*  |
| 15            | 5'1●*         | 0'2*  | 5'6●   | 6'7●*            | —●*         | 6'0*   | —●■   |
| 16            | 1'6●*         | —     | 2'7●*  | 2'6●*            | 7'2●*       | 4'0*   | 7'5●* |
| 17            | —             | 0'1*  | —      | —                | —           | —      | 0'6■  |
| 18            | —             | —■    | —      | —                | 0'2●*       | —      | —     |
| 19            | —             | —     | —      | —                | —           | —      | —     |
| 20            | —             | —     | —      | —                | —           | —      | —     |
| 21            | —             | 0'8*  | —      | 0'2*             | 0'1*        | 0'3*   | —*    |
| 22            | 0'6*          | —     | 0'2*   | —                | —           | —      | —*    |
| 23            | 2'3●          | —     | 0'6●   | 1'4●             | 1'5●*       | —      | 1'5●* |
| 24            | 0'2●          | —     | —      | —                | 0'6●        | 1'0●   | 2'7●  |
| 25            | 0'3●*         | 1'0*  | 3'3●   | 3'6●*            | —           | —      | 3'4●  |
| 26            | —             | —     | —      | —                | —           | —      | 1'3*  |
| 27            | 1'0●          | 0'8●  | 0'7●   | 1'2●             | 0'9●        | 0'5●   | —●*   |
| 28            | 2'1●          | 2'2●  | 1'4●   | 2'1●             | 2'3●        | —      | 4'0●  |
| 29            | 0'2●          | 2'5●■ | —      | —                | 0'8●        | —      | 3'6●  |
| 30            | 0'1●          | 0'5●■ | —      | 0'1●             | 1'2●        | 1'9●   | 1'5●  |
| Suma<br>opadu | 34'0          | 10'4  | 34'2   | 41'5             | 23'8        | 45'0   | 43'3  |



w milimetrach.

| Du-<br>blany | Dela-<br>tyn | Oży-<br>dów | Krzy-<br>wo-<br>równia | Koło-<br>myja | Ober-<br>tyn                | Tar-<br>nopol | Jagiel-<br>nica |       |
|--------------|--------------|-------------|------------------------|---------------|-----------------------------|---------------|-----------------|-------|
| —            | —            | —           | 1'3●                   | —             | Nie zapisywano spostrzeżeń. | —             | —               |       |
| —            | —            | —           | —                      | —             |                             | —             | —               |       |
| —            | —            | —           | —                      | —             |                             | —             | —               | —     |
| —            | —            | —           | —                      | —             |                             | —             | —               | —     |
| 0'3●         | —            | —           | —                      | —             |                             | —             | 0'2=●           | —     |
| —            | —            | —           | —                      | —             |                             | —             | 0'2=            | —     |
| —            | —            | —           | —                      | —             |                             | —             | —=              | —     |
| —            | —            | —           | —                      | —             |                             | —             | —=              | 0'2=  |
| 7'8●         | 18'0●        | 10'1●       | 4'3●*                  | 14'3●         |                             | —             | 10'5=●          | 7'2●  |
| —            | 3'2●         | 0'9●        | 2'2●                   | 7'5●          |                             | —             | 5'6=●           | 6'3●  |
| 1'2●         | —            | 3'6●        | —                      | 1'3●          |                             | —             | 2'5=●           | 1'9●  |
| 0'2●         | 1'1●*        | —           | 0'4●Δ*                 | —             |                             | —             | 0'3=●           | 4'5●* |
| —            | 7'8●*        | 1'5=        | 3'2*                   | 10'5●*        |                             | —             | 1'8●*           | 7'3●* |
| —            | 1'5●*        | 0'9●*       | 1'8*                   | 3'3●*         |                             | —             | 2'5*Δ           | 0'3*  |
| 5'6●*        | 1'0●*        | 4'5●*       | 0'6*                   | 2'1●*         |                             | —             | 3'8*            | 6'8*  |
| 0'5*         | 2'6●*        | —           | 1'0*                   | 10'3●*        |                             | —             | 0'7*            | 2'3*  |
| —            | —            | —           | 0'4●                   | —             |                             | —             | —=              | —     |
| —            | —            | —           | —                      | —             |                             | —             | —=              | —     |
| —            | —            | —           | —                      | —             |                             | —             | —=              | 0'1=  |
| —            | —            | —           | —                      | —             |                             | —             | —=              | 0'1*  |
| —            | —            | —           | —                      | —             |                             | —             | —Δ              | —     |
| 1'0*         | 0'8*         | 0'9*        | 0'4*                   | —             |                             | —             | 0'5*            | 0'7*  |
| 1'8●         | —            | 1'2*        | —                      | —             |                             | —             | 0'5*            | —     |
| 1'2●         | —            | 1'4●*       | —                      | —             |                             | —             | 1'6=●           | —     |
| 2'2*         | 0'1●         | 0'5●        | —                      | —             |                             | —             | 0'8●*           | 0'4*  |
| —            | —            | —           | —                      | —             |                             | —             | —=              | —     |
| 1'5●         | —            | —           | —                      | —             |                             | —             | 0'4●*           | —     |
| 0'6●         | 0'1●         | 6'5●        | —                      | —             |                             | —             | 0'5=●           | —     |
| 1'0●         | —            | 1'4●        | —                      | —             | —                           | 0'1=●         | 4'6●            |       |
| 0'2●         | —            | 1'2●        | —                      | —             | —                           | —=●           | 0'1●            |       |
| 25'1         | 36'3         | 34'6        | 15'6                   | 49'3          | —                           | 32'5          | 42'8            |       |

## Ilość opadu

Grudzień 1899 roku.

| Dzień         | Kami-<br>tzer<br>Platte | Biel-<br>sko       | Ży-<br>wiec | Wado-<br>wice     | Czer-<br>ni-<br>chów | Zako-<br>pane     | Kra-<br>ków         |
|---------------|-------------------------|--------------------|-------------|-------------------|----------------------|-------------------|---------------------|
| 1             | —                       | —                  | —           | —                 | —                    | —                 | —                   |
| 2             | 0'9*                    | 3'3●*              | 2'5●        | —                 | —                    | —                 | 0'25=●              |
| 3             | 5'7*                    | 6'8*               | 7'6●*       | 1'8*              | 6'9●*                | 5'8*              | 3'30●*              |
| 4             | —                       | 1'4*               | 0'4●*       | —                 | 3'0*                 | 16'0*             | —                   |
| 5             | 1'3*                    | 5'4* <sub>R</sub>  | 3'0●*       | 2'8*              | 0'5●*                | —                 | 0'60●*              |
| 6             | 7'8*                    | 3'9*               | 1'8●*       | —                 | 0'1*                 | 5'9*              | 0'55*               |
| 7             | 3'2*                    | 1'1*               | 0'9●*       | 1'2*              | 2'8*                 | 8'9*              | 0'45*               |
| 8             | —                       | 2'3*               | —*          | —                 | —*                   | 2'2*              | —                   |
| 9             | 2'1* <sub>=</sub>       | 1'3*               | 1'4●*       | 2'6*              | —                    | —                 | 0'05*               |
| 10            | — <sub>=</sub>          | 1'8*               | —*          | —                 | 0'3*                 | 1'2*              | —*                  |
| 11            | — <sub>=</sub>          | 1'5*               | —*          | 3'6*              | 4'5*                 | — <sub>=</sub>    | 1'25*               |
| 12            | —                       | —                  | —*          | —                 | 4'0*                 | 2'4*              | 0'10 <sub>=</sub>   |
| 13            | 0'8* <sub>=</sub>       | 1'8*               | 1'3●*       | —                 | 0'2*                 | — <sub>=</sub>    | —                   |
| 14            | —                       | —                  | —*          | —                 | 0'5*                 | 1'4 <sub>=</sub>  | — <sub>=</sub>      |
| 15            | —                       | — <sub>=</sub>     | —*          | — <sub>=</sub>    | —                    | —●                | —                   |
| 16            | — <sub>=</sub>          | 1'6● <sub>=</sub>  | —*          | 0'8● <sub>=</sub> | —                    | 9'0● <sub>=</sub> | 3'95=●              |
| 17            | 1'1*                    | 6'5●* <sub>=</sub> | 9'2●*       | 1'0● <sub>=</sub> | 7'3●                 | 3'3● <sub>=</sub> | 5'80●*              |
| 18            | —                       | —                  | —*          | — <sub>=</sub>    | 6'4●                 | 4'2 <sub>=</sub>  | 0'05*               |
| 19            | —                       | —                  | —*          | —                 | —                    | 2'1 <sub>=</sub>  | —                   |
| 20            | —                       | —                  | —*          | —                 | —                    | —                 | —                   |
| 21            | —                       | —                  | —           | —                 | —                    | —                 | —                   |
| 22            | —                       | —                  | —*          | —                 | —                    | —                 | —                   |
| 23            | —                       | — <sub>=</sub>     | —*          | —                 | —                    | —                 | —                   |
| 24            | —                       | — <sub>=</sub>     | —*          | —                 | —                    | —                 | — <sub>=</sub>      |
| 25            | 1'3*                    | 1'2*               | —*          | 2'5*              | —                    | —*                | 0'30*               |
| 26            | 1'7*                    | 0'1*               | —*          | 2'2*              | 0'2*                 | 1'0*              | —                   |
| 27            | —                       | —                  | 0'5●*       | —*                | —                    | 1'5*              | —                   |
| 28            | 0'8*                    | —                  | —*          | 2'4* <sub>=</sub> | 3'3*                 | 2'7*              | 4'15=* <sub>=</sub> |
| 29            | —                       | — <sub>=</sub>     | —*          | — <sub>=</sub>    | —*                   | 1'1*              | —                   |
| 30            | —                       | 0'6●               | —           | —                 | —                    | 0'5*              | 1'00=●              |
| 31            | —                       | —                  | —           | —                 | —                    | —                 | —                   |
| Suma<br>opadu | 26'7                    | 40'6               | 28'6        | 20'9              | 36'0                 | 69'2              | 21'80               |

w milimetrach.

| Boch-<br>nia | Szczaw-<br>nica | Kry-<br>nica | Tar-<br>nów | Pilzno | Iwo-<br>niez | Rze-<br>szów | Smol-<br>nik | Sanok |
|--------------|-----------------|--------------|-------------|--------|--------------|--------------|--------------|-------|
| —            | —               | —            | —           | —      | —            | 1'2●         | —■           | —     |
| —            | 4'8*            | 2'1*         | 0'9●        | —      | —            | 4'0●         | —■           | —     |
| 2'1●         | 13'3*           | 17'0*        | 1'9*        | 3'0●   | 2'4*         | 2'0●         | 6'1*         | 5'8●* |
| 0'5*         | 1'7*            | 2'2*         | 0'3*        | —●*    | 3'2*         | 0'6*         | —            | —     |
| 0'5●*        | 3'6*            | 4'3*         | 3'7*        | 3'6*   | —            | 6'0*         | 2'0*         | 8'5*  |
| 8'5*         | 4'8*            | 4'5*         | 4'9*        | 7'2*   | 4'3*         | 2'0*         | 0'7*Δ        | 4'9*  |
| —            | 1'5*            | 1'3*         | —           | 0'3*   | 3'5*         | 0'3*         | 0'4*         | 1'7*  |
| 3'0*         | 1'8*            | 0'6*         | —           | 0'6*   | 2'3*         | 0'3*         | 0'1*         | 0'4*  |
| —            | 0'2*            | 0'4*         | 0'6*        | 0'2*   | 4'5*         | 0'2*         | —            | —     |
| 2'1*         | 1'8*            | 0'7*         | 0'6*        | —*     | 7'2*         | 0'7*         | —            | —     |
| 13'4*        | 1'2*            | 1'3*         | 0'4*        | 0'6*   | —*           | 1'2*         | 2'0*         | 4'4*  |
| 0'5*         | —               | —            | —           | 2'0*   | —            | —            | —            | —     |
| —            | 7'8*≡           | 10'0*        | 1'9*        | 3'2*   | —            | —            | —            | —     |
| —            | —               | —            | —           | —      | 4'5*         | —            | 2'3*         | —     |
| —            | 0'6●            | —            | —           | 0'0●   | —            | —            | ≡            | —     |
| 0'3●         | 3'1●≡           | 5'7●≡        | 0'2≡        | 3'3●   | 3'3●         | 3'0●         | 5'9●         | 6'7●  |
| 7'5*         | 4'2●≡           | 4'0●≡        | —           | 2'4●   | 1'4●         | 4'2●         | 4'3 =        | 2'1●  |
| 7'3●         | —               | —            | —           | —      | —            | —            | 0'6●*        | 2'8*  |
| —            | —               | —            | —           | —      | —            | —            | —            | —     |
| —            | —               | —            | —           | —      | —            | —            | —            | —     |
| —            | —               | —            | —           | —      | —            | —            | —            | —     |
| —            | —               | —            | —           | —      | —            | —            | —            | —     |
| —            | —               | —            | —           | —      | —            | —            | —            | —     |
| —            | —               | —            | —           | —      | —            | —            | —            | —     |
| —            | —               | —            | —           | 3'8*   | —            | —            | —            | —     |
| —            | 1'1*            | 2'3*         | 0'5*        | 0'9*   | —            | 0'6*         | —            | 0'8*  |
| 1'4*         | —               | —            | 0'5*        | 1'0*   | 0'6*         | 1'2*         | —*           | —     |
| 3'0*         | 0'4*            | 2'7*         | 0'6*        | 4'3*   | —            | 2'0*         | 1'0*         | 1'7*  |
| —            | —               | —            | 2'7●*       | —      | 1'6*         | —            | 6'1●         | —     |
| —            | —               | —            | 0'3●        | —      | 1'2*         | —            | —            | —     |
| 3'5●         | —               | —            | —           | —      | —            | —            | —            | —     |
| 53'6         | 51'9            | 59'1         | 20'0        | 37'3   | 40'0         | 29'5         | 31'5         | 39'8  |

## Ilość opadu

Grudzień 1899 roku.

| Dzień         | Prze-<br>mysł | Łomna | Chyrów | Stare-<br>miasto | Sambor | Dolina | Lwów  |
|---------------|---------------|-------|--------|------------------|--------|--------|-------|
| 1             | —             | —     | —      | —                | —      | —      | 0·6●  |
| 2             | 0·4●          | 0·6*  | —      | 1·1●             | —      | —      | —     |
| 3             | 0·8●*         | 0·7*  | 6·6●*  | 6·1●*            | 1·6●*  | —      | 3·3●* |
| 4             | —             | 0·4*  | —      | —                | 0·6*   | —      | —*    |
| 5             | 0·5*          | 6·9*  | 5·3*   | 7·8*             | 0·8*   | 1·1*   | 1·3*  |
| 6             | 0·3*          | 5·8*  | 3·0*   | 2·7*             | 2·0*   | 0·2*   | 6·3*  |
| 7             | —             | 1·1*  | —*     | —                | 0·7*   | 0·2*   | 3·0*  |
| 8             | 0·1*          | 1·0*  | 0·2*   | 0·4*             | —      | —      | —*    |
| 9             | —             | 0·3*  | 0·1*   | 0·8*             | —      | 0·5*   | 0·9*■ |
| 10            | 0·6*          | —     | 1·0*   | 1·7*             | 1·2*   | —      | 1·6*  |
| 11            | 1·0*          | 1·8*  | 3·3*   | 2·4*             | 0·4*   | —      | 1·4*  |
| 12            | 0·1*          | —     | 0·2*   | —                | —      | 0·4●   | 4·3*  |
| 13            | —             | —     | —      | —                | —      | —      | 0·7*  |
| 14            | —             | —     | —      | —                | —      | —      | —■    |
| 15            | —             | —     | —      | 0·2●             | —      | 0·3●   | —■    |
| 16            | 5·5●          | 1·2●  | 4·3●   | 5·1●             | —      | —      | 1·6●  |
| 17            | 1·3●*         | 0·8●  | 2·4●   | 1·8●             | 1·5●   | —      | 0·7●  |
| 18            | —             | —     | —      | —                | —      | —      | —     |
| 19            | —             | —     | —      | —                | —      | —      | —     |
| 20            | —             | —     | —      | —                | —      | —      | —     |
| 21            | —             | —     | —      | —                | —      | —      | —     |
| 22            | —             | —     | —      | —                | —      | —      | —*    |
| 23            | 0·1*          | —     | —      | —                | —      | —      | —     |
| 24            | —             | —     | —      | —                | —      | —      | —     |
| 25            | —             | —     | —      | —                | —      | —      | —     |
| 26            | 0·3*          | —     | —*     | —                | —      | —      | —     |
| 27            | —             | —     | —      | —                | —      | —      | —     |
| 28            | 4·8*          | 0·1*  | 4·1*   | 2·9*             | 0·9*   | —      | 1·4*  |
| 29            | —             | 0·8●  | —      | —                | —      | —      | 3·4*  |
| 30            | —             | —     | —      | —                | —      | —      | —     |
| 31            | —             | —     | —      | —                | —      | 2·0●   | —     |
| Suma<br>opadu | 15·8          | 21·5  | 30·5   | 33·0             | 9·7    | 4·7    | 30·5  |

w milimetrach.

| Du-<br>blany | De-<br>latyn | Oży-<br>dów | Krzy-<br>wo-<br>równia | Koło-<br>myja | Horo-<br>denka | Tar-<br>nopol | Jagiel-<br>nica |
|--------------|--------------|-------------|------------------------|---------------|----------------|---------------|-----------------|
| —            | —            | —           | —                      | —             | —              | —             | —               |
| 1'0●         | —            | —           | —                      | —             | —              | —             | —               |
| 1'8●*        | 0'5*Δ        | 1'5●*       | —                      | —             | 0'3*           | 0'2●*         | 0'1*            |
| —*           | —            | 0'9*        | 0'9●                   | 2'9●*         | 0'1*           | 0'5*          | 1'1*            |
| 2'0*         | —            | 1'2*        | —                      | —             | 0'4*           | 1'5*●         | 0'1*            |
| 0'4*         | 2'9*         | 2'8*        | —*                     | 4'0*          | 3'6*           | 2'0*          | 0'3*            |
| —            | 0'3*         | 0'3*        | 4'0*                   | 1'9*          | 0'7*           | 0'8*          | 2'0*            |
| 0'5*         | —            | 0'6*        | 0'3*                   | 0'8*          | 0'1*           | 0'4*          | 1'2*            |
| —*           | 1'8*         | —           | —*                     | —             | 1'0*           | 0'3*          | 0'2*            |
| 1'2*         | 0'5*         | 0'5*        | 3'0*                   | 5'2*          | 0'9*           | 0'8*          | 0'8*            |
| 16'0*        | 2'5*         | 1'4*        | 1'5*                   | 8'0*          | 3'0*           | 4'5*          | 2'2*            |
| 0'8*         | —            | —           | 2'7*                   | 7'6*          | 0'1*           | —             | 6'0*            |
| —            | —            | —           | —                      | —             | 0'2*           | 0'6*■         | —               |
| —            | —            | 0'5Δ        | —                      | —             | 0'1*           | 1'8●■         | 0'7*            |
| 0'6●         | —            | —           | —                      | —             | —              | 0'8■          | 1'0*            |
| —            | —            | —           | —                      | —             | —              | —             | 1'5■            |
| —            | 0'5*         | —           | 4'2●*                  | 2'1●          | —              | —             | 0'7●            |
| —            | —            | —           | —                      | 2'1*          | 0'5*           | 0'3●*         | —               |
| —            | —            | 1'6*        | —                      | 5'5*          | —              | 0'2*          | 0'5*            |
| —            | —            | —           | —                      | —             | —              | —             | —               |
| —            | —            | —           | —                      | —             | —              | —             | —               |
| —            | —            | —           | —                      | —             | —              | —             | —               |
| 0'3*         | —            | 0'4*        | —                      | —             | —              | —             | —               |
| —            | —            | —           | —                      | —             | 0'2*           | 0'3*          | —               |
| —            | —            | —           | —                      | —             | 0'3*           | 0'4*          | 0'1*            |
| —            | —            | —           | —                      | —             | 0'1*           | —             | —               |
| —            | —            | —           | —                      | —             | —              | —             | 0'2*            |
| —            | —            | —           | —                      | —             | —              | —             | —               |
| —            | —            | 0'4*        | —                      | —             | —              | 0'3*■         | —               |
| 3'7*         | —            | 0'6*        | 0'4*                   | 0'5*          | 0'8*           | 4'7*■         | —               |
| —            | —            | —           | —                      | —             | 0'2*           | 0'5■          | 3'4*            |
| —            | 0'1*         | —           | —                      | —             | —              | 0'4●■         | —               |
| —            | —            | —           | —                      | —             | —              | 0'3■          | —               |
| 28'3         | 9'1          | 12'9        | 17'0                   | 40'6          | 12'6           | 21'6          | 22'1            |

## Grady w roku 1899.

W roku bieżącym podobnie jak w poprzedzających, materiały gradowe zebraliśmy z dzienników krajowych, od niektórych c. k. starostw, gdzieśmy się obfitszego spodziewali, a wreszcie z krakowskiego Towarzystwa Wzajemnych ubezpieczeń, które nam tych dat łaskawie od szeregu lat udziela. Żadne z tych źródeł nie wyczerpuje rzeczy, jak łatwo się domyśleć, dla tego też i obraz tych klęsk elementarnych z pewnością skromniejszy co do swych rozmiarów, aniżeli był, gdyby nasze władze tak krajowe jak państwowe interesował on przynajmniej na równi z bólem, połączonym z koniecznością opustów podatkowych, za tą klęską corocznie płynących. Tymczasem kontentując się tem, co mamy, przedstawiamy rzecz według naszego materiału.

Gradobieć tego roku tak wielkich, jak po inne laty, właściwie nie było, co zasługą chłodnego stosunkowo sezonu gradowego, a więcej jeszcze mokrego lata, zwłaszcza w Galicyi zachodniej, gdzie w miejsce gradów i gradobieć szerzyły spustoszenie i klęskę rolnicza wielkie wylewy wód w pierwszej połowie lipca. Tam grady już mało dla się pola miały do zniszczenia, dlatego też może i wiadomości o nich tak skape, bo z interesem nie połączone. Peryod gradowy rozpoczął się jak zwykle w maju, który niemal wyjątkowo był u nas ciepły, a nawet gorący, stosunkowo zaś suchy. Już dnia 5 maja nawiedza grad Smolanekę w pow. tarnopolskim, dnia 7 Warwaryńce w trembowelskim, zaś dnia 10 Rudnę wielką i małą, Łętownię, Strzyżowskie przedmieście i Tropie w pow. rzeszowskim. Po blisko tygodniowej przerwie jawi się już:

Pierwsze gradobicie dnia 17 maja we wschodniej połowie kraju, które nawiedziło 37 gmin w 9 powiatach, a mianowicie: Miodowę i Olesin w pow. brzeżańskim; Kramarzówkę i Ostrów w jarosławskim; Balińce, Buczaczek, Chomiakówkę, Ispaz, Kornicz, Kułaczkowce, Matyjowce, Oskrześnice, Pererów, Siemiakowce, Trofanówki, Zahajpol, Załucze i Zamulińce w pow. kołomyjskim; Baworów i Suszczyn w nadworniańskim; Magdalówkę, Poznanekę gniłą i Skałat w skałackim; Borszczów i Chlebieczyn polny w śniatyńskim; Strusów w trembowelskim; Berezowicę wielką, Kozówkę, Ostasów, Ostalce, Skomorochy, Smolanekę i Suszczyn w tarnopolskim, tudzież Dzibułki, Krechów, Mohylany i Przemiwólki w żółkiewskim powiecie.

I znowu wkrótce, bo już dnia 21 maja nawiedziło

Drugie gradobicie przeważnie wschodnie powiaty kraju, zawadziwszy tylko o 2 zachodnie i niszcząc gminy: Sulów w pow. wielickim i Szerzyny w jasielskim, zaś we wschodniej części kraju: Orzechowczyk, Raźniów, Styberówka i Wierzbowczyk w pow. brodz-

kim; Kaplińce i Płauczę w brzeżańskim; Balińce, Chomiakówkę, Gwoździec mały, Gwoździec stary, Kobylec, Kułaczkowce, Ostap-kowce, Nazurnę, Siemiakowce, Trofanówkę, Winogród i Zahajpol w pow. kołomyjskim; Dunajów w przemysłańskim; Borszczów w śniatyńskim; Bednarowce, Mariampol, Wołczków i Wysoczanę w stanisławowskim; Horodyszcze, Nosowce i Pleszkowce w tarnopolskim; Czumale w zbaraskim, tudzież Krasnosielce, Koropiec, Łukę, Snowicz i Trościaniec w pow. złoczowskim, — a więc razem 33 gmin w 10 powiatach.

Podobne do dwóch poprzednich i niemal w tych samych stronach napotykamy znów

Trzecie gradobicie dnia 26 maja, którem nawiedzone zostały powiaty i gminy: Rusiatycze w pow. bobreckim; Korsów w brodzkim; Demnia i Wierzbów w brzeżańskim; Targowica w horodeńskim; Baworów i Grabowiec w nadworniańskim; Dunajów w przemysłańskim; Lubsza w rohatyńskim; Magdałówka, Poznanka gniła i Żerebki szlacheckie w skałackim; Albinówka, Hańkowce, Stecowa, Zadubrowce, Załucze, Dżurów, Rudniki i Kniże w śniatyńskim; Majdan w stanisławowskim; Chwałowice w tarnobrze-skim; Baworów, Chodaczków mały, Horodyszcze, Nosowce i Romanówka w tarnopolskim; Łoszniów i Zazdrość w trembowelskim; Dupliska, Iwanie, Nagorzany, Rożanówka, Słone i Tłuste w zaleszczyckim, tudzież Romanowe siolo w pow. zbaraskim, czyli razem znów 36 gmin w 15 powiatach.

Odtąd do końca miesiąca przy równoczesnem ochłodzeniu się powietrza i pochmurnem wogóle niebie, o gradach nie słyhać. Następny miesiąc t. j. czerwiec, stosunkowo także chłodnawy, był dość obfity w częste, acz tylko sporadyczne pojawy gradów. I tak nawiedza grad dnia 2 czerwca gminy Pererów i Siemiakowce w kołomyjskim, Knihinicze i Oskrześnińce w rohatyńskim, tudzież Chmielówkę i Rokitno w pow. trembowelskim. Dnia 4 czerwca Sokółówkę i Wybranówkę w bobreckim; Dąbrówkę i Gradzką Wulkę w dabrowskim; Bronowice, Piaski, Prądnik czerwony i Rza-skę w krakowskim; Borek, Jedlicze, Kopytówę, Korczyn, Odrzy-koń, Potok i Żarnowiec w krośnieńskim; Borki janowskie we lwowskim; Hoszany w rudeńskim; Suchów w stryjskim; Grabo-szyce w wadowickim, tudzież Dobezyce w pow. wielickim. Dnia 7 czerwca Bruchnal i Czerczyk w jaworowskim, zaś Czulowice i Porzecze w pow. rudeńskim. Dnia 10 czerwca Sokółówkę w bo-breckim, Kadłubiska w brodzkim, Krasną w brzeżańskim, Cha-rasymów w horodeńskim, Handzlówkę w lańcuckim, Brzuchowice i Lachodów w przemysłańskim i Poczapińce w pow. tarnopolskim; dnia 11 czerwca Dydnię i Krzywe w brzozowskim, Bratkowice w gródeckim, Trześń w kolbuszowskim, Kopytówę w krośnień-skim, Sałasze w rawskim, Hoszany w rudeńskim, tudzież Kro-

piwnę i Wicyń w pow. złoczowskim; dnia 17 czerwca Nowosiółkę w buczackim, Pławnę w grybowskiem, Załucze nad Prutem w kołomyjskim i Późniki w pow. tłumackim; dnia 19 czerwca Siółko w kałuskim, Makowiska w krośnieńskim i Siennów w łańcuckim; dnia 20 czerwca Mogilnicę w czortkowskim, Rudę w rohatyńskim; Grzymałów, Magdalówkę, Nowosiółka, Okno i Poznanęgnię w skałackim, zaś Chmielowę i Latacz w pow. zaleszczyckim; dnia 21 czerwca Heczmarowice i Nową wieś w bialskim, Szymbark w gorlickim; Chłopice, Pełkinie, Rozwinicę i Wierzbą w jarosławskim, Lanerówkę i Rzepniów w kamioneckim, Popowice w przemyskim, tudzież Humieniec w pow. rawskim, poczem nastąpiło

Czwarte gradobicie dnia 23 czerwca, które dotknęło 2 powiaty zachodniej i 11 powiatów wschodniej połowy kraju, niszczać tam gminy: Grzaskę, Manasterz, Mikulice, Mirocin, Ostrów, Siedlecza, Studzian, Urzejowice i Wolice w pow. łańcuckim; Borowę, Gawłuszowice i Sadkową górę w mieleckim; Lachowce w bohorodczańskim; Dzurków, Jakobówkę, Olejową król. i Żuków w horodeńskim; Postulówkę w husiatyńskim; Wierzchnię w kałuskim; Chlebiczyn, Czeremchów, Fatowce, Kamionki wielkie, Korsów, Siemiakowce, Turkę i Żukocin w kołomyjskim; Buczały, Chłopy, Czajkowice, Hoszany, Jakimeczyce, Katarzyńce, Szeptyce i Wańkowiec w pow. rudeńskim; Bililówkę, Grzymałów, Okno, Skalat, i Żerebki szlacheckie w skałackim; Albinówkę i Trójcę w śniatyńskim; Komarów, Kozinę, Kryłoś i Załukiew w stanisławowskim; Draganówkę, Kupeczyńce, Poczapińce, Romanówkę, Słupki, Zabojski w tarnopolskim, tudzież Bezbrudy, Chodów, Józefówkę i Zarudzie w pow. złoczowskim, a więc razem 56 gmin w 13 powiatach.

Na zakończenie tego miesiąca nawiedzone jeszcze zostały gradami dnia 28 gminy: Dubie, Kadłubiska, Łabacz i Raźniów w brodzkim; Dzuryn, Pauszówka i Położce w czortkowskim; Spas w kamioneckim, Brodki w rawskim, Podmichałowice w rohatyńskim, Biskowice w samborskim, Rusin i Wierzbiał w sokalskim, tudzież Raznoszyńce i Zbaraż w pow. zbaraskim.

Bardzo ciężkim był dla naszego rolnictwa w zachodniej części kraju następny miesiąc t. j. lipiec. O gradach mało tu słychać, te jakby zarezerwowane zawsze dla wschodniej jego połowy; natomiast atoli, czego nie zrobiły grady, spełniły rolę zniszczenia gwałtowne ulewy przy końcu pierwszej dekady miesiąca, i idące za nimi wielkie wylewy wszystkich rzek i ich dopływów, które niepowetowane poczyniły szkody, niszcząc zupełnie wszystkie plony i całą nadzieję rolników, zwłaszcza wobec codziennych niemal deszczów (w Krakowie tylko 9 dni bez deszczu), połączonych we wschodniej połowie z burzami i towarzyszącymi im gradami. Tu więc prawie codzien jawią się grady, już to na mniejszych, już



większych przestrzeniach kraju. I tak: dnia 2 lipca grad nawiedza gminę Rudawkę w pow. birczańskim; Albigowę, Handzlówkę, Hussów, Krzemienicę, Markowę, Tarnówkę, Przedmieście i Wysokę w łańcuckim, zaś Ostrówek w mieleckim. Dnia 3 lipca Lanerówkę, Suszno i Pawłów w pow. kamioneckim, zaś Podogrodzie w rohatyńskim. Dnia 4 lipca Mühlbach w bobreckim; Dubie, Jasionów, Kadłubiska i Strzemilcze w brodzkim, Korczów w rawskim, tudzież Byszów, Parhacz i Sokal w pow. sokalskim. Dnia 5 lipca Chocimierz, Harasymów i Zabokruki w horodeńskim; Gwoździec stary w kołomyjskim; Toustobaby w podhajeckim; Lachodów w przemysłańskim; Albinówkę i Rudniki w śniatyńskim, Chodaczków, Horodyszcze, Poczapińce i Zabojki w pow. tarnopolskim, zaś Czernichowce w zbaraskim. Dnia 6 lipca Bohorodczany w bohorodczańskim, Przewozice w kałuskim, Siedlecza w łańcuckim, Ostapie w skałackim, Machnówek w sokalskim, tudzież Jezupol, Kołodziejówkę, Pobereże i Sielec w pow. stanisławowskim. Dnia 7 lipca Zabawę w brzeskim, Grabownicę w dobromilskim, zaś Kawce i Żerosławice w pow. wielickim. Po tych sporadycznych i skromnych, nastąpiło

Piąte gradobicie dnia 8 lipca, którem dotknięte zostały gminy zachodniej części kraju: Dąbrowica w bocheńskim, Łuczanowice i Wadów w krakowskim, Zatwardnica w liskim, i Sienków w łańcuckim, — zaś we wschodniej połowie: Bóbrka, Borynicze, Brzozdowce, Czartorya, Horodysławice, Hranki, Husiatycze, Leszczyn, Podniestrzany i Ruda w bobreckim; Bilecze złote, Jezierzanka, Łanowce i Olesińce w borszczowskim; Bobrowniki w bohorodczańskim; Czechy w brodzkim; Zabawa w brzeskim; Augustówka, Chorobród, Chorościec i Koniuchy w brzeżańskim; Potok złoty w buczackim; Kolendziany i Uhryn w pow. czortkowskim; Okno, Siekierzyn i Tyszkowce w pow. horodeńskim; Sidorów w husiatyńskim; Ciemiężowice, Chawłowice, Dobra, Kramarzówka, i Rozburz w jarosławskim; Gniłowody i Kułuzów w podhajeckim; Kopań i Laszki król. w przemysłańskim; Podogrodzie w rohatyńskim; Besko, Biliłówka, Bucyki, Eleonorówka, Grzymałów i Mazurówka w skałackim; Chłopiatyn, Ostrów i Parhacz w sokalskim; Dąbrowa wrzawska, Gorzyce, Nadbrzezie, Ostrówek, Trześć, Zalesie gorzyckie, Zalipie i Żabno w tarnobrzescim; Roszniów w tłumackim, tudzież Jarosławice, Jezierna, Kabarowce, Katy, Olesko, Zarudzie w pow. złoczowskim, zaś Nowesioło w żydaczowskim. Burza więc dnia tego nawiedziła gradem 71 gmin w 25 powiatach, z których przypada tylko 5 gmin w 4 powiatach zachodnich, reszta zaś we wschodniej części kraju.

Odtąd przez tydzień mało słyhać o gradach, spotykamy je bowiem tylko dnia 11 lipca w Rzemieniu w pow. mieleckim, w Bro-

dach starych w pow. brodzkim i w Białoskórcie w nadworniańskim, — poczem nastąpiło

Szóste gradobicie dnia 17 lipca, które zajęło znowu następujące powiaty i gminy: Jawornik w pow. birczańskim; Borodczyce, Poddniestrzany, Rudę, Sokołówkę i Zalesie w bobreckim; Jazłowiec w brodzkim; Łubno w brzozowskim; Koropiec, Ostre i Żurawińce w buczackim; Cieszanów, Duchnów, Krowicę, Nowesioło i Oleszyce w cieszanowskim; Wygnankę w czortkowskim; Okno w horodeńskim; Korzenicę, Laszki i Skołoszów w jarosławskim; Bruchnal w jaworowskim; Spas w kamioneckim; Balice, Koniuszki nanowskie i Myślatycze w mościskim; Smolanekę i Suszczyn w nadworniańskim; Łysę w podhajeckim; Kniażyce w przemyskim; Bieniawę, Bohatkowce, Kopań i Lipowce w przemysłańskim; Korczów i Potylicz w rawskim; Bukaczowce w rohatyńskim; Zabereże w stanisławowskim; Baranów, Domacyny, Dymitrów duży, Motycze poduchowne, Motycze szlacheckie i Skowierzyn w tarnobrzeskim; Bohorodczyn w tłumackim; Poczapy i Reków w złoczowskim; Nowosiółkę i Charłamowce w zaleszczyckim, — tyle we wschodniej części kraju, zaś w zachodniej tegoż dnia: Więckowice w krakowskim; Białoboki, Dębów, Gać, Kasinę, Krzeszowice, Łopuszkę małą i wielką, Maćkówkę, Manasterz, Mikulice, Nowosielce, Ostrów, Pantalowice, Soninę, Studzian, Użejowice i Wolice w łańcuckim, tudzież Gliny małe, Ostrówek i Sadkową górę w pow. mieleckim, czyli gradobicie to dotknęło razem znów 71 gmin w 27 powiatach kraju, z czego na zachodnią część jego przypadło 22 gmin w 3 powiatach.

I znowu przez parę dni mało słyhać o gradach, a właściwie już do końca miesiąca pofolgowały one trochę, a w ich miejsce przyszły częste deszcze, zwłaszcza w zachodniej części kraju, utrudniające bardzo rolnikom naszym w zbieraniu pozostałych od klęsk plonów. Grady nawiedziły jeszcze tylko dnia 23 lipca Dąbrówkę w pow. borszczowskim, Ostre w buczackim, tudzież Czarnokoniecką Wolę i Uwisłę w pow. husiatyńskim; dnia 24 lipca Korzenicę, Laszki i Mięksisz nowy w jarosławskim; dnia 25 lipca Horodenkę i Okno w horodeńskim; Zborę w kałuskim; Rohynię, Rosochacz i Winogród w kołomyjskim, — zaś Kasparowce, Nowosiółkę, Szczytowce, Uścieczko i Zaleszczyki stare w pow. zaleszczyckim.

Stosunkowo do lat poprzednich następujący miesiąc t. j. sierpień do szczęśliwych względnie pod względem klęsk gradowych zaliczyć należy, acz znowu lipcowe deszcze przeciągły się długo w ten miesiąc w zachodniej połowie kraju, podczas gdy we wschodniej panowały niemal posusze, tak błogie dla rolnictwa o tę porę. O wielkich gradobiciach już nie słyhać, prócz jednego pomniejszego, które jako

Siódme gradobicie przytrafiło się dnia 5 sierpnia, a nawiedziło ono gminy: Grzymałów, Leszniów, Romanówkę, Smarzów, i Strzemilecze w pow. brodzkim; Biskupice radłowskie, Jasień, Luślawice i Wesółów w brzeskim; Adamierz i Oleśno w dąbrowskim; Łużnę w gorlickim; Laszki w jarosławskim; Koniuszki nanowskie w mościskim; Tęgoborze w nowo-sądeckim i Mrówkę w rzeszowskim; Błażów i Pianowice w samborskim; Gorzyce, Konary, Otfinów, Podlesie, Siedliszowice, Sieradzę i Zabno w tarnobrzskim; Duninów, Gródek i Kasparowce w zaleszczyckim, tudzież Iwaszkowce w pow. zbaraskim, — a więc tym razem tylko 29 gmin w 12 powiatach.

To było ostatnie gradobicie tego roku. Po niem przytrafiają się jeszcze lokalne burze gradowe, ale już na mniejszych przestrzeniach kraju. I tak, dnia 12 sierpnia grad nawiedza gminy: Rożyńska i Żerebki szlacheckie w skałackim; Borki wielkie i Romanówkę w tarnopolskim, zaś Kujdańce i Zarubińce w pow. zbarskim. Dnia 13 sierpnia: Brody stare, Dubie, Folwarki małe, Jasionów, Kadłubiska, Łabacz, Rażniów, Smarzów i Turze w brodzkim; Czortków i Czortków stary w czortkowskim; Bossyry i Suchostaw w husiatyńskim, tudzież Kąty i Olesko w pow. złoczowskim. Dnia 18 sierpnia Rozburz w jarosławskim i Siennów w łańcuckim; dnia 19 Krasnostawce w śniatyńskim; dnia 20 sierpnia Jasionów, Kadłubiska, Łabacz, Rażniów i Stolpin w brodzkim; Anielówkę i Tlustę w zaleszczyckim, zaś Kąty w pow. złoczowskim; dnia 21 Bageniec w dąbrowskim; Brzuchowice we lwowskim i Witków w pow. sokalskim, wreszcie dnia 26 sierpnia Poruczyn i Krzywe w brzeżańskim, Osowce w buczackim, Turówkę w skałackim, Stecowę w śniatyńskim, tudzież Młynowce w pow. złoczowskim.

A wreszcie na zakończenie pojawiły się grady tego roku jeszcze dnia 1 września w Balińcach i Trofanówce w pow. kołomyjskim; w Albinówce w śniatyńskim, tudzież w Dobrowlanach i Kołodróbce w pow. zaleszczyckim.

Zbierając materiał powyżej przedstawiony w ściślejsze ramy, przedstawia się on nam za rok 1899 jak następuje: gmin dotkniętych gradem było wogóle 546, rozdzielonych na 62 powiatów; gdy atoli w tej liczbie mieści się 50 gmin dotkniętych gradem dwukrotnie, 19 gmin po trzy razy, 5 gmin po 4 razy, a jedna 5 razy, zatem właściwie tych gmin było 439, a więc stosunkowo rzeczywiście mniej, aniżeli to bywało innemi laty. Z tej ostatniej liczby gmin przypada 53 na zachodnią, zaś reszta t. j. 386 na wschodnią połowę kraju, czyli na pierwszą 12<sup>o</sup>/<sub>o</sub>, zaś na drugą 88<sup>o</sup>/<sub>o</sub>, podczas gdy z 62 powiatów wogóle nawiedzonych gradami przypada znów 16 na zachodnią, zaś 46 na wschodnią połowę. Powiatów w zachodniej Galicyi, według naszego materiału nie dotkniętych gradami, było 9, we wschodniej zaś 5; najwięcej wreszcie

od gradów ucierpiały w tym roku powiaty: brodzki, kołomyjski, łańcucki i tarnobrzeski, w których najmniej po 15 gmin było niemi nawiedzonych, najwięcej zaś takich gmin było 19 w powiecie kołomyjskim.

Dr. Wierzbicki.

## Pioruny w roku 1899.

Według podań urzędowej „Gazety lwowskiej“ zostało w roku bieżącym od piorunów zabitych 8, zaś porażonych osób 5.

Dr. Wierzbicki.

## Spostrzeżenia pojawów w świecie roślinnym i zwierzęcym w latach 1897, 1898 i 1899.

### I. Spostrzeżenia fito-fenologiczne.

#### 1. Rośliny wspólnie uważane w Czernichowie, Jaćmierzu i Ożydowie.

Spostrzeżenia te z trzech lat ubiegłych otrzymała Komisya 1) z Czernichowa od JPani Zofii Birkenmajerowej, żony profesora szkoły rolniczej. 2) z Jaćmierza od JPana Leona Magierowskiego nauczyciela miejscowego i 3) z Ożydowa od JPana Juliana Hawrysiewicza kierownika szkoły miejscowej.

W tablicy następującej podajemy obok nazwiska rośliny, miejscowość i rok spostrzeżenia oraz daty listnienia, kwitnienia, dojrzewania owocu i opadania liści, przyczem pierwsza cyfra oznacza dzień, druga miesiąc odpowiedniego pojawu.

| Nazwisko rośliny                                                   | Miejscowość     | listnie-<br>nie | kwitnie-<br>nie | dojrze-<br>wanie<br>owocu | opada-<br>nie liści |
|--------------------------------------------------------------------|-----------------|-----------------|-----------------|---------------------------|---------------------|
| I. Agrest<br><i>Ribes grossularia</i><br>Gemeine Stachel-<br>beere | Czernichów 1897 | 29 3            | 20 4            | 15 7                      | 2-29 10             |
|                                                                    | Jaćmierz „      | 1 4             | 21 4            | 10 7                      | 15 10               |
|                                                                    | Ożydów „        | 31 3            | 25 4            | 5 7                       | 29 9                |
|                                                                    | Czernichów 1898 | 16 3            | 18 4            | 10 7                      | — 9                 |
|                                                                    | Ożydów „        | 31 3            | 1 5             | 6 7                       | 4 10                |
|                                                                    | Czernichów 1899 | 8 2             | 14 4            | 2 7                       | 20 8                |
|                                                                    | Jaćmierz „      | 4 4             | 22 4            | 5 7                       | 8 10                |
|                                                                    | Ożydów „        | 3 4             | 21 4            | 19 7                      | 6 10                |

| Nazwisko rośliny                                                                                                             | Miejscowość     | listnie-<br>nie | kwitnie-<br>nie | dojrze-<br>wanie<br>owocu | opada-<br>nie liści |
|------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------|-----------------|---------------------------|---------------------|
| 2 Akacya<br><i>Robinia Pseudo-<br/>Acacia</i><br>Wilde Akazie                                                                | Czernichów 1897 | 28 4            | 3 6             | —                         | 28 9                |
|                                                                                                                              | Jaćmierz "      | 10 4            | 8 6             | —                         | — 11                |
|                                                                                                                              | Ożydów "        | 2 5             | 30 5            | —                         | 16 10               |
|                                                                                                                              | Czernichów 1898 | 28 4            | 31 5            | —                         | 19 10               |
|                                                                                                                              | Ożydów "        | 11 5            | 30 5            | 10 10                     | 26 10               |
|                                                                                                                              | Czernichów 1899 | 23 4            | 6 6             | —                         | 14 10               |
|                                                                                                                              | Jaćmierz "      | 13 5            | 8 6             | 18 9                      | 26 10               |
|                                                                                                                              | Ożydów "        | 6 5             | 2 6             | —                         | 22 10               |
| 3. Bez czarny<br><i>Sambucus nigra</i><br>Gemeiner Holun-<br>der                                                             | Czernichów 1897 | 2 4             | 8 6             | —                         | 27 10               |
|                                                                                                                              | Jaćmierz "      | 12 4            | 1 6             | 20 8                      | 17 10               |
|                                                                                                                              | Ożydów "        | 6 4             | 2 6             | 24 8                      | 4 10                |
|                                                                                                                              | Czernichów 1898 | 12 3            | 3 6             | —                         | 15 10               |
|                                                                                                                              | Ożydów "        | 8 4             | 3 6             | 24 8                      | 1 10                |
|                                                                                                                              | Czernichów 1899 | 6 3             | 5 6             | —                         | 1 11                |
|                                                                                                                              | Jaćmierz "      | 5 4             | 28 5            | 24 8                      | 20 10               |
|                                                                                                                              | Ożydów "        | 6 4             | 26 5            | 2 8                       | 28 9                |
| 4. Bez turecki<br><i>Syringa vulgaris</i><br>Flieder                                                                         | Czernichów 1897 | 31 3            | 9 5             | —                         | —                   |
|                                                                                                                              | Jaćmierz "      | 20 4            | 17 5            | —                         | 1 11                |
|                                                                                                                              | Ożydów "        | 3 4             | 13 5            | —                         | 1 11                |
|                                                                                                                              | Czernichów 1898 | 18 3            | 7 5             | —                         | 26 10               |
|                                                                                                                              | Ożydów "        | 17 4            | 19 5            | —                         | 19 9                |
|                                                                                                                              | Czernichów 1899 | 24 3            | 11 5            | —                         | 6 11                |
|                                                                                                                              | Jaćmierz "      | 21 4            | 15 5            | —                         | 24 10               |
|                                                                                                                              | Ożydów "        | 16 4            | 13 5            | —                         | 29 10               |
| 5. Borówka czer-<br>niea<br><i>Vaccinium Myr-<br/>tillus</i><br>Gemeine Heidel-<br>beere                                     | Czernichów 1897 | —               | —               | 23 6                      | —                   |
|                                                                                                                              | " 1898          | —               | 10 5            | 12 6                      | —                   |
|                                                                                                                              | Ożydów "        | 15 4            | —               | —                         | —                   |
|                                                                                                                              | Czernichów 1899 | 21 4            | 4 5             | 25 6                      | —                   |
|                                                                                                                              | Ożydów "        | —               | —               | 28 6                      | —                   |
| 6. Brodawnik lé-<br>karski (mlecz, za-<br>bie oczy)<br><i>Taraxacum offi-<br/>cinale</i><br>Officinelles Pfaffen-<br>röhrlin | Czernichów 1897 | 13 3            | 26 4            | 2 5                       | —                   |
|                                                                                                                              | Jaćmierz "      | —               | 2 5             | 18 5                      | —                   |
|                                                                                                                              | Ożydów "        | 1 4             | 28 4            | 26 5                      | —                   |
|                                                                                                                              | Czernichów 1898 | 24 2            | 25 4            | —                         | —                   |
|                                                                                                                              | Ożydów "        | 15 4            | 28 4            | —                         | —                   |
|                                                                                                                              | Czernichów 1899 | 1 4             | 19 4            | 12 6                      | —                   |
|                                                                                                                              | Ożydów "        | 1 4             | 21 4            | 16 5                      | —                   |

| Nazwisko rośliny                                                                | Miejscowość     | listnie-<br>nie | kwitnie-<br>nie | dojrze-<br>wanie<br>owocu | opada-<br>nie liści |
|---------------------------------------------------------------------------------|-----------------|-----------------|-----------------|---------------------------|---------------------|
| 7. Brzoza biała<br><i>Betula alba</i><br>Weisse Birke                           | Czernichów 1897 | 16 4            | —               | —                         | 16 10               |
|                                                                                 | Jaćmierz "      | 23 4            | —               | —                         | 17 10               |
|                                                                                 | Oźydów "        | 23 4            | 8 5             | —                         | 28 10               |
|                                                                                 | Czernichów 1898 | 15 4            | —               | —                         | —                   |
|                                                                                 | Oźydów "        | 10 4            | 2 5             | —                         | 30 10               |
|                                                                                 | Czernichów 1899 | 20 4            | —               | 25 9                      | —                   |
|                                                                                 | Jaćmierz "      | 26 4            | 22 4            | —                         | 7 10                |
|                                                                                 | Oźydów "        | 20 4            | —               | —                         | 25 10               |
| 8. Buk<br><i>Fagus sylvatica</i><br>Gemeine Buche                               | Czernichów 1897 | 23 4            | 12 7            | —                         | —                   |
|                                                                                 | Oźydów "        | 1 5             | —               | —                         | 21 10               |
|                                                                                 | Czernichów 1898 | 20 4            | —               | —                         | —                   |
|                                                                                 | Czernichów 1899 | 25 4            | —               | —                         | —                   |
| 9. Chmiel<br><i>Humulus Lupulus</i><br>Gemeiner Hopfen                          | Czernichów 1897 | 12 4            | —               | —                         | —                   |
|                                                                                 | Oźydów "        | 6 4             | 1 7             | 28 8                      | 15 10               |
|                                                                                 | Czernichów 1898 | 17 4            | —               | —                         | —                   |
|                                                                                 | Oźydów "        | 25 4            | 2 7             | 18 8                      | 15 10               |
|                                                                                 | Czernichów 1899 | 7 4             | —               | —                         | 26 10               |
|                                                                                 | Oźydów "        | 18 4            | 3 5             | —                         | 20 10               |
| 10. Czeremcha (Kocierpka)<br><i>Prunus Padus</i><br>Gemeine Trauben-<br>kirsche | Jaćmierz 1897   | —               | 2 5             | —                         | —                   |
|                                                                                 | Oźydów "        | 19 4            | 1 5             | —                         | —                   |
|                                                                                 | Oźydów 1898     | 6 4             | 8 5             | —                         | —                   |
|                                                                                 | Jaćmierz 1899   | 16 4            | 1 5             | 24 8                      | 17 10               |
|                                                                                 | Oźydów "        | 18 4            | —               | —                         | —                   |
| 11. Dąb zwyczajny<br><i>Quercus sessili-<br/>flora</i><br>Steineiche            | Czernichów 1897 | 2 5             | —               | 18 10                     | 15 10               |
|                                                                                 | Oźydów "        | 10 5            | 8 5             | 10 10                     | 30 10               |
|                                                                                 | Oźydów 1898     | 10 5            | 8 5             | —                         | 4 11                |
|                                                                                 | Czernichów 1899 | 6 5             | —               | 10 10                     | —                   |
|                                                                                 | Oźydów "        | 10 5            | —               | —                         | 29 10               |
| 12. Fiolek wonny<br><i>Viola odorata</i><br>Wohlriechendes<br>Veilchen          | Czernichów 1897 | 2 3             | 1 4             | —                         | —                   |
|                                                                                 | Oźydów "        | —               | 5 4             | —                         | —                   |
|                                                                                 | Czernichów 1898 | 20 2            | 9 3             | —                         | —                   |
|                                                                                 | Oźydów "        | 2 4             | 8 4             | —                         | —                   |
|                                                                                 | Czernichów 1899 | —               | 9 3             | —                         | —                   |
| Oźydów "                                                                        | 25 3            | 2 4             | —               | —                         |                     |

| Nazwisko rośliny                                                             | Miejscowość     | listnie-<br>nie | kwitnie-<br>nie | dojrze-<br>wanie<br>owocu | opada-<br>nie liści |
|------------------------------------------------------------------------------|-----------------|-----------------|-----------------|---------------------------|---------------------|
| 13. Głóg biały<br><i>Crataegus<br/>oxyacantha</i><br>Gemeiner Weiss-<br>dorn | Czernichów 1897 | —               | 18 5            | 24 9                      | —                   |
|                                                                              | Jaćmierz "      | 22 4            | 23 5            | —                         | 18 10               |
|                                                                              | Oźydów "        | 2 4             | 28 5            | 16 8                      | 8 10                |
|                                                                              | Czernichów 1898 | —               | 8 5             | 19 9                      | —                   |
|                                                                              | Oźydów "        | 26 4            | 19 5            | 15 9                      | 30 9                |
|                                                                              | Czernichów 1899 | 4 5             | 20 5            | —                         | —                   |
|                                                                              | Jaćmierz "      | 18 4            | 23 5            | 18 9                      | 19 10               |
| Oźydów "                                                                     | 18 4            | 12 5            | 24 9            | 21 10                     |                     |
| 14. Grab<br><i>Carpinus betulus</i><br>Gemeine Hainbuche                     | Jaćmierz 1897   | 26 4            | —               | —                         | 14 10               |
|                                                                              | Czernichów 1898 | 20 4            | —               | —                         | —                   |
|                                                                              | Oźydów "        | —               | —               | —                         | 10 10               |
|                                                                              | Czernichów 1899 | 9 4             | —               | —                         | —                   |
|                                                                              | Jaćmierz "      | 23 4            | 6 5             | 24 9                      | 18 10               |
| 15. Groch siewny<br><i>Pisum sativum</i><br>Gemeine Erbse                    | Czernichów 1897 | 2 4             | 31 5            | 12 7                      | —                   |
|                                                                              | Oźydów "        | 18 4            | 4 6             | 8 7                       | —                   |
|                                                                              | Czernichów 1898 | 12 4            | 5 6             | —                         | —                   |
|                                                                              | Oźydów "        | 25 4            | 24 5            | 15 7                      | —                   |
|                                                                              | Czernichów 1899 | 17 4            | 30 5            | 20 7                      | —                   |
|                                                                              | Jaćmierz "      | —               | 22 6            | 4 8                       | —                   |
|                                                                              | Oźydów "        | 20 4            | 25 5            | 18 7                      | —                   |
| 16. Grusza<br><i>Pyrus communis</i><br>Gemeine Birne                         | Czernichów 1897 | 22 4            | 30 4            | 18 8                      | 20 10               |
|                                                                              | Jaćmierz "      | 3 5             | 10 5            | —                         | 15 10               |
|                                                                              | Oźydów "        | 27 4            | 2 5             | 25 8                      | 18 10               |
|                                                                              | Czernichów 1898 | 20 4            | 30 4            | 12 8                      | 10 10               |
|                                                                              | Oźydów "        | 1 5             | 10 5            | 18 7                      | 16 10               |
|                                                                              | Czernichów 1899 | 15 4            | 2 5             | —                         | 26 10               |
|                                                                              | Jaćmierz "      | 29 4            | 7 5             | 6 8                       | 21 10               |
|                                                                              | Oźydów "        | 22 4            | 27 4            | 15 8                      | 26 10               |
| 17. Iwa<br><i>Salix caprea</i><br>Sahlweide                                  | Jaćmierz 1897   | 24 4            | 15 3            | 19 5                      | —                   |
|                                                                              | Oźydów "        | 1 5             | —               | —                         | —                   |
|                                                                              | Oźydów 1898     | 26 4            | 4 4             | —                         | —                   |
|                                                                              | Jaćmierz 1899   | 25 4            | 19 5            | 10 8                      | 15 10               |
|                                                                              | Oźydów "        | 20 4            | 1 5             | —                         | —                   |
| 18. Jabłoń<br><i>Pyrus Malus</i><br>Gemeiner Apfel                           | Czernichów 1897 | 17 4            | 3 5             | 26 8                      | 26 10<br>— 5 11     |
|                                                                              | Jaćmierz "      | 1 5             | 24 5            | —                         | 25 10               |
|                                                                              | Oźydów "        | 22 4            | 9 5             | 8 8                       | 19 10               |
|                                                                              | Czernichów 1898 | 10 4            | 5 5             | 8 8                       | 26 10               |
|                                                                              | Oźydów "        | 30 4            | 15 5            | 20 9                      | 22 10               |
|                                                                              | Czernichów 1899 | 15 4            | 8 5             | 12 8                      | 15 11               |
|                                                                              | Jaćmierz "      | 30 4            | 18 5            | 30 8                      | 20 10               |
| Oźydów "                                                                     | 18 4            | 6 5             | 16 8            | 22 10                     |                     |

| Nazwisko rośliny                                                                        | Miejscowość     | listnie-<br>nie | kwitnie-<br>nie | dojrze-<br>wanie<br>owocu | opada-<br>nie liści |
|-----------------------------------------------------------------------------------------|-----------------|-----------------|-----------------|---------------------------|---------------------|
| 19. Jarzab po-<br>spolity<br><i>Sorbus aucuparia</i><br>Gemeine Eberesche               | Czernichów 1897 | 6 4             | —               | —                         | —                   |
|                                                                                         | Jaćmierz "      | 22 4            | 20 5            | 29 7                      | 5 10                |
|                                                                                         | Oźydów "        | 15 4            | 11 5            | 25 8                      | 16 10               |
|                                                                                         | Czernichów 1898 | —               | 18 5            | 10 8                      | —                   |
|                                                                                         | Oźydów "        | 26 4            | 17 5            | 18 7                      | 1 10                |
|                                                                                         | Czernichów 1899 | 6 4             | 21 5            | 23 8                      | —                   |
|                                                                                         | Jaćmierz "      | 24 4            | 16 5            | 23 7                      | 30 9                |
|                                                                                         | Oźydów "        | 15 4            | 12 5            | 18 7                      | 20 10               |
| 20. Jaskier ziarno-<br>płon<br><i>Ranunculus</i><br><i>Ficaria</i><br>Scharbockskraut   | Czernichów 1897 | 6 3             | 12 5            | —                         | —                   |
|                                                                                         | Jaćmierz "      | —               | 16 4            | —                         | —                   |
|                                                                                         | Oźydów "        | 30 3            | 4 5             | —                         | —                   |
|                                                                                         | Czernichów 1898 | 22 2            | 12 4            | —                         | —                   |
|                                                                                         | Oźydów "        | —               | 15 4            | —                         | —                   |
|                                                                                         | Czernichów 1899 | 23 3            | 3 5             | —                         | —                   |
| Oźydów "                                                                                | —               | 15 4            | —               | —                         |                     |
| 21. Jaśmin<br><i>Philadelphus</i><br><i>coronarius</i><br>Gemeiner Pfeiffen-<br>strauch | Czernichów 1897 | 15 4            | 7 6             | —                         | —                   |
|                                                                                         | Jaćmierz "      | —               | 5 6             | —                         | 26 10               |
|                                                                                         | Oźydów "        | 12 4            | 30 5            | —                         | 14 10               |
|                                                                                         | Czernichów 1898 | 21 4            | 2 6             | —                         | —                   |
|                                                                                         | Oźydów "        | 21 4            | 5 6             | —                         | 15 10               |
|                                                                                         | Czernichów 1898 | 2 4             | 8 6             | —                         | —                   |
|                                                                                         | Jaćmierz "      | 20 4            | 15 6            | —                         | 19 10               |
|                                                                                         | Oźydów "        | 17 4            | 30 5            | —                         | 19 10               |
| 22. Jesion<br><i>Fraxinus excel-<br/>sior</i><br>Gemeine Esche                          | Czernichów 1897 | 5 5             | 1 5             | —                         | 24 8<br>— 10 10     |
|                                                                                         | Jaćmierz "      | 8 5             | 27 4            | 24 9                      | 13 10<br>6 10       |
|                                                                                         | Oźydów "        | 25 4            | 24 4            | 6 9                       | 25 18               |
|                                                                                         | Czernichów 1898 | 23 4            | 26 4            | —                         | 30 9                |
|                                                                                         | Oźydów "        | 2 5             | 25 4            | —                         | 18 9                |
|                                                                                         | Czernichów 1889 | 6 5             | 2 5             | —                         | 14 10               |
|                                                                                         | Jaćmierz "      | 8 5             | 2 5             | —                         | 25 9                |
|                                                                                         | Oźydów "        | 9 5             | 8 4             | —                         | —                   |
| 23. Kalina<br><i>Viburnum Opulus</i><br>Gem. Schneeball-<br>strauch                     | Czernichów 1897 | —               | 27 5            | —                         | —                   |
|                                                                                         | Oźydów "        | —               | 22 5            | 24 9                      | —                   |
|                                                                                         | Czernichów 1898 | —               | 20 5            | —                         | —                   |
|                                                                                         | Oźydów 1899     | —               | 23 5            | —                         | —                   |



| Nazwisko rośliny                                                                               | Miejscowość     | listnie-<br>nie | kwitnic-<br>nie | dojrze-<br>wanie<br>owocu | opada-<br>nie liści |
|------------------------------------------------------------------------------------------------|-----------------|-----------------|-----------------|---------------------------|---------------------|
| 24. Kasztan dziki<br><i>Aesculus</i><br><i>Hippocastanum</i><br>Rosskastanie                   | Czernichów 1897 | 13 4            | 14 5            | 25 9                      | 22 10<br>-3 11      |
|                                                                                                | Jaćmierz "      | 23 4            | 14 5            | 16 9                      | 21 10               |
|                                                                                                | Ożydów "        | 20 4            | 8 5             | 12 9                      | 27 10               |
|                                                                                                | Czernichów 1898 | 12 4            | 8 5             | 19 9                      | —                   |
|                                                                                                | Ożydów "        | 25 4            | 15 5            | 10 9                      | 2 10                |
|                                                                                                | Czernichów 1899 | 15 4            | 12 5            | —                         | 8 10                |
|                                                                                                | Jaćmierz "      | 22 4            | 14 5            | 24 9                      | 8 11                |
|                                                                                                | Ożydów "        | 15 4            | 19 5            | 15 8                      | 18 10               |
| 25. Klon zwy-<br>czajny<br><i>Acer platanoides</i><br>Spitzblättriger<br>Ahorn                 | Czernichów 1897 | 26 4            | 17 4            | —                         | 28 9<br>-24 10      |
|                                                                                                | Ożydów "        | 20 4            | —               | —                         | 1 10                |
|                                                                                                | Czernichów 1898 | 21 4            | 18 4            | —                         | —                   |
|                                                                                                | Ożydów "        | 23 4            | 29 4            | —                         | 28 9                |
|                                                                                                | Czernichów 1899 | 24 4            | 17 4            | —                         | 8 10                |
|                                                                                                | Ożydów "        | —               | 27 4            | —                         | 10 10               |
| 26. Kminek<br><i>Carum carvi</i><br>Gemeiner Kümmel                                            | Czernichów 1897 | —               | 23 5            | —                         | —                   |
|                                                                                                | Ożydów "        | —               | 1 6             | —                         | —                   |
|                                                                                                | Ożydów 1898     | —               | 15 5            | —                         | —                   |
| 27. Knieć błotna<br>(Kaczyniec błotny)<br><i>Caltha palustris</i><br>Gemeine Dotter-<br>blumme | Czernichów 1897 | —               | 2 5             | —                         | —                   |
|                                                                                                | Ożydów "        | 8 4             | 18 4            | —                         | —                   |
|                                                                                                | Czernichów 1898 | —               | 5 5             | —                         | —                   |
|                                                                                                | Ożydów "        | 17 4            | 25 4            | —                         | —                   |
|                                                                                                | Ożydów 1899     | —               | 15 4            | —                         | —                   |
| 28. Koniczyna<br>łakowa<br><i>Trifolium pra-<br/>tense</i><br>Wiesenklee                       | Czernichów 1897 | —               | 12 6            | —                         | —                   |
|                                                                                                | Ożydów "        | 2 4             | 31 5            | —                         | —                   |
|                                                                                                | Czernichów 1898 | —               | 6 8             | —                         | —                   |
|                                                                                                | Ożydów "        | 4 4             | 26 5            | —                         | —                   |
|                                                                                                | Czernichów 1899 | 10 3            | 25 5            | 2 9                       | —                   |
| 29. Konwalia la-<br>nuszka<br><i>Convallaria</i><br><i>majalis</i><br>Maiglöckchen             | Czernichów 1897 | 23 4            | 15 5            | —                         | —                   |
|                                                                                                | Jaćmierz "      | —               | 21 5            | —                         | —                   |
|                                                                                                | Ożydów "        | 24 4            | 8 5             | —                         | —                   |
|                                                                                                | Czernichów 1898 | 16 4            | 9 5             | 30 9                      | —                   |
|                                                                                                | Ożydów "        | 4 4             | 16 5            | —                         | —                   |
|                                                                                                | Czernichów 1899 | 15 4            | 7 5             | 27 9                      | —                   |
| Ożydów "                                                                                       | —               | 9 5             | —               | —                         |                     |

| Nazwisko rośliny                                                                 | Miejscowość     | listnie-<br>nie | kwitnie-<br>nie | dojrze-<br>wanie<br>owocu | opada-<br>nie liści |
|----------------------------------------------------------------------------------|-----------------|-----------------|-----------------|---------------------------|---------------------|
| 30. Kukurudza<br><i>Zea Mays</i><br>Türkisches Korn                              | Czernichów 1897 | —               | 17 7            | 15 9                      | —                   |
|                                                                                  | Oźydów "        | 18 5            | —               | 21 8                      | 28 9                |
|                                                                                  | Oźydów 1898     | 18 5            | —               | 30 8                      | —                   |
|                                                                                  | Oźydów 1899     | 16 5            | 4 7             | 28 8                      | —                   |
| 31. Leszczyna<br><i>Coryllus avellana</i><br>Gemeine Haselnuss                   | Czernichów 1897 | 2 4             | 15 3            | —                         | 28 10               |
|                                                                                  | Jaćmierz "      | 28 4            | 14 3            | 12 9                      | 24 10               |
|                                                                                  | Oźydów "        | 1 4             | 14 3            | 24 8                      | 20 10               |
|                                                                                  | Czernichów 1898 | 12 4            | 27 2            | —                         | —                   |
|                                                                                  | Oźydów "        | 26 4            | 15 3            | 2 9                       | 16 10               |
|                                                                                  | Czernichów 1899 | 11 4            | 5 2             | —                         | 15 10               |
|                                                                                  | Jaćmierz "      | 26 4            | 11 3            | 10 9                      | 4 11                |
| Oźydów "                                                                         | 8 4             | 15 2            | 25 8            | 15 10                     |                     |
| 32. Lipa drobno-<br>listna<br><i>Tilia parvifolia</i><br>Kleinblättrige<br>Linde | Czernichów 1897 | 16 4            | 3 7             | —                         | —                   |
|                                                                                  | Oźydów "        | 23 4            | 24 6            | —                         | —                   |
|                                                                                  | Czernichów 1898 | 26 4            | 29 6            | —                         | —                   |
|                                                                                  | Oźydów "        | 2 5             | 1 7             | —                         | —                   |
|                                                                                  | Czernichów 1899 | 6 5             | —               | —                         | 7 11                |
|                                                                                  | Oźydów "        | 27 4            | 4 7             | —                         | 20 10               |
| 33. Malina<br><i>Rubus Idaeus</i><br>Gemeine Himbeere                            | Czernichów 1897 | 28 3            | 28 5            | 8 7                       | —                   |
|                                                                                  | Oźydów "        | 6 4             | 20 5            | 1 7                       | 30 11               |
|                                                                                  | Czernichów 1898 | 20 3            | 21 5            | 25 6                      | —                   |
|                                                                                  | Oźydów "        | 18 4            | 1 6             | 8 7                       | 2 11                |
|                                                                                  | Czernichów 1899 | 1 4             | 24 5            | 5 7                       | —                   |
| Oźydów "                                                                         | 10 4            | 10 5            | 15 7            | 30 10                     |                     |
| 34. Modrzew<br><i>Pinus Larix</i><br>Lärchenbaum                                 | Czernichów 1897 | 4 4             | —               | —                         | —                   |
|                                                                                  | Jaćmierz "      | 20 4            | 1 4             | —                         | 16 10               |
|                                                                                  | Czernichów 1898 | 15 3            | —               | —                         | —                   |
|                                                                                  | Czernichów 1899 | 27 3            | 21 4            | —                         | —                   |
|                                                                                  | Jaćmierz "      | 19 4            | 17 4            | —                         | 25 10               |
| 35. Morwa biała<br><i>Morus alba</i><br>Weisse Maulbeere                         | Czernichów 1897 | 6 5             | 28 5            | 5 7                       | —                   |
|                                                                                  | Oźydów "        | 3 5             | 20 5            | —                         | 20 10               |
|                                                                                  | Czernichów 1898 | 4 5             | 17 5            | 20 6                      | 21 10               |
|                                                                                  | Oźydów "        | 14 5            | 25 5            | 11 7                      | 8 10                |
|                                                                                  | Czernichów 1899 | 11 5            | 20 5            | 6 8                       | —                   |
| Oźydów "                                                                         | 11 5            | 24 5            | —               | 22 10                     |                     |

| Nazwisko rośliny                                                             | Miejscowość     | listnie-<br>nie | kwitnie-<br>nie | dojrze-<br>wanie<br>owocu | opada-<br>nie liści |
|------------------------------------------------------------------------------|-----------------|-----------------|-----------------|---------------------------|---------------------|
| 36. Narcyz<br><i>Narcissus poeticus</i><br>Rothrandige Nar-<br>cisse         | Czernichów 1897 | 20 2            | 26 4            | —                         | —                   |
|                                                                              | Jaćmierz "      | —               | 7 5             | —                         | —                   |
|                                                                              | Ożydów "        | 4 4             | 8 5             | —                         | —                   |
|                                                                              | Czernichów 1898 | —               | 23 4            | —                         | —                   |
|                                                                              | Ożydów "        | —               | 4 5             | —                         | —                   |
|                                                                              | Czernichów 1899 | 31 1            | 21 4            | —                         | —                   |
|                                                                              | Jaćmierz "      | —               | 10 5            | —                         | —                   |
| Ożydów "                                                                     | —               | 8 4             | —               | —                         |                     |
| 37. Orzech włoski<br><i>Juglans regia</i><br>Gemeine Wallnuss                | Czernichów 1897 | 19 4            | —               | —                         | 11 10               |
|                                                                              | Jaćmierz "      | 4 5             | —               | —                         | 18 10               |
|                                                                              | Ożydów "        | 4 5             | 8 5             | 14 9                      | 22 10               |
|                                                                              | Czernichów 1898 | 26 4            | —               | 18 9                      | —                   |
|                                                                              | Ożydów "        | 12 5            | —               | 16 9                      | 6 10                |
|                                                                              | Czernichów 1899 | 23 4            | —               | —                         | —                   |
|                                                                              | Jaćmierz "      | 9 5             | 4 5             | 14 9                      | 29 10               |
| Ożydów "                                                                     | 6 5             | —               | 12 9            | 23 10                     |                     |
| 38. Owies<br><i>Avena sativa</i><br>Gebauter Hafer                           | Ożydów 1897     | 12 4            | —               | —                         | —                   |
|                                                                              | Czernichów 1898 | —               | —               | 11 8                      | —                   |
|                                                                              | Ożydów "        | 14 4            | —               | 9 8                       | —                   |
|                                                                              | Czernichów 1899 | 30 4            | —               | —                         | —                   |
|                                                                              | Jaćmierz "      | 18 4            | —               | 7 8                       | —                   |
| Ożydów "                                                                     | 16 4            | —               | 21 8            | —                         |                     |
| 39. Pierwiosnka<br>pospolita<br><i>Primula officinalis</i><br>Gemeine Primel | Czernichów 1897 | 6 3             | 18 4            | —                         | —                   |
|                                                                              | Jaćmierz "      | 31 3            | 13 4            | —                         | —                   |
|                                                                              | Czernichów 1899 | —               | 20 4            | 20 7                      | —                   |
|                                                                              | Ożydów "        | 16 3            | —               | —                         | —                   |
|                                                                              | Czernichów 1899 | —               | 16 3            | —                         | —                   |
| Ożydów "                                                                     | —               | 12 3            | —               | —                         |                     |
| 40. Pierwiosnka<br>większa<br><i>Primula elatior</i><br>Hohe Primel          | Czernichów 1897 | 4 3             | 23 4            | —                         | —                   |
|                                                                              | Ożydów "        | —               | 20 4            | —                         | —                   |
|                                                                              | Czernichów 1898 | 25 2            | 18 4            | 20 7                      | —                   |
|                                                                              | Ożydów "        | 21 3            | —               | —                         | —                   |
|                                                                              | Czernichów 1899 | —               | 10 4            | 20 6                      | —                   |

| Nazwisko rośliny                                                                        | Miejscowość     | listnie<br>nie | kwitnie<br>nie | d ojrze-<br>wanie<br>owocu | opada-<br>nie liści |
|-----------------------------------------------------------------------------------------|-----------------|----------------|----------------|----------------------------|---------------------|
| 41. Piwonia lekar-<br>ska<br><i>Paeonia offici-<br/>nalis</i><br>Gemeine Gichtrose      | Czernichów 1897 | 31 3           | 20 5           | —                          | —                   |
|                                                                                         | Oźydów "        | 29 3           | 28 5           | —                          | —                   |
|                                                                                         | Czernichów 1898 | 21 3           | 18 5           | —                          | —                   |
|                                                                                         | Oźydów "        | 2 4            | 3 6            | —                          | —                   |
|                                                                                         | Czernichów 1899 | 12 3           | 12 5           | —                          | —                   |
|                                                                                         | Jaćmierz "      | 28 4           | 29 5           | —                          | 29 10               |
| Oźydów "                                                                                | 8 4             | 18 5           | —              | —                          |                     |
| 42. Porzeczka<br><i>Ribes rubrum</i><br>Gemeine Johannis-<br>beere                      | Czernichów 1897 | 2 4            | 18 4           | 4 7                        | 12 25<br>— 10       |
|                                                                                         | Jaćmierz "      | 13 4           | 29 4           | 5 7                        | 27 10               |
|                                                                                         | Oźydów "        | 8 4            | 27 4           | 19 6                       | 10 10               |
|                                                                                         | Czernichów 1898 | 28 3           | 18 4           | 21 6                       | 15 8                |
|                                                                                         | Oźydów "        | 17 4           | 4 5            | 30 6                       | 2 10                |
|                                                                                         | Czernichów 1899 | 15 3           | 18 4           | 22 6                       | 15 7                |
|                                                                                         | Jaćmierz "      | 19 4           | 24 4           | 5 7                        | 2 10                |
| Oźydów "                                                                                | 18 4            | 22 4           | 29 6           | 24 9                       |                     |
| 43. Poziomka ja-<br>dalna<br><i>Fragaria vesca</i><br>Wilde Erdbeere                    | Czernichów 1897 | 4 3            | 1 5            | 12 6                       | —                   |
|                                                                                         | Oźydów "        | 29 3           | 10 5           | 16 6                       | 10 11               |
|                                                                                         | Czernichów 1898 | 10 3           | 27 4           | 2 6                        | —                   |
|                                                                                         | Oźydów "        | 3 4            | 29 4           | 16 6                       | —                   |
|                                                                                         | Czernichów 1899 | 10 3           | 2 5            | 14 6                       | —                   |
|                                                                                         | Oźydów "        | 6 4            | 4 5            | 20 6                       | —                   |
| 44. Przyłuszczak<br>trojanek<br><i>Hepatica triloba</i><br>Dreilappiges Leber-<br>kraut | Czernichów 1897 | 5 4            | 14 3           | —                          | —                   |
|                                                                                         | Oźydów "        | —              | 19 3           | —                          | —                   |
|                                                                                         | Czernichów 1898 | 17 3           | 5 3            | —                          | —                   |
|                                                                                         | Czernichów 1899 | 6 4            | 7 3            | —                          | —                   |
|                                                                                         | Oźydów "        | 30 3           | 16 3           | —                          | —                   |
| 45. Pszenica ozima<br><i>Triticum vulgare<br/>hibernum</i><br>Winterweizen              | Jaćmierz 1897   | —              | 15 6           | —                          | —                   |
|                                                                                         | Oźydów "        | 6 4            | —              | 22 7                       | —                   |
|                                                                                         | Oźydów 1898     | 6 4            | 16 6           | 17 7                       | —                   |
|                                                                                         | Czernichów 1899 | —              | —              | 5 8                        | —                   |
|                                                                                         | Jaćmierz "      | —              | 18 6           | 29 7                       | —                   |
|                                                                                         | Oźydów "        | 2 4            | 12 6           | 24 7                       | —                   |
| 46. Róża dzika<br><i>Rosa canina</i><br>Hundsrose                                       | Czernichów 1897 | 8 4            | 10 6           | 12 9                       | 27 10               |
|                                                                                         | Jaćmierz "      | —              | 7 6            | —                          | 28 10               |
|                                                                                         | Oźydów "        | 19 4           | 28 5           | 10 10                      | 20 10               |
|                                                                                         | Czernichów 1898 | 24 3           | 7 6            | 5 10                       | —                   |
|                                                                                         | Oźydów "        | 26 4           | 8 6            | —                          | 26 10               |
|                                                                                         | Czernichów 1899 | 12 4           | 9 6            | 15 9                       | —                   |
|                                                                                         | Oźydów "        | 15 4           | 5 6            | 1 10                       | 25 10               |

| Nazwisko rośliny                                                                             | Miejscowość     | listnie-<br>nie | kwitnie-<br>nie | dojrze-<br>wanie<br>owocu | opada-<br>nie liści |
|----------------------------------------------------------------------------------------------|-----------------|-----------------|-----------------|---------------------------|---------------------|
| 47. Róża ogro-<br>dowa<br><i>Rosa centifolia</i><br>Gartenrose                               | Czernichów 1897 | 8 4             | 4 6             | —                         | 30 10               |
|                                                                                              | Jaćmierz "      | —               | 13 6            | —                         | 30 10               |
|                                                                                              | Ożydów "        | 24 4            | 8 6             | —                         | —                   |
|                                                                                              | Czernichów 1898 | 26 3            | 18 6            | —                         | —                   |
|                                                                                              | Ożydów "        | 27 4            | 18 6            | —                         | 3 11                |
|                                                                                              | Czernichów 1899 | 15 4            | 16 6            | —                         | —                   |
|                                                                                              | Jaćmierz "      | —               | 3 6             | —                         | —                   |
| Ożydów "                                                                                     | 20 4            | 14 6            | —               | —                         |                     |
| 48. Śliwa<br><i>Prunus domestica</i><br>Gemeine Pflaume                                      | Czernichów 1897 | 19 4            | 29 4            | 10 9                      | 18 10<br>— 2 11     |
|                                                                                              | Jaćmierz "      | 30 4            | 8 5             | 20 9                      | 25 9                |
|                                                                                              | Ożydów "        | 25 4            | 8 5             | 12 9                      | 6 10                |
|                                                                                              | Czernichów 1898 | 20 4            | 26 4            | 8 9                       | 20 9                |
|                                                                                              | Ożydów "        | 2 5             | 12 5            | 8 9                       | 12 10               |
|                                                                                              | Czernichów 1898 | 16 4            | 25 4            | 8 9                       | —                   |
|                                                                                              | Jaćmierz "      | 27 4            | 5 5             | 12 9                      | 10 10               |
| Ożydów "                                                                                     | 20 4            | 26 4            | 12 9            | 2 10                      |                     |
| 49. Storczyk sze-<br>rokolistny<br><i>Orchis latifolia</i><br>Breitblätter. Kna-<br>benkraut | Czernichów 1895 | —               | 20 5            | —                         | —                   |
|                                                                                              | Ożydów "        | —               | 16 6            | —                         | —                   |
|                                                                                              | Czernichów 1899 | —               | 21 5            | —                         | —                   |
|                                                                                              | Ożydów "        | 10 4            | 12 5            | —                         | —                   |
| 50. Tarnina<br><i>Prunus spinosa</i><br>Schlehenpflaume                                      | Czernichów 1867 | —               | 26 4            | —                         | —                   |
|                                                                                              | Jaćmierz "      | —               | 2 5             | —                         | —                   |
|                                                                                              | Ożydów "        | 18 4            | 3 5             | 1 9                       | 13 10               |
|                                                                                              | Czernichów 1898 | —               | 25 4            | —                         | —                   |
|                                                                                              | Ożydów "        | 2 5             | 1 5             | —                         | 21 10               |
|                                                                                              | Czernichów 1899 | —               | 26 4            | —                         | —                   |
|                                                                                              | Jaćmierz "      | —               | 28 4            | —                         | —                   |
| Ożydów "                                                                                     | 21 4            | 28 4            | 1 9             | 21 10                     |                     |
| 51. Topola czarna<br><i>Populus nigra</i><br>Schwarze Pappel                                 | Jaćmierz 1897   | 3 5             | —               | —                         | 13 10               |
|                                                                                              | Ożydów "        | 20 4            | —               | —                         | 28 9                |
|                                                                                              | Ożydów 1898     | 23 4            | —               | —                         | 19 10               |
|                                                                                              | Ożydów 1899     | —               | 16 4            | —                         | 21 10               |

| Nazwisko rośliny                                                                      | Miejscowość     | listni-<br>nie | kwitnie-<br>nie | dojrze-<br>wanie<br>owocu | opada-<br>nie liści |
|---------------------------------------------------------------------------------------|-----------------|----------------|-----------------|---------------------------|---------------------|
| 52. Trześń<br><i>Prunus avium</i><br>Süsse Kirsche                                    | Czernichów 1897 | 20 4           | 28 4            | 6 7                       | 30 10               |
|                                                                                       | Jaćmierz "      | 21 4           | 29 4            | 25 6                      | 15 10               |
|                                                                                       | Ożydów "        | 28 4           | 6 5             | 18 6                      | 15 10               |
|                                                                                       | Czernichów 1898 | 17 4           | 25 4            | 20 6                      | 25 10               |
|                                                                                       | Ożydów "        | 28 4           | 6 5             | 25 6                      | 17 10               |
|                                                                                       | Czernichów 1899 | 13 4           | 25 4            | 20 6                      | 15 11               |
|                                                                                       | Ożydów "        | 22 4           | 26 4            | 4 7                       | 18 10               |
| Ożydów "                                                                              | 20 4            | 22 4           | 25 6            | 18 10                     |                     |
| 53. Wawrzynek<br>(wilcze łyko)<br><i>Daphne Mezereum</i><br>Gemeiner Seidel-<br>bast  | Czernichów 1898 | —              | 31 3            | —                         | —                   |
|                                                                                       | Ożydów "        | —              | 18 3            | —                         | —                   |
|                                                                                       | Ożydów 1899     | —              | 12 2            | —                         | —                   |
| 54. Wiciokrzew<br><i>Lonicera Xylo-<br/>steum</i><br>Gemeine Hecken-<br>kirsche       | Czernichów 1897 | 31 3           | 5 6             | 20 9                      | 1 11                |
|                                                                                       | Ożydów "        | 10 4           | 26 5            | —                         | —                   |
|                                                                                       | Ożydów 1898     | 15 4           | 15 5            | —                         | —                   |
|                                                                                       | Ożydów 1899     | 9 4            | 12 5            | —                         | 10 10               |
| 55. Wierzba migda-<br>łolistna<br><i>Salix amygdalina</i><br>Mandelblättrige<br>Weide | Jaćmierz 1897   | 20 4           | —               | —                         | 25 10               |
|                                                                                       | Ożydów "        | 15 4           | —               | —                         | 4 10                |
|                                                                                       | Czernichów 1898 | 19 4           | —               | —                         | —                   |
|                                                                                       | Czernichów 1899 | —              | 14 3            | —                         | —                   |
|                                                                                       |                 |                |                 |                           |                     |
| 56. Winograd wi-<br>norodny<br><i>Vitis vinifera</i><br>Gemeiner Wein-<br>stock       | Czernichów 1897 | 18 5           | 15 6            | 26 9                      | 31 10               |
|                                                                                       | Ożydów "        | 11 5           | 20 6            | 1 10                      | 30 10               |
|                                                                                       | Ożydów 1898     | 17 5           | 1 6             | 16 9                      | 11 10               |
|                                                                                       | Czernichów 1899 | 25 4           | —               | —                         | —                   |
|                                                                                       | Ożydów "        | 14 5           | 12 6            | 21 9                      | —                   |
| 57. Wiśnia<br><i>Prunus Cerasus</i><br>Weichsel                                       | Czernichów 1897 | 20 4           | 27 4            | 2 7                       | —                   |
|                                                                                       | Jaćmierz "      | 29 4           | 4 5             | 17 6                      | 28 10               |
|                                                                                       | Ożydów "        | 20 4           | 2 5             | 2 7                       | 6 11                |
|                                                                                       | Czernichów 1898 | 15 4           | 2 5             | 29 6                      | 22 10               |
|                                                                                       | Ożydów "        | 27 4           | 9 5             | 8 7                       | 15 10               |
|                                                                                       | Czernichów 1899 | 11 4           | 30 4            | 18 7                      | —                   |
|                                                                                       | Ożydów "        | 3 5            | 6 5             | 8 7                       | 3 11                |
| Ożydów "                                                                              | 21 4            | 28 4           | 16 7            | 23 10                     |                     |

| Nazwisko rośliny                                                          | Miejscowość     | listnie-<br>nie | kwitnie-<br>nie | dojrze-<br>wanie<br>owocu | opada-<br>nie liści |
|---------------------------------------------------------------------------|-----------------|-----------------|-----------------|---------------------------|---------------------|
| 58. Ziemniak<br>psianka<br><i>Solanum tubero-<br/>sum</i><br>Kartoffel    | Czernichów 1897 | 1 5             | 11 6            | 3 7                       | 15 9                |
|                                                                           | Jaćmierz "      | —               | 16 6            | —                         | —                   |
|                                                                           | Ożydów "        | 18 5            | 15 6            | —                         | —                   |
|                                                                           | Czernichów 1898 | 28 4            | 3 6             | 30 6                      | —                   |
|                                                                           | Ożydów "        | 15 5            | 24 6            | 29 7                      | —                   |
|                                                                           | Czernichów 1899 | 1 5             | 11 6            | 23 6                      | 17 8                |
|                                                                           | Jaćmierz "      | —               | 21 6            | —                         | —                   |
|                                                                           | Ożydów "        | 8 5             | 15 6            | 29 9                      | —                   |
| 59. Żyto ozime<br><i>Secale cereale</i><br><i>hibernum</i><br>Winterrogen | Ożydów 1897     | 25 3            | 26 5            | 20 7                      | —                   |
|                                                                           | Ożydów 1898     | 3 4             | 1 6             | 16 7                      | —                   |
|                                                                           | Jaćmierz 1899   | —               | 24 5            | 12 7                      | —                   |
|                                                                           | Ożydów "        | 3 4             | 23 5            | 24 7                      | —                   |

## 2. Rośliny uważane tylko w poszczególnych miejscowościach<sup>1)</sup>

### a) w Czernichowie.

Rok 1897. *Acer pseudoplatanus* l. 28 IV. — *Anemone nemorosa* k. 1 IV.  
*Calluna vulgaris* k. 24 VII. — *Centaurea argentea* l. 28 II, k. 23 V, — *Cytisus Laburnum* l. 2 IV.  
*Daucus Carota* l. 15 IV. — *Digitalis grandiflora* k. 24 VI, o. 3 VII — *Dyclitra spectabilis* l. 3 III, k. 27 IV.  
*Evonymus europaeus* l. 15 IV, k. 20 V, d. 23 IX. o. 16 X.  
*Haemerocallis fulva* l. 10 VII, k. 27 VI. — *Hypericum perforatum* k. 8 VII.  
*Iris germanica* l. 2 III, k. 26 V.  
*Nuphar luteum* k. 20 VI.  
*Phlox paniculata* l. 15 III, k. 14 VI, o. 15 XI. — *Pinus picea* l. 29 IV. — *Polygonum orientale* l. 2 IV, k. 10 IX.  
*Rheum undulatum* l. 17 III, k. 17 V.  
*Spiraea prunifolia* l. 27 III, k. 10 V, o. 8 X. — *Spiraea sorbifolia* l. 25 III, k. 23 VI.

<sup>1)</sup> Głoska l znaczy listnienie, k kwitnienie, d dojrzewanie owocu, o opadanie liści.

*Tanacetum vulgare* l. 10 IV, k. 16 VII.

*Ulmus campestris* l. 22 IV.

*Waigelia versicolor* l. 14 V, k. 23 V.

Hyacyny (w gruncie) l. 5 III, k. 16 IV. — Krokusy (w gruncie) l. 5 III, k. 22 III. — Szparagi l. 8 V, k. 30 V. — Truskawki l. 2 III, k. 1 V, d. 11 VI. — Tulipany (w gruncie) l. 12 III, k. 27 IV. — Wino dzikie l. 30 V, k. 9 VII, d. 27 IX, o. 19 X.

Rok 1898. *Acer pseudoplatanus* l. 25 IV. — *Anemone nemorosa* k. 31 III.

*Centaurea argentea* l. 3 III, k. 10 V. — *Colchicum autumnale* k. 12 XI. — *Cornus sanguinea* l. 1 IV, k. 9 VI. — *Cytisus Laburnum* l. 26 III, k. 8 V, o. 20 IX. — *Cydonia japonica* l. 2 IV, k. 1 V.

*Digitalis grandiflora* k. 8 VI. — *Dyclitra spectabilis* l. 1 III, k. 19 IV, o. 5 VII.

*Evonymus europaeus* l. 12 IV.

*Juniperus communis* l. 23 IV.

*Phlox paniculata* l. 16 III, k. 28 VII. — *Pinus Abies* l. 27 IV. — *Pinus silvestris* k. 14 V. — *Polygonum orientale* l. 28 III.

*Rheum undulatum* l. 27 II, k. 30 IV.

*Spiraea prunifolia* l. 30 III, k. 4 V. — *Spiraea sorbifolia* l. 15 II, k. 15 VI, o. 1 X.

*Tanacetum vulgare* k. 18 VII. — *Triticum vulgare aestivum* d. 27 VII. — *Tussilago Farfara* l. 10 V, k. 25 III.

*Ulmus campestris* l. 19 IV.

*Waigelia versicolor* l. 2 IV, k. 22 V.

Hyacyny (w gruncie) l. 26 II, k. 11 IV. — Krokusy (w gruncie) l. 24 II, k. 24 III. — Paproć l. 24 IV. — Powój biały l. 3 V, k. 17 VI. — Szparagi l. 6 VI, d. 15 X. — Tulipany (w gruncie) l. 3 III, k. 27 IV. — Wino dzikie l. 30 IV, k. 1 VII, o. 7 X.

Rok 1899. *Acer pseudoplatanus* l. 3 V, k. 14 V, o. 8 X. — *Anemone nemorosa* k. 28 III. — *Aquilegia* k. 21 V.

*Cullana vulgaris* l. 4 V, k. 8 VIII. — *Centaurea argentea* l. 12 II, k. 16 V, o. 24 VIII. — *Cytisus Laburnum* l. 9 IV, k. 8 V, o. 20 IX. — *Cornus sanguinea* l. 8 IV, k. 10 VI, o. 26 X. — *Cydonia japonica* l. 12 III, k. 6 V.

*Daucus Carota* l. 4 V. — *Digitalis grandiflora* k. 26 VI. — *Dyclitra spectabilis* l. 7 III, k. 25 IV, o. 15 VI.



- Haemerocallis fulva* l. 14 II. — *Hordeum vulgare hibernum* d. 8 VIII.  
*Iris germanica* l. 2 III, k. 31 V.  
*Juniperus communis* l. 27 IV, k. 5 V.  
*Lilium Tumbergianum* l. 12 IV, k. 18 VI. — *Lonicera Coprifolium* k. 23 V.  
*Persica vulgaris* k. 15 IV, d. 12 IX. — *Phlox paniculata* l. 6 III, k. 4 VIII. — *Pinus Abies* l. 28 IV. — *Pinus silvestris* l. 29 IV, k. 8 VIII. — *Polygonum orientale* l. 13 IV.  
*Rheum undulatum* l. 4 II, k. 15 V, o. 30 VII. — *Ribes aureum* l. 18 II, k. 20 IV.  
*Spiraea prunifolia* l. 16 III, k. 5 V, o. 8 X. — *Spiraea sorbifolia* l. 20 I, k. 16 VI, o. 12 IX.  
*Tanacetum vulgare* l. 28 III.  
*Waigelia versicolor* l. 15 IV, k. 26 V.  
 Chrzan l. 13 III, k. 28 V, — Hyacynty (w gruncie) l. 9 II, k. 7 IV. — Korona cesarska l. 12 III. — Krokusy l. 9 II, k. 14 III. — Lubin niebieski l. 1 III, k. 24 V. — Niezapominajka ogrodowa k. 17 IV. — Paproć l. 23 IV. — Poziomka ogrodowa k. 25 IV. — Szczypiórek l. 10 III, k. 23 V. — Szparagi l. 15 V, k. 12 VI. — Tulipany l. 2 III, k. 27 IV. — Wino dzikie l. 30 IV, k. 16 VII, o. 8 X.

β) w Jaćmierzu.

- Rok 1897. *Carpinus betulus* l. 26 IV, o. 14 X.  
 Rok 1899. *Hordeum vulgare aestivum* d. 27 VII.  
*Pinus picea* l. 19 V, k. 22 V, d. 15 VI, o. 8. XI.

γ) w Ożydowie.

- Rok 1897. *Alnus glutinosa* l. 24 IV, o. 26 X.  
*Bellis perennis* k. 30 III.  
*Cornus mas* l. 27 IV, k. 5 IV, d. 10 IX, o. 12 X.  
*Galanthus nivalis* l. 25 III, k. 31 III.  
*Leucojum vernalis* l. 12 III, k. 16 III. — *Linum usitatissimum* l. 28 IV, o. 25 IX.  
*Persica vulgaris* l. 28 IV, d. 10 IX.  
*Quercus pedunculata* k. 11 V.  
*Secale cereale aestivum* l. 10 IV, k. 5 VI, d. 28 VII.  
 Rok 1898. *Carpinus betulus* o. 10 X. — *Cornus mas* l. 5 V, k. 3 IV, d. 5 IX, o. 26 X.  
*Daucus Carota* l. 3. V.

*Hordeum vulgare aestivum* l. 28 IV, d. 20 VII.

*Iris germanica* k. 18 V.

*Leucojum vernum* k. 3 III. — *Linum usitatissimum*  
k. 3 VI.

*Persica vulgaris* l. 20 IV. — *Populus tremula* l. 25 IV.

*Quercus pedunculata* l. 15 V, k. 10 V.

*Sambucus racemosa* k. 18 V. — *Secale cereale aestivum*  
l. 26 IV.

*Triticum vulgare aestivum* l. 26 IV, k. 30 VI, d. 8 VII.

Rok 1899. *Alnus glutinosa* l. 19 IV, k. 20 III, o. 19 IX.

*Bellis perennis* k. 11 III.

*Cornus mas* l. 24 IV, k. 16 III, d. 1 IX, o. 15 X.

*Daucus Carota* l. 6 V.

*Hordeum vulgare aestivum* l. 20 IV, d. 25 VII.

*Leucojum vernum* l. 24 II, k. 8 III. — *Linum usita-*  
*tissimum* l. 15 V, k. 24 VI.

*Pinus silvestris* k. 2 V.

*Quercus pedunculata* l. 3 V.

*Rhamnus frangula* l. 8 IV, k. 14 V, o. 20 X.

*Sambucus racemosa* l. 10 IV, k. 20 V. — *Secale ce-*  
*reale aestivum* l. 8 IV, k. 5 VI, d. 16 VII.

*Triticum vulgare aestivum* l. 20 IV.

## II. Spostrzeżenia pojavów w świecie zwierzęcym.

Spostrzeżenia te otrzymała Komisya fizyograficzna z tych samych miejsc i od tychże osób co i spostrzeżenia pojavów w świecie roślinnym.

W tablicach następujących pierwsza liczba oznacza dzień, druga miesiąc pojavu w nagłówku wymienionego.

### 1. Pojawy wspólnie uważane.

#### a) Czas przylotu i odlotu ptaków.

| Nazwisko ptaka                                                       | Miejscowość                  | Czas przylotu | Czas odlotu |
|----------------------------------------------------------------------|------------------------------|---------------|-------------|
| 1. Bekas Krzyk<br><i>Scelopax Gallinago</i><br>Gemeine Sumpfschnepfe | Ożydów 1898<br>Jaćmierz 1899 | 1 4<br>28 3   | —<br>4 11   |

| Nazwisko ptaka                                                 | Miejscowość     | Czas przylotu | Czas odlotu |
|----------------------------------------------------------------|-----------------|---------------|-------------|
| 2. Bocian biały<br><i>Ciconia alba</i><br>Weisser Storch       | Czernichów 1897 | 29 3          | 23 8        |
|                                                                | Oźydów "        | 17 3          | 22 8        |
|                                                                | Czernichów 1898 | 25 3          | 23 8        |
|                                                                | Oźydów "        | 22 3          | 19 8        |
|                                                                | Czernichów 1899 | 5 4           | 22 8        |
|                                                                | Jaćmierz "      | 29 3          | 21 8        |
|                                                                | Oźydów "        | 30 3          | 28 8        |
| 3. Czapla siwa<br><i>Ardea cinerea</i><br>Grauer Reiher        | Oźydów 1898     | 15 3          | —           |
|                                                                | Jaćmierz 1899   | 19 3          | 8 10        |
| 4. Czajka<br><i>Vanellus cristatus</i><br>Kiebitz              | Oźydów 1897     | 1 3           | 4 9         |
|                                                                | Oźydów 1898     | 17 3          | 12 9        |
|                                                                | Jaćmierz 1899   | 19 3          | 8 10        |
|                                                                | Oźydów "        | 22 3          | 4 10        |
| 5. Derkacz chruściel<br><i>Gallinula Crex</i><br>Wachtelkönig  | Oźydów 1898     | 10 4          | —           |
|                                                                | Jaćmierz 1899   | 9 5           | 18 10       |
| 6. Geś gęgawa<br><i>Anser cinereus</i><br>Graue Gans           | Oźydów 1897     | 20 3          | 9 10        |
|                                                                | Oźydów 1898     | 14 3          | 4 10        |
|                                                                | Jaćmierz 1899   | 16 3          | 9 10        |
|                                                                | Oźydów "        | 1 4           | —           |
| 7. Gołąb Hurkot<br><i>Columba Oenas</i><br>Holztaube           | Oźydów 1897     | 1 3           | —           |
|                                                                | Jaćmierz 1899   | 11 4          | 6 10        |
| 8. Jaskółka dymówka<br><i>Hirundo rustica</i><br>Rauchschwalbe | Oźydów 1897     | 14 4          | 14 9        |
|                                                                | Czernichów 1898 | 18 4          | —           |
|                                                                | Oźydów "        | 14 4          | —           |
|                                                                | Jaćmierz 1899   | 15 4          | 22 9        |
|                                                                | Oźydów "        | 15 4          | 1 9         |
| 9. Jaskółka oknówka<br><i>Hirundo urbica</i><br>Hausschwalbe   | Czernichów 1897 | 23 4          | 18 10       |
|                                                                | Oźydów "        | 20 4          | —           |
|                                                                | Czernichów 1898 | 27 4          | 2 10        |
|                                                                | Oźydów "        | 16 4          | —           |
|                                                                | Czernichów 1899 | 25 4          | 28 9        |
|                                                                | Jaćmierz "      | 16 4          | 29 9        |
|                                                                | Oźydów "        | 11 4          | 35 9        |

| Nazwisko ptaka                                                    | Miejscowość     | Czas przylotu | Czas odlotu |
|-------------------------------------------------------------------|-----------------|---------------|-------------|
| 10. Kaczka dzika<br>(krzyżówka)<br><i>Anser ferus</i><br>Wildente | Czernichów 1897 | 26 7          | —           |
|                                                                   | Ożydów "        | 15 3          | —           |
|                                                                   | Czernichów 1898 | 24 2          | —           |
|                                                                   | Ożydów "        | 16 3          | 4 10        |
|                                                                   | Czernichów 1899 | 17 2          | —           |
|                                                                   | Jaćmierz "      | 18 3          | 30 9        |
| Ożydów "                                                          | 14 3            | —             |             |
| 11. Kukulka<br><i>Cuculus canorus</i><br>Kuckuk                   | Czernichów 1897 | 23 4          | —           |
|                                                                   | Ożydów "        | 30 4          | —           |
|                                                                   | Czernichów 1898 | 28 4          | —           |
|                                                                   | Ożydów "        | 21 4          | —           |
|                                                                   | Czernichów 1899 | 18 4          | —           |
|                                                                   | Jaćmierz "      | 17 4          | 16 9        |
| Ożydów "                                                          | 12 4            | —             |             |
| 12. Pliszka biała<br><i>Motacilla alba</i><br>Weisse Bachstelze   | Ożydów 1897     | 17 3          | 19 9        |
|                                                                   | Czernichów 1898 | 4 3           | —           |
|                                                                   | Ożydów "        | 28 3          | —           |
|                                                                   | Czernichów 1899 | 5 3           | —           |
|                                                                   | Jaćmierz "      | 17 3          | —           |
|                                                                   | Ożydów "        | 4 4           | 3 10        |
| 13. Pokrzywka<br>słowik<br><i>Sylvia luscinia</i><br>Nachtigall   | Ożydów 1897     | 6 5           | 22 8        |
|                                                                   | Ożydów 1898     | 28 4          | —           |
|                                                                   | Jaćmierz 1899   | 18 4          | 10 9        |
|                                                                   | Ożydów "        | 14 4          | —           |
| 14. Przepiórka<br><i>Perdix Coturnix</i><br>Wachtel               | Czernichów 1897 | 15 7          | —           |
|                                                                   | Czernichów 1898 | 29 6          | —           |
|                                                                   | Czernichów 1899 | 7 5           | —           |
|                                                                   | Jaćmierz "      | 24 4          | 25 8        |
|                                                                   | Ożydów "        | 5 5           | —           |
| 15. Skowronek<br>rolnik<br><i>Alauda arvensis</i><br>Feldlerche   | Czernichów 1897 | 24 2          | —           |
|                                                                   | Ożydów "        | 28 2          | —           |
|                                                                   | Ożydów 1898     | 2 3           | —           |
|                                                                   | Czernichów 1899 | 31 1          | —           |
|                                                                   | Jaćmierz "      | 17 2          | 24 8        |
|                                                                   | Ożydów "        | 6 3           | 10 10       |
| 16. Szpak<br><i>Sturnus vulgaris</i><br>Staar                     | Jaćmierz 1899   | 23 4          | 6 10        |
|                                                                   | Ożydów "        | 4 4           | 1 10        |

| Nazwisko ptaka                                       | Miejscowość     | Czas przylotu | Czas odlotu |
|------------------------------------------------------|-----------------|---------------|-------------|
| 17. Turkawka<br><i>Columba turtur</i><br>Turteltaube | Jaćmierz 1897   | 7 5           | 9 10        |
|                                                      | Oźydów "        | 6 4           | —           |
| 18. Wilga<br><i>Oriolus galbula</i><br>Kirschpirol   | Czernichów 1897 | 11 6          | —           |
|                                                      | Czernichów 1898 | 13 5          | —           |
|                                                      | Czernichów 1899 | 5 5           | —           |
|                                                      | Jaćmierz "      | 8 4           | 4 9         |
|                                                      | Oźydów "        | 10 4          | —           |
| 19. Żóraw<br><i>Grus</i><br>Kranich                  | Oźydów 1897     | 15 3          | 2 10        |
|                                                      | Oźydów 1899     | 16 3          | 5 10        |
|                                                      | Jaćmierz 1898   | 4 4           | —           |

## b) Czas pierwszego pojawu ssaków i płazów.

| Nazwisko ssaka<br>albo płazu                                           | Miejscowość     | Czas pierwszego<br>pojawu |
|------------------------------------------------------------------------|-----------------|---------------------------|
| Nietoperz myszatek<br><i>Vespertilio murinus</i><br>Gemeine Fledermaus | Czernichów 1897 | 16 3                      |
|                                                                        | Oźydów "        | 28 3                      |
|                                                                        | Czernichów 1898 | 26 2                      |
|                                                                        | Oźydów "        | 6 4                       |
|                                                                        | Czernichów 1899 | 11 3                      |
|                                                                        | Jaćmierz "      | 12 3                      |
| Jaszczurka zwinka<br><i>Lacerta agilis</i><br>Eidechse                 | Czernichów 1897 | 18 4                      |
|                                                                        | Oźydów "        | 4 5                       |
|                                                                        | Czernichów 1898 | 1 4                       |
|                                                                        | Oźydów "        | 16 4                      |
|                                                                        | Czernichów 1899 | 10 4                      |
|                                                                        | Jaćmierz "      | 15 3                      |
|                                                                        | Oźydów "        | 11 4                      |
| Żaba jadłowka<br><i>Rana esculenta</i><br>Wasserrfrosch                | Czernichów 1867 | 12 4                      |
|                                                                        | Oźydów "        | 1 4                       |
|                                                                        | Czernichów 1898 | 26 3                      |
|                                                                        | Oźydów "        | 15 4                      |
|                                                                        | Jaćmierz 1899   | 14 3                      |
|                                                                        | Oźydów "        | 6 4                       |

## a) Czas pierwszego pojawu owadów.

| Nazwisko owadu                                                                           | Miejscowość     | Czas pierwszego pojawu |
|------------------------------------------------------------------------------------------|-----------------|------------------------|
| 1. Bielinek kapu-<br>stniak<br><i>Pieris Brassicae</i><br>Kohlweisslung                  | Czernichów 1897 | 20 5                   |
|                                                                                          | Oźydów "        | 10 4                   |
|                                                                                          | Czernichów 1898 | 20 4                   |
|                                                                                          | Oźydów "        | 21 4                   |
|                                                                                          | Czernichów 1899 | 12 4                   |
|                                                                                          | Jaćmierz "      | 7 4                    |
|                                                                                          | Oźydów "        | 12 4                   |
| 2. Chrabąszcz<br><i>Melolontha vulgaris</i><br>Maikäfer                                  | Czernichów 1897 | 15 3                   |
|                                                                                          | Oźydów "        | 3 4                    |
|                                                                                          | Czernichów 1898 | 26 4                   |
|                                                                                          | Oźydów "        | 7 5                    |
|                                                                                          | Czernichów 1899 | 25 4                   |
|                                                                                          | Jaćmierz "      | 18 4                   |
|                                                                                          | Oźydów "        | 27 4                   |
| 3. Paź królowy<br><i>Papilio Machaon</i><br>Schwalbenschwanz                             | Oźydów 1897     | 1 5                    |
|                                                                                          | Czernichów 1898 | 12 8                   |
|                                                                                          | Oźydów "        | 10 5                   |
|                                                                                          | Oźydów 1899     | 24 5                   |
| 4. Rusałka Pawik<br><i>Vanessa Io</i><br>Pfauenauge                                      | Oźydów 1897     | 10 4                   |
|                                                                                          | Oźydów 1898     | 31 4                   |
|                                                                                          | Czernichów 1899 | 16 5                   |
|                                                                                          | Jaćmierz "      | 20 5                   |
|                                                                                          | Oźydów "        | 14 4                   |
| 5. Świerszcz polny<br><i>Gryllus campestris</i><br>Feldgrille                            | Czernichów 1897 | 24 6                   |
|                                                                                          | Czernichów 1898 | 28 5                   |
|                                                                                          | Oźydów "        | 22 4                   |
|                                                                                          | Czernichów 1899 | 20 5                   |
|                                                                                          | Jaćmierz "      | 22 5                   |
|                                                                                          | Oźydów "        | 15 5                   |
| 6. Trzmiel<br><i>Bombus terrestris</i><br>Erdhummel                                      | Oźydów 1897     | 15 4                   |
|                                                                                          | Czernichów 1898 | 25 4                   |
|                                                                                          | Oźydów "        | 25 4                   |
|                                                                                          | Czernichów 1899 | 8 4                    |
|                                                                                          | Jaćmierz "      | 8 4                    |
|                                                                                          | Oźydów "        | 19 4                   |
| 7. Trzyszc (pia-<br>skowiec) plamiec<br><i>Cicindela campestris</i><br>Grüner Sandläufer | Czernichów 1897 | 21 5                   |
|                                                                                          | Czernichów 1899 | 11 4                   |
|                                                                                          | Jaćmierz "      | 21 4                   |

## 2. Pojawy uważane tylko w poszczególnych miejscowościach.

## α) w Czernichowie.

|           |        |                               |                |    |     |
|-----------|--------|-------------------------------|----------------|----|-----|
| Rok 1897. | Ptaki: | Pokrzywka mlaskacz . . . . .  | przyłot        | 26 | II  |
|           | Płazy: | Ropucha . . . . .             | pierwszy pojaw | 10 | IV  |
|           | Owady: | Libellula depressa . . . . .  | " "            | 21 | V   |
|           |        | Owłosiak . . . . .            | " "            | 24 | V   |
|           |        | Pszczola . . . . .            | " "            | 15 | III |
|           |        | Rusałka żałobnik . . . . .    | " "            | 29 | V   |
|           |        | Rynnica topolówka . . . . .   | " "            | 26 | VI  |
|           |        | Szczypica wręgatka . . . . .  | " "            | 16 | III |
| Rok 1898. | Ptaki: | Gajówka świstunka . . . . .   | przyłot        | 26 | III |
|           |        | Pokrzywka mlaskacz . . . . .  | " "            | 26 | II  |
|           | Płazy: | Ropucha . . . . .             | pierwszy pojaw | 7  | III |
|           | Owady: | Podrzut . . . . .             | " "            | 30 | VI  |
|           |        | Pszczola . . . . .            | " "            | 27 | III |
|           |        | Szczypica wręgatka . . . . .  | " "            | 2  | III |
| Rok 1899. | Ptaki: | Jerzyk . . . . .              | przyłot        | 17 | IV  |
|           |        | Pokrzywka mlaskacz . . . . .  | " "            | 13 | III |
|           | Płazy: | Ropucha . . . . .             | pierwszy pojaw | 6  | IV  |
|           |        | Skrzeczenie żab . . . . .     | " "            | 18 | IV  |
|           | Owady: | Admirał . . . . .             | " "            | 14 | V   |
|           |        | Apollo . . . . .              | " "            | 18 | V   |
|           |        | Cytrynek . . . . .            | " "            | 14 | IV  |
|           |        | Guniak Czerwezyk . . . . .    | " "            | 11 | VI  |
|           |        | Fuchs . . . . .               | " "            | 14 | IV  |
|           |        | Lampyris noctiluca . . . . .  | " "            | 28 | VI  |
|           |        | Lemma asparagi . . . . .      | " "            | 16 | III |
|           |        | Podrzut . . . . .             | " "            | 22 | V   |
|           |        | Rusałka Wierzbowiec . . . . . | " "            | 25 | IV  |
|           |        | Libellula depressa . . . . .  | " "            | 22 | V   |
|           |        | Świtezianka modra . . . . .   | " "            | 23 | V   |
|           |        | Szczypica wręgatka . . . . .  | " "            | 10 | III |
|           |        | Pszczola . . . . .            | " "            | 29 | III |

## β) w Jaémierzu.

|           |        |                             |                |    |            |    |    |
|-----------|--------|-----------------------------|----------------|----|------------|----|----|
| Rok 1899. | Ptaki: | Gęś posiewnica . . . . .    | przyłot        | 20 | III, odlot | 10 | IX |
|           |        | Pokrzywka rudzik . . . . .  | "              | 6  | IV, "      | 16 | X  |
|           | Owady: | Pasikonik zielony . . . . . | pierwszy pojaw | 28 | V          |    |    |
|           |        | Świtezianka modra . . . . . | " "            | 23 | V          |    |    |

## γ) w Ożydowie.

|           |        |                        |         |    |            |   |    |
|-----------|--------|------------------------|---------|----|------------|---|----|
| Rok 1897. | Ptaki: | Bekas słonka . . . . . | przyłot | 19 | III,       |   |    |
|           |        | Dudek . . . . .        | "       | 3  | III, odlot | 6 | IX |

|                  |                        |                       |
|------------------|------------------------|-----------------------|
|                  | Pliszka żółta, przylot | 18 III.               |
| Owady:           | Żuk gnojak . . .       | pierwszy pojaw 18 III |
| Rok 1898. Ptaki: | Bekas słonka, przylot  | 30 III.               |
|                  | Pliszka żółta . . .    | 30 III.               |
| Owady:           | Niestrzep głogowiec .  | pierwszy pojaw 1 IV   |
|                  | Rusałka Wierzbowiec .  | " " 1 IV              |
| Rok 1899. Ptaki: | Bekas słonka, przylot  | 2 IV.                 |
|                  | Dudek . . . . .        | " 17 IV.              |
|                  | Gęś posiewnica . . .   | " 4 IV, odlot 10 IX.  |
|                  | Pliszka żółta . . .    | " 10 IV.              |
| Owady:           | Niestrzep głogowiec .  | pierwszy pojaw 19 V.  |

### Wyniki spostrzeżeń magnetycznych dokonanych w Krakowie w roku 1899.

Podobnie jak lat poprzednich, tak i w roku bieżącym, w tym samym punkcie ogrodu botanicznego i temi samemi narzędziami, t. j. zapomocą teodolitu Schneidera i inklinatorum Dovera, robiłem spostrzeżenia tyczące się zboczenia i nachylenia magnetycznego. Z obserwacji tych otrzymałem wyniki następujące:

#### 1. Zboczenie magnetyczne.

| Dzień             | Chwila            | Zboczenie zachodnie |
|-------------------|-------------------|---------------------|
| 1899 d. 6 czerwca | 9 g. 45.0 m. rano | 6° 9' 59            |
| " "               | 10 " 15.0 "       | 6 10.41             |
| " "               | 10 " 45.0 "       | 6 9.67              |
| 30 " "            | 9 " 30.0 "        | 6 3.18              |
| " "               | 10 " 4.0 "        | 6 5.68              |
| " "               | 10 " 36.0 "       | 6 4.26              |
| 13 lipca          | 9 " 40.0 "        | 6 5.28              |
| " "               | 10 " 10.0 "       | 6 6.13              |
| " "               | 10 " 40.0 "       | 6 5.95              |
| 5 paździer.       | 9 " 47.0 "        | 6 6.76              |
| " "               | 10 " 20.0 "       | 6 4.93              |
| " "               | 10 " 50.0 "       | 6 3.76              |
| 21 " "            | 9 " 45.0 "        | 6 5.01              |
| " "               | 10 " 15.0 "       | 6 4.59              |
| " "               | 10 " 42.0 "       | 6 6.42              |

Średnia z tych 15 spostrzeżeń daje dla Krakowa 6° 6' 11 zboczenia zachodniego igły magnetycznej, i to dla dnia 9 sierpnia 1899 r.



## 2. Nachylenie magnetyczne.

| Dzień              | Igła 1                | Igła 2               |
|--------------------|-----------------------|----------------------|
| 1899 d. 15 czerwca | 64°6'38 o g. 10 m. 14 | 64°7'75 o g. 9 m. 53 |
| 2 paździer.        | 7.75 " 9 " 45         | 7.75 " 10 " 6        |
| 30 "               | 9.25 " 9 " 47         | 8.75 " 10 " 7        |
| Średnia            | 64°7'79               | 64°8'08              |

| Dzień           | Igła 3                | Igła 4               |
|-----------------|-----------------------|----------------------|
| 1899 d. 31 maja | 64°7'75 o g. 10 m. 11 | 64°6'38 o g. 9 m. 51 |
| 1 lipca         | 7.25 " 9 " 56         | 8.00 " 10 " 16       |
| 13 paździer.    | 8.00 " 9 " 52         | 8.12 " 10 " 12       |
| Średnia         | 64°7'67               | 64°7'50              |

Ogólna średnia z tych 12-tu spostrzeżeń jest 64°7'76.

*Dr. Wierzbicki.*



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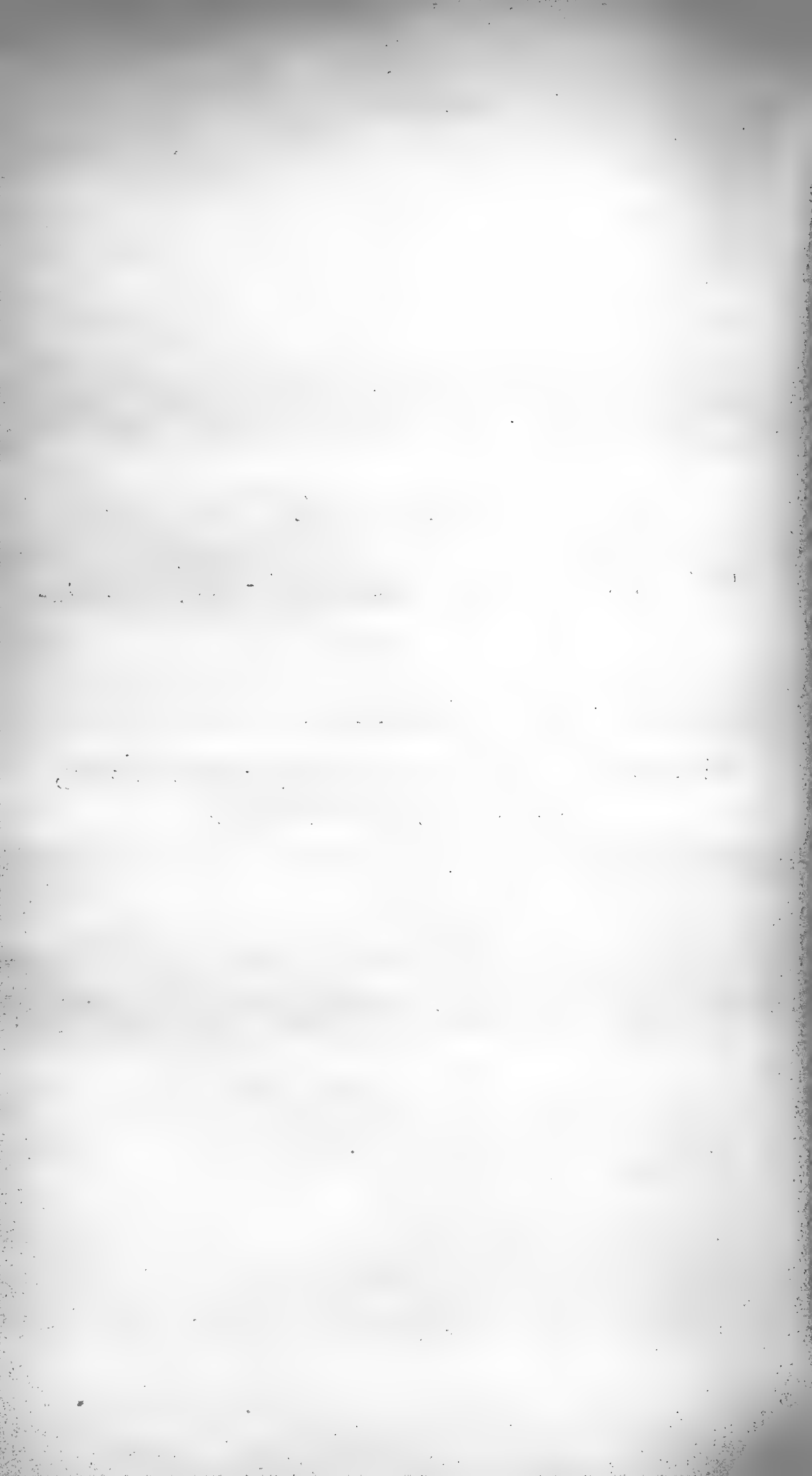
**MATERIAŁY**  
**do fizyografii krajowej.**

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**Część II.**

**Materiały zebrane przez Sekcje: geologiczną,  
botaniczną i zoologiczną.**

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# Glony Suchy i Makowa

przez

Romana Gutwińskiego.

W pracy „Wykaz glonów zebranych w okolicy Wadowic-Makowa“<sup>1)</sup>, obejmującej spory szmat ziemi, zaledwo dotknąłem flory glonów miast Suchy i Makowa. W pierwszym zebrałem próbki tylko ze stawów, w drugim tylko z łąk mokrych i rowów przydrożnych. Te dostarczyły następujących, w „Wykazie“ umieszczonych gatunków: *Bulbochaete polyandra*; *Oedogonium propinquum, longatum*; *Cylindrocapsa conferta*; *Conferva tenerrima*; *Scoenedesmus bijugatus, denticulatus, Hystrix, quadricauda, obliquus*; *Pediastrum Boryanum* var. *granulatum, duplex* var. *clathratum, asperum, genuinum, Tetras*; *Sciadium Arbuscula*; *Ophiocytium majus, cochleare*; *Dictyosphaerium pulchellum*; *Botrycoccus Braunii*; *Inoderma majus*; *Spirogyra arcta* var. *catenaeformis*; *Closterium acerosum, Lunula, parvulum, subangulatum, Leibleinii*; *Penium Navicula*; *Disphinctium quadratum*; *Pleurotaenium Ehrenbergii, truncatum, coronatum, Archeri*; *Cosmarium granatum, bioculatum, Meneghinii, holmiense, pachydermum, Archerii* for. *minor, Botrytis* et var. *subovale, tetraophthalmum, subprotumidum* var. *leopoliense, Novae-Semliae, angustatum*; *Staurastrum cuspidatum, rugulosum, muticum, orbiculare, muricatum, hexacerum, paradoxum, contortum.*

*Navicula nobilis, major, viridis, mesolepta, radiosa, Placenta, dicephala, elliptica, cuspidata, amphisbaena, limosa, Iridis* var. *amphigomphus et affinis, Rotaeana* var. *oblongella*; *Stauroneis Phoenicenteron, anceps*; *Pleurostauron acutum*; *Amphipleura pellucida*; *Pleurosigma attenuatum, Spencerii*; *Frustulia vulgaris*; *Cymbella*

<sup>1)</sup> Sprawozdanie Komisji fiz. Akad. Umiej. Tom XXXII. Kraków, 1897.

*cuspidata* et var. *naviculiformis*, *laevis*, *affinis*, *leptoceras*, *anglica*, *gastroides*, *cymbiformis*, *Cistula* et var. *maculata*; *Encyonema ventricosum*; *Amphora ovalis* et var. *Pediculus*; *Gomphonema constrictum*, *acuminatum* var. *coronatum* et *laticeps*, *parvulum*; *Cocconeis Pediculus*, *Placentula*; *Achnanthes microcephala*, *exilis*; *Nitzschia sinuata*, *sigmoidea*, *lamprocarpa*, *Sigma*; *Denticula frigida*; *Hantzschia Amphioxys*; *Suriraya biseriata*, *robusta*, *splendida*, *ovalis* var. *angusta*; *Cymatopleura Solea*; *Campylodiscus noricus*; *Diatoma vulgare* var. *grande*; *Meridion circulare*; *Synedra Vaucheriae*, *Ulna* et var.: *subaequalis*, *danica*, *Acus* var. *delicatissima*, et for. *amphicephala*, *radians*; *Fragilaria crotonensis*, *elliptica*; *Tabellaria fenestrata*, *flocculosa*; *Cystopleura turgida*, *gibba*, *Zebra* var. *saxonica* et *Porcellus*; *Eunotia Arcus* var. *hybrida* et *tenella*, *pectinatis*, *Diodon*; *Pseudo-Eunotia lunaris*; *Gaillonella varians*; *Cyclotella Kuetzingiana*.

*Gomphosphaeria aponina*; *Chroococcus turgidus*.

Są to gatunki przeważnie planktoniczne, pływające po powierzchni naszych wód stojących; jako takie przynależą w większej części (76 gatunków na 120) stawom Suchy i żadną miarą nie dają wyobrażenia o florze miejscowości w tytule niniejszej pracy wspomnianych.

Dlatego poświęciłem lipiec i sierpień 1897. roku na bliższe zbadanie pod względem glonów Suchy i Makowa wraz z najbliższym tych miast otoczeniem. Miejsc, z których brałem próbki, wymienić tutaj nie będę, bo każdy znajdzie je w części systematycznej tej pracy. Nadmienię tylko, że starałem się wyzyskać w najszerszym znaczeniu różnorodność stanowisk, by — ile możliwości — dać dokładny rys flory miejscowości w mowie będących.

W całości dostarczyły one 174 gatunków glonów, lecz gdy z tych tylko 111 gatunków — w pracy znakiem \* uwydatnionych — nie znajduje się w rozprawie na samym wstępie przytoczonej — przeto liczba ta z liczbą 120 gatunków w „Wykazie“ już podanych składa się na liczbowy obraz flory Suchy i Makowa, która zatem obejmuje tylko 231 gatunków.

Pomijając nieskonstatowaną w niej obecność nielicznych zresztą i rzadkich we florze całego kraju: *Florideów* i *Melanophyceów*, podnoszę jako wybitną różnicę, w przeciwstawieniu do flory okolic Lwowa i Tarnopola, a tudzież całego obszaru objętego „Wykazem“ moim, brak zupełny we florze Suchy i Makowa rodzajów: *Xanthidium* i *Micrasterias*, *Sphaerosoma*, *Spirotaenia*, *Docidium* i uderzające ubóstwo sinorośców (*Schizophyceae*).

Pomiędzy gatunkami odszukanymi w Suchy i Makowie jest 19 nowych — w tekście znakiem § uwidoczniionych — dla okolicy Wadowic-Makowa, a mianowicie: 1 z rzędu *Confervoidae*,

1 z rzędu *Potococcoideae*, 6 z rzędu *Conjugatae*, 5 z rzędu *Bacillarieae*, a 6 z rzędu *Cyanophyceae*. Tak więc liczba gatunków, wykazanych przeze mnie dla tej okolicy<sup>1)</sup>, wzrasta obecnie do 691.

Class. Chlorophyceae (Kuetz.) Wittr.

Ordo Confervoideae (Ag.) Falk.

Fam. Ulotrichiaceae (Kuetz.) Borzi em.

Gen. *Stigeoclonium* Kuetz.

\* § 1. *S. tenue* (Ag.) Rabh.

Sucha — dół po glinie przy cegielni za plebanią.

Gen. *Conferva* L.

\* 2. *C. bombycina* (Ag.) Lagerh.

Rów przy gościńcu ze Suchy do Makowa obok figury Matki Boskiej, tuż przy rogatce.

Fam. Cladophoraceae (Hass.) Wittr.

Gen. *Cladophora* Kuetz.

\* 3. *C. glomerata* (L.) Kuetz.

crass. trunc. = 66  $\mu$  — 67  $\mu$

„ ramor. = 55  $\mu$

„ ramulor. = 22  $\mu$  — 33  $\mu$ .

Sucha — strumień w lesie powyżej „Pstrągarni“.

\* 4. *C. declinata* Kuetz. var. *fluitans* (Kuetz.) Hansg., Prodr. pag. 84.

crass. truncorum 136  $\mu$ .

Sucha — skała wśród Skawy pod „Garcowską Górą“ w silnym bardzo prądzie.

Ordo Protococcoideae (Menegh.) Kirch.

Fam. Palmellaceae (Decais.) Naeg. em.

Gen. *Sorastrum* Kuetz.

\* 5. *S. crassispinosum* (Hansg.) Bohlin, Die Algen der ersten Regnell'schen Expedition. Stockholm 1897, pag. 39. Tab. II. fig. 34—36. (= *S. cornutum* Reinsch, Contribut. etc. Tab. VI).  
Maków — małe stawki zarosły sitem nad „hutami“ pod Bryndzówką.

<sup>1)</sup> Cfr. R. Gutwiński, Wykaz glonów zebranych w okolicy Wadowie-Makowa, Spraw. Kom. fiz. Ak. Um. Tom. XXXII, pag. 99.

Gen. **Coelastrum** Naeg.\* 6. *C. sphaericum* Naeg.

Sucha — średnia sadzawka w „księżym potoku“.

Gen. **Pediastrum** Meyen, Racib. em.\* 7. *P. muticum* Kuetz. var. *longicorne* Rac. Gat. rodz. Ped. fig. 8.

Maków — maleńki stawek zarosły sitem nad „hutami“ pod Bryndzówką.

8. *P. Boryanum* (Turp.) Mengh. var. *granulatum* (Kuetz.) A. Br.

Maków — razem z gatunkiem poprzedzającym.

Gen. **Ophiocytium** Naeg.9. *O. cochleare* (Eichw.) A. Br.

Maków — razem z poprzednimi gatunkami.

Gen. **Tetraëdron** Kuetz.\* 10. *T. trigonum* (Naeg.) Hansg. § var. *gracile* Reinsch, Algenflor. von Franken, Taf. III. fig. 1a.

Diameter cell. = 24  $\mu$ .

Long. lateris = 30.8  $\mu$ .

Maków — razem z poprzednim.

Gen. **Eremosphaera** De-By.\* 11. *E. viridis* De-By.

Maków — razem z poprzednimi gatunkami.

Gen. **Dictyosphaerium** Naeg.12. *D. pulchellum* Wood, Hansg. Prodr. pag. 130.

Maków — razem z poprzednimi.

Gen. **Nephrocytium** Naeg.\* § 13. *N. Naegelii* Grun., Hansg. l. c. pag. 131.

crass. cell. = 13  $\mu$ .

Maków — razem z poprzednimi.

## Ordo Conjugatae (Link) De-By.

## Fam. Desmidiaceae (Kuetz.) De-By.

Gen. **Desmidium** Ag.\* 14. *D. Swartzii* Ag.

Maków — maleńki stawek nad „hutami“ pod Bryndzówką.



Gen. **Hyalotheca** Ehrenb.

- \* 15. *H. dissiliens* (Sm.) Bréb.  
Maków — razem z poprzedzającym.

Gen. **Gonatozygon** De-By.

- \* 16. *G. Ralfsii* De-By var. *pilosellum* Nordst. Botaniska Notiser 1886, pag. 136. De-Toni, Sylloge, pag. 802.  
Long. cell. = 176  $\mu$  — 198  $\mu$   
Crass.: medii = — 9.9  $\mu$ , apicum = 11  $\mu$   
Long. pilorum = 2.2  $\mu$ .  
Sucha — średnia sadzawka w „księżym potoku“.

Gen. **Cylindrocystis**.

- \* § 17. *C. americana* West, Some Desm. of Unit. Staat. Tab. XVIII, fig. 5.  
Long. cell. = 44  $\mu$  — 48  $\mu$ , lat. = 19.8  $\mu$  — 22  $\mu$ .  
Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.

Gen. **Roya** W. et G. S. West.

- \* 18. *R. obtusa* (Bréb) W. et G. West, On some New and Interesting Freshwater Algae 1896, pag. 152 var. *montana* W. et G. S. West l. c. Pl. III, f. 23—24.  
Long. = 59.4  $\mu$ , lat. = 6  $\mu$ .  
Sucha — ścieki przyleśnych trawników na stokach Jasienia, przy drodze do Dąbia.  
var. *minor*. Rac. De nonn. Desm. quae in Pol. inv. sunt. pag. 6.  
Long. cell = 24  $\mu$ , lat. = 6.6  $\mu$ .  
Sucha — razem z odmianą poprzedz.

Gen. **Closterium** Nitzsch.

- \* 19. *C. pusillum* Hantzsch,  $\beta$  *monolithum* Wittr. Botan. Notiser 1886, pag. 138.  
Long. cell. = 26.4  $\mu$ , lat. = 6.6  $\mu$ .  
Sucha — struga przydrożna na drodze do Pstragarni.  
\* § 20. *C. pygmaeum* Gutw. Flora glonów okol. Lwowa pag. (32).  
Tab. I, fig. 5.  
Sucha — ścieki przyleśnych trawników na stokach Jasienia, przy drodze do Dąbia.  
21. *C. acerosum* (Schrank) Ehrenb.

Sucha — sadzawka średnia w „księżym potoku“; mokradła na zboczu „Świerkoszowej Góry“ przy drodze z makowskiego działu. [*Hic specimina membranam luteolam, densissime areolato-punctulatum habuerunt*]. Maków — okrągły zbiornik przy studni cembrowanej kamieniami pod szczytem Makowskiej Góry.

Forma *intermedia* Gutw., De nonnull. pag. 36. Tab. I, fig. 6.  
Long. = 352  $\mu$ , lat. 35·2, lat. apic. = 5·5  $\mu$ .

Maków — mały stawek zarosły sitem nad „hutami“ pod Bryndzówką.

22. *C. Lunula* (Muell.) Nitzsch var. *typicum*.

Maków — razem z *C. acerosum* for. *intermedia*.

\* 23. *C. lineatum* Ehrenb.

Maków — razem z gatunkiem poprzedzającym.

\* 24. *C. moniliferum* (Bory) Ehrenb. var. *typicum* Klebs.

Maków — tuż przy kamieniołomie p. Lika w rowie przy gościńcu.

var. *concauum* Klebs, Desm. Ostpr. Tab. I, fig. 5a.

Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.

25. *C. Leibleinii* Kuetz., Ralfs, Brit. Desm. Tab. XVIII, fig. 4a.

Crass. cell. = 39·6  $\mu$ .

Sucha — średnia sadzawka w „księżym potoku“. Maków — okrągły zbiornik wody przy studni cembrowanej kamieniami pod szczytem Makowskiej Góry (bardzo licznie!); mały stawek zarosły sitem nad „hutami“ pod Bryndzówką; strumyczek w lesie Surletówka na stokach Makowskiej Góry.

\* 26. *C. rostratum* Ehrenb.

Rów przy gościńcu ze Suchy do Makowa obok figury Matki Boskiej tuż przy rogatce.

#### Gen. *Penium* Bréb.

27. *P. Digitus* (Ehrenb.) Bréb.

Razem z *C. rostratum*.

\* 28. *P. closterioides* Ralfs., Delponte, Spec. Desm. subalp. Tab. XV, fig. 20.

Razem z gatunkiem poprzednim.

\* 29. *P. lamellosum* Bréb.

Sucha — ścieki przyleśnych trawników na stokach Jasienia, przy drodze do Dąbia.

#### Gen. *Tetmemorus* Ralfs.

\* 30. *T. laevis* (Kuetz.) Ralfs, Brit. Desm. Tab. XXIV, fig. 3.

Sucha — ścieki przyleśnych trawników na stokach Jasienia, przy drodze do Dąbia.

Gen. *Disphinctium* Naeg.

31. *D. quadratum* (Ralfs?) Hansg.  
 Long.  $44 \mu$  —  $48.4 \mu$ ; lat. =  $24 \mu$  —  $28.6 \mu$  —  $30.8 \mu$ ;  
 lat. isth. =  $18 \mu$ .  
 Sucha — ścieki przyleśnych trawników na stokach Jasienia,  
 przy drodze do Dąbia.
- \* 32. *D. annulatum* Naeg. Einzel. Alg. VI. F.  
 Long. =  $42 \mu$ , lat. =  $20 \mu$ , isth. =  $19 \mu$ .  
 Sucha — razem z *Tetmemorus laevis*.
- \* 33. *D. Thwaitesii* (Ralfs, Brit. Desm. Tab. XVII, fig. 8).  
 De-Toni.  
 Sucha — struga przydrożna na drodze do Pstrągarni.
- \* 34. *D. speciosum* (Lund) Hansg.  
 Long. =  $35.2 \mu$ , lat. =  $22 \mu$ , isth. =  $11 \mu$ .  
 Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.
- \* 35. *D. anceps* Lund. for. *crispula* Nordst., Gutw. De nonnul. pag. 44, Tab. VII, fig. 36.  
 Long. =  $28.6 \mu$ , lat. =  $15.4 \mu$ , lat. isth. =  $11 \mu$ , apic. =  $8.8 \mu$ .  
 Maków — strumyczek na stokach Makowskiej Góry, w lesie Surletówka.  
 var. *minimum* Gutw, Mat. Cz. II. Spraw. Kom. fiz. T. XXV pag. 9, Tab. I, fig. 2.  
 Sucha — struga przydrożna na drodze do Pstrągarni.

Gen. *Pleurotaenium* Naeg.

- \* § 36. *P. Trabaecula* (Ehrenb.) Naeg. var. *granulatum* Ralfs.  
 Long. =  $316 \mu$ , crass. =  $35 \mu$ .  
 Sucha — mokradła na zboczu „Świerkoszowej Góry“ przy drodze z makowskiego działu.
37. *P. truncatum* (Bréb.) Naeg., Ralfs l. c. Tab. XXVI, fig. 2.  
 Long. =  $374 \mu$  —  $396 \mu$  —  $456 \mu$   
 Lat. med. =  $55.5 \mu$  —  $61.6 \mu$   
 Lat. constrict. =  $50.6 \mu$  —  $59.4 \mu$   
 Lat. apicum =  $35.2 \mu$ .  
*Membrana granulata piloso-aculeata.*  
 Maków — maleńki stawek zarosły sitem nad „butami“ pod Bryndzówką.
- \* 38. *P. nodulosum* (Bréb.) De-By, Ralfs l. c. Tab. XXVI, fig. 1.  
 Maków — razem z gatunkiem poprzedzającym i w strumyczku w lesie Surletówka na stokach Makowskiej Góry.
39. *P. coronatum* (Bréb.) Rabenh.  
 Maków — razem z *P. truncatum*.

Gen. *Pleurotaeniopsis* Lund.

- \* 40. *P. turgida* (Bréb.) Lund. Ralfs l. c. Tab. XXXII, fig. 8.  
Maków — razem z *P. coronatum* i *P. nodulosum*.

Gen. *Cosmarium* Corda.

41. *C. granatum* Bréb.

Maków — małe stawki zarosły sitem nad „hutami“ pod Bryndzówką i strumyczek w lesie Surletówka na stokach Makowskiej Góry.

- \* 42. *C. laeve* Rabenh.

Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.

- \* 43. *C. nitidulum* De-Not. for. *punctulatum* Gutw. Prodronus pag. [334] 61.

Long. 26·4  $\mu$ , lat. = 19·8  $\mu$ , lat. isth. = 6·6  $\mu$ , ap. = 11  $\mu$ .

Sucha — ścieki przyleśnych trawników na stokach Jasienia, przy drodze do Dąbia.

44. *C. Meneghini* Bréb., Ralfs l. c. Tab. XV, fig. 6.

Sucha — sadzawka średnia w „księżym potoku“.

- \* var. *difficile* (Lütkem.) Gutw. Wykaz gl. okol. Wadowic-Makowa, pag. 139.

Maków — małe stawki zarosły sitem nad „hutami“ pod Bryndzówką.

- \* 45. *C. Regnellii* Wille.

Maków — razem z gatunkiem poprzedzającym.

- \* 46. *C. crenatum* Ralfs § var. *subcrenatum* Rabenh., De-Toni, Sylloge, pag. 941.

Long. = 30·8  $\mu$ , lat. = 22  $\mu$ , isth. = 11.

Sucha — ścieki przyleśnych trawników na stokach Jasienia, przy drodze do Dąbia.

47. *C. holmiense* Lund. \* var. *integrum* Lund.

Long. = 50·6  $\mu$ , lat. = 28·6  $\mu$ , isth. = 15·4  $\mu$ .

Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.

- \* § 48. *C. cambricum* Cooke et Wills in Cooke, On Some Desm. 1880. Pl. 13, fig. A. 6.

*forma inter typicum et dubium* Rac. *medium tenens*.

Long. 24·2  $\mu$ , lat. 15·4  $\mu$ , isth. = 4·4  $\mu$ .

Sucha — ścieki przyleśnych trawników na stokach Jasienia, przy drodze do Dąbia.

- \* 49. *C. tetragonum* (Naeg.) Arch.

var. *Lundellii* Cooke.

Long. 39·6  $\mu$  — 41·8  $\mu$ , lat. = 24  $\mu$ , ist. = 8·8  $\mu$ , apex = 11  $\mu$ .

Sucha — razem z Nrem 48; Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.

var. *Lundellii* Cooke for. *Schmidlei* Gutw. Wykaz glonów okolic Wadowic-Makowa 1897, pag. 142, Nr. 259.

Sucha — ścieki przyleśnych trawników na stokach Jasienia, na drodze do Dąbia.

\* 50. *C. genuosum* Nordst. var. *minus* Gutw. Spraw. Kom. fiz. Ak. Um. T. XXVIII, pag. 125 et De nonnul. alg. nov. pag. 49. Tab. VII, fig. 37.

Long. 24  $\mu$ , lat. 14  $\mu$ , lat. ap. 6.6  $\mu$ , ist. = 4.4  $\mu$ .

Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.

51. *C. pachydermum* Lund. Klebs, Desm. Ostp. Tab. III, fig. 36 et 38.

Rów przy gościńcu ze Suchy do Makowa obok figury Matki Boskiej, tuż przy rogatce. Maków — maleńki stawek zarosły sitem nad „hutami“ pod Bryndzówka i strumyczek w lesie Surletówka na stokach Makowskiej Góry.

\* 52. *C. margaritifera* (Turp.) Menegh.

Maków — nad „hutami“ razem z poprzednim gatunkiem.

53. *C. Botrytis* (Bory) Menegh.

Razem z Nrem 51. Maków — tuż przy kamieniołomie pana Lika w rowie przy gościńcu; strumyczek w lesie Surletówka na stokach Makowskiej Góry.

var. *subovale* Klebs.

Long. = 106  $\mu$ , lat. = 73  $\mu$ , isth. = 22  $\mu$ ; crass. = 49  $\mu$ .

Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.

54. *C. tetraophthalmum* (Kuetz.) Bréb.

Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry i maleńki stawek zarosły sitem nad „hutami“ pod Bryndzówka.

\* 55. *C. reniforme* (Ralfs) Arch.

Maków nad „hutami“ razem z Nrem 54 (często).

var. *compressum* Nordst., N. Zeal. and Austr. Tab. V, fig. 5.

Sucha — między *Oedogonium spec. steril.* w średniej sadzawce „księżego potoku“.

\* 56. *C. cyclicum* Lund., L. N. Johnson, Some new. and. rare Desm. of. Un. Staat. pag. 211, fig. 5.

Long. = 46  $\mu$ , lt. = 53  $\mu$ , isth. = 15.4  $\mu$ .

Sucha — ścieki przyleśnych trawników na stokach Jasienia, przy drodze do Dąbia.

\* 57. *C. ochhtodes* Nordst. Wolle, Desm. Un. Staat. Tab. XIV, fig. 13 i 14.

Maków — nad „hutami“ z Nrem 55.

- \* 58. *C. Gayanum* De-Toni, Sylloge, pag. 994, Nr. 2375.  
 Long. = 103·4  $\mu$ , lat. = 66  $\mu$ , isth. = 24·2  $\mu$ .  
 Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.
- \* 59. *C. conspersum* Ralfs, Brit. Desm. Tab. XVI, fig. 4.  
 Long. = 79  $\mu$ , lat. = 64  $\mu$ , ist. = 22  $\mu$ .  
 Maków — razem z Nrem 57.  
 var. *rotundatum* Wittr. Anteckn. Tab. I, fig. 14.  
 Maków — nad „hutami“ razem z Nrem 57.
- \* 60. *C. caelatum* Ralfs l. c. Tab. XVII, fig. 1.  
 Sucha — struga przydrożna na drodze do „Pstrągarni“ i ścieki przyleśnych trawników na stokach Jasienia, przy drodze do Dąbia.  
 var. *spectabile* (De Not.) Nordst.  
 Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.
- \* § 61. *C. costatum* Nordst. forma Gutw. Mat. do flory glonów Cz. III, fig. 12.  
 Maków — razem z *C. caelatum* var. *spectabile*.
- \* 62. *C. Turpinii* Bréb. var. *Lundellii* Gutw.  
 Sucha — średnia sadzawka w „księżym potoku“.
- \* 63. *C. pseudogranatum* Nordst. Symb. Tab. III, fig. 27 et Gutw. De nonnul. alg. nov. pag. 12 [44] Tab. VII, fig. 38.  
 Long. = 40  $\mu$ , lat. = 26·4  $\mu$ , isth. = 8·8  $\mu$ , ap. = 6·6  $\mu$  crass. 15·4  $\mu$ .  
 Maków — małe stawki zarosłe sitem nad „hutami“ pod Bryndzówka.
- \* 64. *C. Logiense* Bisset. Gutw., De nonnul. alg. nov. pag. 25. [57]. Tab. VII, fig. 33.  
 Long. = 55  $\mu$ , lat. = 42  $\mu$ , isth. = 15·4  $\mu$ .  
*E vertice ellipticum compressum*.  
 Sucha — ścieki trawników przyleśnych na stokach Jasienia, przy drodze do Dąbia.
- \* § 65. *C. subglobosum* Nordst. Norg. Tab. I, fig. 13.  
 Long. = 33  $\mu$ , lat. = 18.  
 Sucha — razem z Nrem 64.

### Gen. *Arthrodesmus* Ehrenb.

- \* 66. *A. octocornis* Ehrenb. § var. *inermis* Rac. & Eichler, fig. 13.  
 Long. = 13  $\mu$ , lat. = 9  $\mu$ , isth. = 6·6, crass. = 6·6.  
 Sucha — ścieki przyleśnych trawników na stokach Jasienia, przy drodze do Dąbia.

Gen. **Euastrum** Ehrenb.\* 67. *E. verrucosum* Ehrenb.

Maków — maleńki stawek zarosły sitem nad „hutami“ pod Bryndzówka.

\* 68. *E. erosum* Lund., Desm. Suec. Tab. II, fig. 6.

Sucha — struga przydrożna na drodze do Pstrągarni.

\* 69. *E. binale* (Turp.) Ralfs, Brit. Desm. Tab. XIV, fig. 8d.

Sucha — razem z Nrem 66.

\* 70. *E. oblongum* (Grev.) Ralfs.

Sucha — mokradła przy drodze z makowskiego działu na zboczu „Świerkoszowej Góry“. Maków — razem z Nrem 67 (przelicznie!).

\* 71. *E. ansatum* Ralfs l. c. Tab. XV, fig. 2.

Sucha — razem z Nrem 69.

Gen. **Staurostrum** Meyen.\* 72. *S. brevispina* Bréb., Ralfs, Brit. Desm. Tab. XXXIV, fig. 7.

Maków — maleńki stawek zarosły sitowiem nad „hutami“ pod Bryndzówka.

\* 73. *S. hirsutum* (Ehrenb.) Bréb., Ralfs l. c. Tab. XXII, fig. 3.

Long. = 37  $\mu$  — 42  $\mu$ , lat. = 31  $\mu$  — 40  $\mu$ , isthm. = 11  $\mu$ .

Sucha — ścieki przyleśnych trawników na stokach Jasienia, przy drodze do Dabia.

74. *S. orbiculare* (Ehrenb.) Klebs.

Sucha — struga przydrożna na drodze do „Pstrągarni“. Maków — razem z Nrem 72.

var. *extensum* Nordst. Norges, fig. 10.

\* § forma nob.

*E vertice trigonum, lateribus retusis.*

Long. = 35  $\mu$ , lat. = 24  $\mu$ , isth. = 11  $\mu$ , apic. = 8·8  $\mu$ .

Sucha — razem z formą typową.

75. *S. muricatum* Bréb., Ralfs, l. c. Tab. XXII, fig. 2.

Sucha — razem z Nrem 73.

\* 76. *S. punctulatum* Bréb.

Sucha — razem z gatunkiem poprzedzającym.

\* 77. *S. dilatatum* Ehrenb.

Long. = 26·4  $\mu$ , lat. = 28·6  $\mu$ , isth. = 8·8  $\mu$ .

Sucha — średnia sadzawka w „księżym potoku“.

\* 78. *S. cordatum* Gay, Conjug. Tab. II, fig. 7.

Maków — maleńki stawek zarosły sitowiem nad „hutami“ pod Bryndzówka.

\* 79. *S. furcigerum* Bréb., Ralfs, l. c. Tab. XXXVIII, fig. 12.

Maków — razem z Nrem 78.

\* 80. *S. sexcostatum* Bréb., Ralfs, l. c. Tab. XXIII, fig. 5.

Long. = 33  $\mu$ , lat. = 29  $\mu$ .

Sucha — ścieki przyleśnych trawników na stokach Jasienia, przy drodze do Dąbia.

§ subsp. *productum* West, Alg. of Engl. Lake Distr., fig. 34.

Sucha — razem z Nrem 77.

Class. Baccillarieae Nitzsch.

Ordo Raphideae V. H.

Fam. Naviculaceae Kuetz.

Gen. *Navicula* Bory.

81. *N. nobilis* (Ehrenb.) Kuetz.

Maków — maleńki stawek zarosły sitowiem nad „hutami“ pod Bryndzówką.

82. *N. major* Kuetz., V. H. Synops. Tab. V, fig. 3.

Maków — razem z Nrem 81. i w strumyczku w lesie Surletówka na stokach Makowskiej Góry. Sucha — rów przy gościńcu makowskim obok figury Matki Boskiej tuż przy rogatce makowskiej.

83. *N. viridis* (Nitzsch) Kuetz. V. H. l. c. Tab. V, fig. 5.

Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.

var. *commutata* Grun., V. H. Tab. V, fig. 6.

Maków — razem z typową.

\* 84. *N. hemiptera* Kuetz.

Maków — razem z poprzedzającą. Sucha — rów przy gościńcu do Makowa obok figury Matki Boskiej, tuż przy rogatce.

\* 85. *N. borealis* (Ehrenb.) Kuetz.

Long. = 26.4  $\mu$ ; lat. = 6.6  $\mu$ .

Sucha — struga przydrożna na drodze do Pstrągarni. Maków — razem z Nrem 83 i w okrągłym zbiorniku wody przy studni kamieniami cembrowanej pod szczytem Makowskiej Góry.

\* 86. *N. Stauroptera* Grun. V. H. Synops. Tab. VI, fig. 7.

Maków — okrągły zbiornik wody przy studni kamieniami cembrowanej pod szczytem Makowskiej Góry.

\* var. *parva* (Ehrenb.) V. H. Tab. VI, fig. 6.

Sucha — rów przy gościńcu do Makowa obok figury Matki Boskiej, tuż przy rogatce.

\* var. *gracilis* Grun. Naviculaceae Tab. (2) IV, fig. 18.

Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.

87. *N. mesolepta* Ehrenb.

Sucha — razem z *N. stauroptera* var. *parva*. Maków — maleńki stawek zarosły sitowiem nad „hutami“ pod Bryndzówką i strumyczek w lesie Surletówka na stokach Makowskiej Góry.



- \* 88. *N. Legumen* Ehrenb. var. *decrescens* Grun., V. H. Tab. VI, fig. 16.  
Rów przy gościńcu do Makowa wiodącym obok figury Matki Boskiej, tuż przy rogatce.
- \* 89. *N. gracilis* Kuetz., Grun., Naviculaceae Tab. (2) IV, fig. 27.  
Maków — razem z *N. stauroptera* var. *gracilis*.
99. *N. radiosa* Kuetz.  
Sucha — struga przydrożna na drodze do Pstrągarni, strumień w lesie powyżej Pstrągarni, mokradła na zboczu „Świerkoszowej Góry“ przy drodze z makowskiego działu. Maków — nad „hutami“ pod Bryndzówką i strumyczek w lesie Surletówka na stokach Makowskiej Góry.
- \* 91. *N. rhynchocephala* Kuetz. var. *elongata* Grun. Naviculaceae Tab. (2) IV, fig. 31a.  
Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.
- \* 92. *N. cryptocephala* Kuetz., Grun. l. c. Tab. (2) IV, fig. 28a.  
Sucha — skała wśród Skawy pod „Garcowską Górą“ w silnym prądzie. — Maków — razem z Nrem 91.
- \* 93. *N. lanceolata* Kuetz. Grun. l. c. Tab. (2) IV, fig. 26.  
Maków — razem z Nrem 91.
94. *N. elliptica* Kuetz.  
Sucha — razem z Nrem 88. Maków — razem z Nrem 93.
95. *N. cuspidata* Kuetz.  
Sucha — dół po glinie przy cegielni za plebanią.
96. *N. limosa* Kuetz., Bac. Tab. III, fig. 50.  
Sucha — razem z Nrem 94.
- \* 97. *N. gibberula* Kuetz., Grun., Navicul. Tab. (3) V, fig. 8a.  
Maków — nad „hutami“ i w lesie Surletówka razem z Nrem 87.
98. *N. Iridis* Ehrenb.  
var. *amphigomphus* (Ehrenb.) V. H. Tab. XIII, fig. 2.  
Sucha — razem z Nrem 88.  
var. *affinis* (Ehrenb.) V. H., Grun., Navicul. Tab. (3) V, fig. 3.  
Maków — razem z Nrem 91.

Gen. *Stauroneis* Ehrenb.

99. *S. Phoenicenteron* (Nitzsch.) Ehrenb., V. H. Tab. IV, fig. 2.  
Sucha — ścieki przyleśnych trawników na stokach Jasienia, przy drodze do Dabia; rów przy gościńcu do Makowa wiodącym, obok figury Matki Boskiej, tuż przy rogatce.
100. *S. anceps* Ehrenb., V. H. Tab. IV, fig. 4.  
Maków — małe stawki zarosły sitowiem nad „hutami“

pod Bryndzówką, strumyczek w lesie Surletówka na stokach Makowskiej Góry.

Gen. **Pleurostauron** Rabenh.

101. *P. acutum* (W. Sm.) Rabh., V. H. Tab. IV, fig. 3,  
Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.

\* 102. *P. Legumen* (Ehrenb.) Rabh. (*Stauroneis Smithii* Grun.) V. H. Tab. IV, fig. 10.

Mokradła na zboczu „Świerkoszowej Góry“ przy drodze z makowskiego działu — Sucha.

Gen. **Amphipleura** Kuetz.

103. *A. pellucida* (Ehrenb.?) Kuetz.

Maków — razem z Nrem 101.

Gen. **Pleurosigma** W. Sm.

\* 104. *P. acuminatum* (Kuetz.) Grun.

Rów przy gościńcu z Suchy do Makowa wiodącym obok figury Matki Boskiej, tuż przy rogatce.

\* 105. *P. scalproides* Rabenh., V. H. Tab. XXI, fig. 1.

Sucha — strumień w lesie powyżej Pstrągarni, między mchami.

Gen. **Frustulia** Ag.

\* 106. *F. rhomboides* (Ehrenb.) De-Toni.

var. *obtusa* Grun. Nav. Tab. (3) V, fig. 14b.

Maków — razem z Nrem 101.

\* 107. *F. viridula* (Bréb.) De-Toni, V. H. Tab. XVII, fig. 3.

Sucha — struga przydrożna na drodze do Pstrągarni.

\* 108. *F. neglecta* (Thwait.) De-Toni, V. H. Tab. XV, fig. 37.

Sucha — strumień w lesie powyżej Pstrągarni.

Gen. **Mastogloia** Thwait.

\* 109. *M. Grevillei* W. Sm., V. H. Tab. IV, fig. 2a.

Long. = 24  $\mu$ . — 33  $\mu$ , lat. = 11  $\mu$ ; striae 4 in 4.4  $\mu$ .

Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.

Fam. **Cymbellaceae** (Kuetz.) Grun.

Gen. **Cymbella** Ag.

\* 110. *C. Ehrenbergii* Kuetz. V. H. Tab. II, fig. 1.

Maków — małe stawki zarosły sitowiem nad „butami“ pod Bryndzówką.

111. *C. cuspidata* Kuetz.

Maków — razem z Nrem 109.

var. *naviculiformis* Auersw.

Sucha — struga przydrożna na drodze do Pstrągarni; ścieki przyleśnych trawników na stokach Jasienia przy drodze do Dąbia. Maków — razem z Nrem 109 i 110.

112. *C. affinis* Kuetz.Sucha — na *Cladophora declinata* przyrosłej do skały wśród Skawy pod „Garcowską Górą“ w silnym prądzie wody.113. *C. anglica* Lagerst. V. H. Tab. II, fig. 4.

Rów przy gościńcu do Makowa obok figury Matki Boskiej, tuż przy rogatce; Sucha — ścieki przyleśnych trawników na stokach Jasienia przy drodze do Dąbia.

\* 114. *C. lanceolata* (Ehrenb.) Kirch., V. H. Tab. II, fig. 7.

Sucha — strumień w lesie powyżej Pstrągarni. Maków — maleńki stawek zarosły sitowiem nad „hutami“ pod Bryndzówka; strumyczek w lesie Surletówka na stokach Makowskiej Góry.

115. *C. Cistula* (Hempr.) Kirch.

Sucha — struga przydrożna na drodze do Pstrągarni.

116. *C. cymbiformis* (Kuetz.) Bréb. V. H. Tab. II, fig. 11.

Sucha — potok „Józefa Sumery“ przy ujściu do Skawy (na kamieniach); strumień w lesie za Pstrągarnią (między mchami), mokradła przy drodze z makowskiego działu na zboczu „Świerkoszowej Góry“.

var. *parva* (W. Sm.) V. H. Tab. II, fig. 14.

Maków — maleńki stawek zarosły sitem nad „hutami“ pod Bryndzówka.

Gen. **Encyonema** Kuetz.\* 117. *E. caespitosum* Kuetz.

Sucha — na kamieniach małego wodospadu w potoku Józefa Sumery.

\* 118. *E. gracile* Rabh., V. H. Tab. III, fig. 20.

Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.

Gen. **Amphora** Ehrenb.119. *A. ovalis* (Bréb.) Kuetz.

Sucha — strumień w lesie powyżej Pstrągarni (między mchami). Maków — razem z Nrem 118.

Fam. **Gomphonemaceae** (Kuetz.) Grun.120. *G. constrictum* Ehrenb. \* var. *subcapitatum* V. H. Tab. XXIII, fig. 5.

Maków — okrągły zbiornik wody przy studni kamieniami cembrowanej pod szczytem Makowskiej Góry.

\* § 121. *G. commutatum* Grun.

Sucha — potok Józefa Sumery przy ujściu do Skawy (na kamieniach).

122. *G. acuminatum* Ehrenb.

var. *coronatum* (Ehrenb.) Rabenh.

Rów przy gościńcu do Makowa wiodącym obok figury Matki Boskiej, tuż przy rogatce.

Maków — razem z Nrem 118.

var. *laticeps* (Ehrenb.) V. H. Tab. XXIII, fig. 17.

Maków — razem z Nrem 118 i 120.

\* 123. *G. montanum* Schum. var. *medium* Grun. V. H. Tab. XXIII, fig. 37.

Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.

\* 124. *G. dichotomum* Kuetz., V. H. Tab. XXIV, fig. 19.

Maków — razem z gatunkiem poprzedzającym.

\* 125. *G. tenellum* Kuetz., V. H., Tab. XXIV, fig. 23.

Maków — razem z Nrem 123.

\* 126. *G. angustatum* Kuetz. var. *productum* Grun. V. H. Tab. XXIV, fig. 52—55.

Sucha — struga przydrożna przy drodze do Pstrągarni.

127. *G. parvulum* Kuetz., V. H. Tab. XXV, fig. 9.

Maków — mały stawek zarosły sitowiem nad „hutami“ pod Bryndzówką.

var. *subcapitatum* V. H. l. c. fig. 11.

Maków — okrągły zbiornik przy studni kamieniami cembrowanej pod szczytem Makowskiej Góry.

\* var. *exilissimum* Grun. V. H. l. c. fig. 12.

Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.

\* 128. *G. olivaceum* (Lyngb.) Kuetz. var. *vulgare* (Kuetz.) Grun., V. H. Tab. XXV, fig. 21.

Sucha — potok Józefa Sumery przy ujściu do Skawy (na kamieniach). Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.

#### Gen. *Roicosphaenia* Grun.

\* 129. *R. curvata* (Kuetz.) Grun.

Sucha — potok Józefa Sumery, na kamieniach w małym wodospadzie; strumień w lesie powyżej Pstrągarni.

Fam. **Cocconeidaceae** (Kuetz.) Grun.Gen. **Cocconeis** Ehrenb.130. *C. Pediculus* Ehrenb.

Sucha — skała wśród Skawy pod „Garcowską Górą“ w silnym prądzie na *Cladoph. declinata*; potok Józefa Sumery na *Cladophora spec?* na kamieniach w małym wodospadzie; strumień w lesie powyżej Pstrągarni.

131. *C. Placentula* Ehrenb.

Sucha — sadzawka w Pstrągarni i dno rynny doprowadzającej wodę. Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.

## Ordo Pseudoraphideae H. L. Smith.

Fam. **Nitzschiaceae** Grun.\* 132. *N. parvula* W. Sm., De-Toni, Sylloge, Vol. II, sect. 2, pag. 513.

Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.

133. *N. sinuata* (W. Sm.) Grun. V. H. Tab. LX, fig. 11.

Maków — razem z Nrem 131.

134. *N. lamprocarpa* Hantzsch. V. H. l. c. Tab. LXIV, fig. 3.

Rów przy gościńcu do Makowa wiodącym obok figury Matki Boskiej, tuż przy rogatce.

\* 135. *N. linearis* (Ag.) W. Sm. var. *tenuis* (W. Sm.) Grun., V. H. Tab. LXVII, fig. 16.

Sucha — strumień w lesie za Pstrągarnią (między mchami).

Gen. **Hantzschia** Grun.136. *H. Amphioxys* (Ehrenb.) Grun. V. H. Tab. LVI, fig. 1.

Razem z Nrem 134.

Fam. **Surirellaceae** (Kuetz.) Grun.Gen. **Surirarya** Turp.137. *S. biseriata* (Ehrenb.) Bréb., V. H. Tab. LXXII, fig. 3.

Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.

138. *S. robusta* Ehrenb., V. H. Tab. LXXI, fig. 1—2.

Sucha — razem z Nrem 134 i 136.

139. *S. splendida* (Ehrenb.) Kuetz., V. H. Tab. LXXII, fig. 4.

Sucha — mokradła przy drodze z makowskiego działu na zboczu „Świerkoszowej Góry.

Maków — razem z Nrem 137.

- \* § 140. *S. tenera* Greg. V. H. Tab. suppl. C. fig. 39, A. Schmidt, Atlas Tab. XXIII, fig. 9.

Sucha — razem z gatunkiem poprzedzającym i Nrem 134.

- 141: *S. ovalis* Bréb.

var. *minuta* (Bréb.) V. H. Tab. LXXIII, fig. 10.

Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.

var. *angusta* (Kuetz.) V. H. Tab. LXXII, fig. 14 et 15.

Maków — razem z poprzedzającą odmianą i rów przy gościńcu tuż przy kamieniołomie p. Lika.

#### Gen. *Cymatopleura* W. Sm.

142. *C. Solea* (Bréb.) W. Sm.

Rów przy gościńcu ze Suchy do Makowa obok figury Matki Boskiej, tuż przy rogatce.

#### Gen. *Campylodiscus* Ehrenb.

143. *C. noricus* Ehrenb., V. H. Tab. LXXVII, fig. 4—6.

Maków — razem z *S. ovalis* var. *minuta*.

#### Fam. Diatomaceae (Grun.) Kirch.

##### Gen. *Diatoma* D. C.

144. *D. vulgare* Bory, V. H. Tab. L, fig. 4.

Sucha — potok Józefa Sumery, na kamieniach przy ujściu i w małym wodospadzie. Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.

\* var. *Ehrenbergii* Grun. Kirchn. Algenfl. von Schlesien, pag. 203.

Sucha — skała wśród Skawy pod „Garcowską Górą“ w silnym prądzie (na *Cladoph. declinata*).

- \* 145. *D. elongatum* Ag. var. *tenuis* (Ag.) Kuetz V. H. Tab. L, fig. 14. A.

Sucha — razem z odmianą poprzedzającą.

- \* 146. *D. hiemale* (Lyng.) Heib., V. H., Tab. LI, fig. 1—2.

Sucha — potok Józefa Sumery, na kamieniach w małym wodospadzie; strumień w lesie powyżej Pstrągarni (między mechami).

#### Fam. Meridionaceae Kuetz.

##### Gen. *Meridion* Ag.

147. *M. circulare* (Grev.) Ag. De-Toni, Sylloge algarum, Vol. II, Sect. 2, pag. 642.

Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.

Fam. Fragilariaceae (Kuetz.) em. De-Toni.

Gen. *Synedra* Ehrenb.

148. *S. Ulna* (Nitzsch.) Ehrenb., V. H. Tab. XXXVIII, fig. 2, 7.

Sucha — dół po glinie przy cegielni za plebania; strumień w lesie powyżej Pstrągarni; skała wśród silnego prądu Skawy pod „Garcowską Górą“.

\* var. *longissima* (W. Sm.) Brun., V. H. Tab. XXXVIII, fig. 3.

Maków — okrągły zbiornik wody przy studni kamieniami cembrowanej pod szczytem Makowskiej Góry.

\* var. *amphirhynchus* (Ehrenb.) Grun., Grun. V. H. Tab. XXXVIII, fig. 5.

Maków — razem z poprzedzającą.

\* var. *oxyrhynchus* (Kuetz.) V. H. Tab. XXXIX, fig. 1.

Sucha — strumień w lesie powyżej Pstrągarni; potok Józefa Sumery przy ujściu do Skawy (na kamieniach).

149. *S. Acus* Kuetz.

Sucha — skała wśród Skawy pod „Garcowską Górą“ w silnym prądzie (na *Cladoph. declinata*).

var. *delicatissima* (W. Sm.) Grun. V. H. Tab. XXXIX, fig. 6.

Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry. Rów przy gościńcu ze Suchy do Makowa obok figury Matki Boskiej, tuż przy rogatce.

150. *S. radians* Kuetz.

Sucha — średnia sadzawka w „księżym potoku“.

\* 151. *S. amphicephala* Kuetz. Grun. Öst. Diat. Taf. (8) V, fig. 11.

Sucha — skała wśród silnego prądu Skawy pod „Garcowską Górą“ (na *Cladoph. declinata*).

\* § 152. *S. affinis* Kuetz. var. *subtilis* Grun. V. H. Tab. XLI, fig. 18

Sucha — średnia sadzawka w „księżym potoku“.

Fam. Striatellaceae (Kuetz.) Heib.

Gen. *Tabellaria* Ehrenb.

153. *T. flocculosa* (Roth.) Kuetz., V. H., Tab. LII, fig. 10—12.

Maków — rów przy gościńcu tuż przy kamieniołomie p. Lika.

Fam. **Eunotiaceae** (Kuetz.) De-Toni.Gen. **Cystopleura** Bréb.154. *C. turgida* (Ehrenb.) Kunze.

Rów przy gościńcu ze Suchy do Makowa, obok figury Matki Boskiej, tuż przy rogatce.

\* var. *granulata* (Ehrenb.) Brun., V. H. Tab. XXXI, fig. 6.

Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.

155. *C. gibba* (Ehrenb.) Kunze.

Sucha — mokradła przy drodze z makowskiego działu na zboczu „Swierkoszowej Góry”; potok Józefa Sumery, na kamieniach w małym wodospadzie. Rów przy gościńcu ze Suchy do Makowa przy figurze Matki Boskiej, tuż przy rogatce. Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.

\* var. *ventricosa* (Ehrenb.) Grun.

Maków — strumyczek w lesie Surletówka.

156. *C. Argus* \* § var. *amphicephala* Grun., V. H. Tab. XXI, fig. 19.

Rów przy gościńcu ze Suchy do Makowa obok figury Matki Boskiej, tuż przy rogatce.

157. *C. Zebra* (Ehrenb.) Kunze.

Sucha — potok Józefa Sumery, na kamieniach w małym wodospadzie.

\* var. *proboscidea* (Kuetz.) Grun., V. H. Tab. XXXI, fig. 10.

Razem z Nrem 156.

\* 158. *C. gibberula* (Ehrenb.) Kunze.

§ var. *genuina* Grun.

Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.

var. *producta* Grun. Öst. Diat. Tab. III (6), fig. 9.

Rów przy gościńcu ze Suchy do Makowa obok figury Matki Boskiej, tuż przy rogatce.

Gen. **Pseudo-Eunotia** Grun.159. *P. lunaris* (Ehrenb.) Grun.

Sucha — dół po glinie przy cegielni za plebanią i razem z *C. gibberula* var. *producta*.

Ordo **Cryptorhaphideae** H. L. Smith.Fam. **Melosiraceae** (Kuetz.) De-Toni.Gen. **Gaillonela** Bory.160. *G. varians* Ag.

var. *genuina* Kirch.



Maków — tuż przy kamieniolomie p. Lika w rowie przy gościńcu (cum auxosporis d. 20. VIII); strumyczek w lesie Surletówka na stokach Makowskiej Góry.

var. *aequalis* Kuetz.

Sucha — potok Józefa Sumery na kamieniach w małym wodospadzie i przy ujściu do Skawy.

\* § 161. *G. tenuis* Kuetz.

Sucha — potok Józefa Sumery, na kamieniach przy ujściu do Skawy.

Gen. **Orthosira** Thw. em. Heib.

\* § 162. *O. arenaria* (Moore) Sm. var. *typica* Gutw. Prodröm. pag. 154 Nr. 965.

Sucha — sadzawka w Pstrągarni i dno rynny doprowadzającej wodę; strumień w lesie powyżej Pstrągarni.

Class. Schizophyceae Cohn.

Ordo Gloeosipheae Kuetz.

Fam. Nostocae (Kuetz.) Born. et Flah.

Gen. **Nostoc** Vauch.

\* 163. *N. rupestre* Kuetz., Bzi, Morf. e biolog. ficochr. pag. 283. Tab. VII, fig. 4. (*N. microscopicum* Carm.).

Crass. cel. veg. = 3.3  $\mu$ , cel. limitan. = 6.6  $\mu$ .

Maków — strumyczek w lesie Surletówka na stokach Makowskiej Góry.

Gen. **Anabaena** (Bory) Wittr.

\* 164. *A. macrosperma* (Kuetz.) Hansg. var. *major* (Kuetz.).

Hansg., Prodröm. pag. 71.

Crass. cel. veg. = 3.3 — 4  $\mu$ , long. = 5.5  $\mu$  — 7.7  $\mu$ .

„ limit. = 4.4  $\mu$  — 5.5  $\mu$ , „ = 8.8  $\mu$

„ sporae = 15.4  $\mu$  „ = 24  $\mu$ .

Rów przy drodze ze Suchy do Makowa obok figury Matki Boskiej, tuż przy rogatce.

Fam. Oscillariaceae Stiz.

Gen. **Schizothrix** Kuetz.

\* § 165. *S. penicillata* (Kuetz.) Gomont, Monogr. pag. 43, Tab. VII, fig. 8—10.

Crass. cell. cum vagina = 11  $\mu$  — 13  $\mu$  — 15  $\mu$  — 18  $\mu$   
 „ „ sine „ = 4·4  $\mu$  — 6·6  $\mu$ .

Maków — okrągły zbiornik wody przy studni kamieniami cembrowanej pod szczytem Makowskiej Góry.

\* 166. *S. Friesii* (Ag.) Gomont, l. c. pag. 54. Tab. IX, fig. 1—2.

Crass. fil. 3·3  $\mu$  — 4·4  $\mu$ ; long. cell. = 4·4  $\mu$  — 6·6  $\mu$ .

Mioduszyna — ścieżki.

### Gen. *Microcoleus* Desmaz.

\* § 167. *M. vaginatus* Gom. var. *Vaucheri* (Kuetz.) Gom. l. c. pag. 94. Tab. XIV, fig. 12.

Crass. fil. = 4·4  $\mu$ , long. cell. = 3·3  $\mu$ .

Sucha — struga przydrożna na drodze do Pstrągarni.

### Gen. *Phormidium* Kuetz.

\* § 168. *P. Corium* Gom. Monog. pag. 192. Tab. V, fig. 1—2.

Crass. fil. 2·2  $\mu$  — 3·3  $\mu$ , long. cell. = 3·3  $\mu$  — 5·5  $\mu$ .

Ścieki pod samym szczytem Makowskiej Góry.

\* § 169. *P. uncinatum* Gom. l. c. pag. 204. Tab. V, fig. 21—22.

Crass. fil. = 6·6  $\mu$ , long. cell. = 5·5  $\mu$ .

Sucha razem z Nrem 167.

### Gen. *Oscillatoria* Vauch.

\* 170. *O. princeps* Vauch., Gom. l. c. pag. 226. Tab. VI, fig. 9.

Crass. fil. = 22  $\mu$ ; long. cell. = 4·4  $\mu$ .

Maków — małe stawki nad „hutami“ pod Bryndzówką.

\* § 171. *O. limosa* Ag. (*O. Froelichii* Kuetz.) Gom. l. c. pag. 230.

Tab. VI, fig. 13.

Crass. fil. = 16·6  $\mu$ , long. cell. = 4·4  $\mu$ .

Rów przy gościńcu ze Suchy do Makowa obok figury Matki Boskiej, tuż przy rogatce.

\* § 172. *O. formosa* Bory, Gom. l. c. pag. 250. Tab. VII, fig. 16.

Crass. fil. = 5·5  $\mu$ , long. cell. = 4·4  $\mu$  — 5·5  $\mu$ .

Sucha — skała w Skawie pod „Garcowską Górą“ w silnym prądzie wody.

## Ordo Chroococcoideae.

## Fam. Chroococcaceae.

Gen. *Merismopedium* Meyen ex p.

- \* 173. *M. glaucum* (Ehrenb.) Naeg., Hansg. Prodr. pag. 141.  
 Crass. cell. = 3  $\mu$  = long. cell.  
 Sucha — średnia sadzawka w „księżym potoku“.

Gen. *Gomphosphaeria* Kuetz.

74. *G. aponina* Kuetz., Hansg. Prodr. pag. 143.  
 Maków — maleńki stawek nad „hutami“ pod Bryndzówka.



# FAUNA LEPIDOPTEROLOGICZNA

doliny Popradu i jego dopły wów.

Część IV.

Napisał

**Fryderyk Schille**

zarządca lasów w Rytrze.



Jako uzupełnienie mojej publikacyi o motylach doliny Popradu, podaję poniżej gatunki motyli większych (*Macrolepidoptera*), które od roku 1894, jako dla okolicy nowe odnalazłem.

## MACROLEPIDOPTERA.

### RHOPALOCERA.

#### Papilionidae.

#### Pieridae.

#### *Pieris* Schrk.

1. *P. daphidice* L. 17. lipca, Rytro — rzadka

#### Lycaenidae.

#### *Lycaena* F.

2. *L. argiolus* L. 29. kwietnia, Biegonice. 11. maja, Żarnowiec, rzadki, szczególnie ♀♀.

**Nymphalidae.****Vanessa F.**

3. *V. levana* L. 27. maja, Rytro. 28. maja, Rzyczanów.  
2-gie pokolenie: *prorsa* L. w lecie na tych samych miejscach dość rzadki.

**Melitaea F.**

4. *M. aurelia* Nick. 2. lipca 1897. Rzyczanów, bardzo rzadka.

**Argynnis F.**

5. *A. niobe* L. 2. lipca 1897. polana „Jasienowa“; bardzo rzadka.

**Satyridae.****Erebia B.**

6. *E. aethiops* Esp. v. *leucotaenia* Stgr. 17. sierpnia, Żarnowiec — bardzo rzadka.

**Pararge Hb.**

7. *P. aegeria* L. Na polanie pod „Skalka“ jeden okaz przez Dra Klemensiewicza przy wspólnej wycieczce złapany w sierpniu 1898. Również bardzo rzadka.

**HETEROCERA.****Sphinges.****Sphingidae.****Macroglossa O.**

8. *M. bombylifformis* O. Wielka Roztoka 1. czerwca 1894. na kwiatach *Viola rediviva* o godzinie 10. przed południem, 15. czerwca 1895. pod Konieczną. Rzadki.

**Bombyces.****Hepialidae.****Hepialus F.**

9. *H. carna* Esp. 12. lipca 1899. „Fugasówka“ pod Radziejową. Bardzo rzadki.

**Cossidae.****Zeuzera Latr.**

10. *Z. pyrina* L. 4. lipca 1898. Barcice.

**Cochliopodae.****Heterogenea Knoch.**

11. *H. aetella* Schiff. 14. czerwca 1898. Polana „Skotarskie“.

**Liparidae.****Dasychira Stph.**

12. *D. fascelina ab. laricis* Schille. Ab. nov. Dilutior cinerea, fere unicolor; alis anterioribus vix nigro alboque adpersis, strigis duabus nigris abbreviatis obsoletisque subtiliter fulvo irroratis.

Wyhodowałem 24 egzemplarze na modrzewiu *Larix europea* w roku 1898.

Aberracya ta jest opisana w Societas Entomologica, rocznik XIV, Nr. 10.

**Noctuae.****Agrotis O. La.**

13. *A. fugax* Tr. 16. czerwca 1894. Rytro, 2 okazy. 16. lipca 1898. Konieczna, 1 okaz.  
 14. *A. obelisca* Hb. 5. sierpnia 1896. Rytro, przy lampie w nocy złapana.  
 15. *A. saucia* Hb. 29. września 1899. Rytro.  
 16. *A. nigricans* L. 29. lipca 1897. Rytro.

**Dianthoecia B.**

17. *D. cucubali* Fuesli. W roku 1898. kilkadziesiąt okazów wyhodowałem z gąsienic w Piwnicznej znalezionych.

**Ammoconia Ld.**

18. *A. caecimacula* F. 10. i 18. września 1899 z gąsienic wyhodowane.

**Hadena Tr.**

19. *H. lithoxylea* F. 15. lipca, Rytro.

**Leucania O.**

20. *L. turca* L. Jeden okaz do lampy złapałem w czasie mej bytności we wschodniej Galicyi w Sołotwinie, powiat Bohorodczany.

**Caradrina O.**

21. *C. quadripunctata* F. *ab.* zbliżająca się do *v. grisea* Ew. 26. maja 1896. Rytro.

**Cucullia Schrk.**

22. *C. absinthii* L. W roku 1897. 4 okazy z gąsienic na piołunie hodowanych; wylęgały się 19., 21. i 25. lipca.

**Plusia O.**

23. *P. bractea* F. Złapałem jeden okaz w lipcu do lampy w górach sołotwińskich w Porohach.

**Catocala Schrk.**

24. *C. promissa* Esp. Złapałem w lasach sołotwińskich na przynętę z jabłek.

**Toxocampa Gn.**

25. *T. craccae* F. 21. czerwca 1895. i 7. czerwca 1897. do lampy w Rytrze.

**Helia Gn.**

26. *H. calvaria* F. Złapałem w Sołotwinie w sierpniu na przynętę z jabłek.

**Zanclognatha Ld.**

27. *Z. tarsipennalis* Tr. 11. lipca 1894. i 30. czerwca 1897., w Żarnowcu i Młodowie.

**Bomolocha Hb.**

28. *B. fontis* Thnb. 8. lipca 1894 w Przysietnicy za leśniarką, bardzo rzadki.

**Geometrae.****Jodis Hb.**

29. *J. putata* L. 17. czerwca 1894., Rzyczanów. 12. czerwca 1897., Żarnowice.

**Acidalia Tr.**

30. *A. bisetata* Hufn. 5. czerwca 1894., Rytro. 16. lipca 1894., Przysietnica. 27. lipca 1898., Dominików.  
 31. *A. emarginata* L. 4. sierpnia 1898., Młodów.

**Abraxas Leach.**

32. *A. grossulariata* L. 7. lipca 1894., Rytro.  
 33. *A. marginata* L. *ab. pollutaria* Hb. 13. maja 1899., Rytro.

**Bapta Stph.**

34. *B. temerata* Hb. 9. czerwca, Żarnowiec.

**Numeria Dup.**

35. *N. pulveraria* L. 12. czerwca 1894., Radziejowa, 1100 m. 7. maja 1897., Żarnowiec. 4. maja 1899., Rytro *ex. l.*

**Crocallis Tr.**

36. *C. elinguaris* L. *ab. trapezaria* B. 24. lipca 1898. *ex. l.* Rytro. Gąsienica w maju na Woli Kroguleckiej z tarniny.

**Phasiane Dup.**

37. *Ph. clathrata* L. W maju w Rytrze i Barcicach.

**Odezia B.**

38. *O. tibiale* Esp. 16. czerwca 1897. w Młodowie. Motyl bardzo rzadki, od czasów Nowickiego w Galicyi nie złapany.

**Cidaria Tr.**

39. *C. taeniata* Stph. 25. lipca 1898. 2 okazy pod Konieczną.  
 40. *C. turbata* Hb. 15. lipca 1899., Wielka Roztoka, bardzo rzadki.  
 41. *C. didymata* L. 2. sierpnia 1899., polana „Jaworzynka“, 3 okazy.  
 42. *C. incursata* Hb. 24. maja 1897. do lampy, Rytro.  
 43. *C. moluginata* Hb. 27. czerwca 1896, Żarnowiec. 23. czerwca 1897., Młodów.  
 44. *C. affinitata* Stph. *v. turbaria* Stph. 23. maja 1897., Mała Roztoka, bardzo rzadki.  
 45. *C. luteata* Schiff. 22. czerwca 1896., W. Roztoka. 16. czerwca 1897., Młodów.  
 46. *C. sordidata* F. *ab. infusata* Stgr. 9. lipca 1894., Przysietnica.



**Eupithecia Curt.**

47. *E. abietaria* Goeze. 16. czerwca 1897., Młodów, rzadka.
48. *E. scabiosata* Bkh. 24. maja 1895., Wielka Roztoka.
49. *E. subfulvata* Hw. 2. sierpnia 1899., pod Radziejową, do lampy.
50. *E. nepetata* Mab. 3. sierpnia 1898., Rzyczanów.
51. *E. satyrata* Hb. *ab. callunaria* Dbld. 24. maja 1895. i 19. czerwca 1897. w Przysietnicy.
52. *E. virgaureata* Dbld. 19. czerwca 1897. w Przysietnicy.
53. *E. assimilata* Gn. 12. sierpnia 1899., Rytro.

Kończąc w roku 1899. okres trzechletnich badań dla Komisji fizyograficznej Akademii Umiejętności, zebrałem w roku tym 43 dla okolicy nowych gatunków Microlepidopterów, które poniżej podaję:

**MICROLEPIDOPTERA.****Pyralidina.****Scoparia Hw.**

1. *S. ambigualis* Tr. *var.* H. S. fig. 109. 15. lipca, w dwóch okazach, Wielka Roztoka.

**Botys Tr.**

2. *B. flavalis* Schiff. 23. lipca 1899. z doliny Popradu, lecz z węgierskiej strony.

**Agrotera Schrk.**

3. *A. nemoralis* Sc. 11. maja 1898. i 24. maja 1899. koło Woli Kroguleckiej.

**Tortricina.****Tortrix Tr.**

4. *T. semialbana* Gn. 28. lipca 1899. koło Młodowa.
5. *T. Conwayana* F. 30. czerwca koło Dominikowa.

**Olindia Gn.**

6. *O. ulmana* Hb. 15. lipca w kilku okazach na W. Roztoce.

**Cochylis Tr.**

7. *C. zephyrana* Tr. var. do var. *scabidulana* Ld. bardzo zbliżona.  
13. maja, Piwniczna.  
8. *C. Schreibersiana* Froel. 12. lipca, Fugasówka pod Radziejową.

**Penthina Tr.**

9. *P. variegana* Hb. 16. czerwca, Rytro. 30. czerwca, Dominików.  
10. *P. palustrana* Z. 14. lipca, Młodów.  
11. *P. sauciana* Hb. 17. lipca, Radziejowa.  
12. *P. oblongana* Hw. 14. czerwca, Młodów.

**Grapholita Tr.**

13. *G. cirsiana* Z. 21. czerwca, Fugasówka pod Radziejową.  
14. *G. gemmiferana* Tr. 5. czerwca, Skotarskie.  
15. *G. expallidana* Hw. 6. czerwca, Pod Obłazem.  
16. *G. nisella* Cl. 26. lipca, Rzyczanów.  
17. *G. immundana* F. 17. maja, koło Młodowa.

**Phthoroblastis Ld.**

18. *P. germana* Hbn. 24. maja, Wola Krogulecka.

**Steganoptycha H. S.**

19. *S. nigromaculana* Hw. 28. lipca, Młodów.

**Phoxopteryx Tr.**

20. *P. diminutana* Hw. 12. lipca, Fugasówka.

**Tineina.****Scardia Tr.**

21. *S. boleti* F. 8. czerwca, kilka okazów w Rzyczanowie.

**Tinea Z.**

22. *T. parasitella* Hb. 8. czerwca, Rytro.

**Nemotois Hb.**

23. *N. violellus* Z. 17. lipca, Radziejowa.

**Argyresthia Hb.**

24. *A. illuminatella* Z. 6., 14., i 16. czerwca, Oblazy i Młodów.

**Plutella Schrk.**

25. *P. daella* Stt. 21. czerwca, w potoku pod Radziejową.

**Bryotropha Hein.**

26. *B. terrella v. lutescens* 12. sierpnia, krzaki Teutelbauma.

**Depressaria Hw.**

27. *D. flavella* Hb. 26. lipca, Rzyczanów.  
 28. *D. laterella* Schiff. 6. kwietnia, Rytro.  
 29. *D. Douglasella* Stt. 9. września, Rytro.  
 30. *D. pulcherrimella* Stt. 14. lipca, Młodów.

**Gelechia Z.**

31. *G. infernalis* H. S. 17. lipca, Radziejowa, 1200 m., 3 okazy.

**Nannodia Hein.**

32. *N. Eppelsheimi*. 24. maja, Rytro.

**Anacampsis Curt.**

33. *A. coronillella* Tr. var. Odznaczająca się żółto zabarwionym środkowym członkiem gąszczków. (Według diagnozy Dra Hofmana z Regensburga).

**Ornix Z.**

34. *O. carpinella* Frey. W dwóch generacyach w czerwcu 6. w Oblazie i 12. sierpnia w Rytrze ku Staremu Sączowi.

**Coleophora Z.**

35. *C. taeniipennella* H. S. 25. maja, pod Konieczną. 5. czerwca, Skotarskie.

**Chauliodus Tr.**

36. *Ch. Illigerellus* Hb. 15. czerwca w potoku pod Kaplicą na Oblazie.

**Butalis Tr.**

37. *B. chenopodiella* Hb. 25. lipca, ♀ i ♂ *in copula* — Rytro.  
19. lipca 1 okaz, Rytro.

**Elachsita Stt.**

38. *E. disertella* H. S. 27. maja i 15. czerwca, Młodów.  
39. *E. exactella* H. S. 15. czerwca, Młodów. 5. czerwca, Skotar-  
skie. 8. czerwca, Rzyczanów.  
40. *E. Reuttiana* Frey. 8. czerwca, Rzyczanów.

**Lithocolletis Z.**

41. *L. Froelichiella* Z. 4. maja, Żarnowiec. 18. maja, Młodów

**Bucculatrix Z.**

42. *B. crataegi* Z. 8. czerwca, Rzyczanów. 9. czerwca, Grabowiec.

**Platyptilia Hb.**

43. *P. nemoralis* var. *isodactyla* Graaf. 23. lipca 1899. w kilku okazach pod Konieczną.



# Materiały

## do fauny Złotek<sup>1)</sup> (Chrysididae) Galicyi

Napisał

Dr. Edward L. Niezabitowski.

Jedną z najpiękniejszych grup błonkówek, tak pod względem bogactwa jak i świetności barw, stanowią złotki. Żadna inna rodzina błonkówek nie może się z nią równać, a tylko niektóre chrząszcze z pośród owadów, a kolibry między ptakami mogą się poszczycić podobną pięknnością i grą barw. Ciało złotych w promieniach słońca mieni się wszystkimi kolorami tęczy, bo też i życie ich ściśle z ciepłem i światłem słonecznym jest związane. W godzinach największego skwaru, na przedmiotach najwięcej wystawionych na promienie słońca, jak budynkach drewnianych, starych murach, gliniastych i piaszczystych urwiskach, widać je uwijające się żywo i zaglądale w każdy otwór, w każdą szczelinę. Niech jednak tylko słońce przysłoni się chmurą, w jednej chwili, jakby za dotknięciem różdżki czarodziejskiej niktą wszystkie złotki i najwprawniejsze oko badacza nie wysledzi ich kryjówek. Jakież cel mają te ciągle ich wędrówki po miejscach słonecznych? Przypatrzwszy się bliżej, wprawne oko pozna, że po wymienionych miejscach uwijają się prawie wyłącznie samiczki, zajęte troską o złożenie jajka i zabezpieczenie życia swemu potomstwu, podczas gdy samczyki pędzą swój krótki żywot bez troski na

<sup>1)</sup> Nazwy złotych użyłem zamiast dawniej używanej nazwy złotolitek, która mem zdaniem była nieodpowiednią.

kwiatach pięciorników i różnych roślin okółkowych, czerpiąc z nich słodki nektar. W tych samych miejscach, po których uwijają się złotki, w dziurkach drzewa i ziemi, niekiedy w opuszczonych domkach ślimaków, składają swe jajka przeróżne owady osowate, a dla zabezpieczenia wylęgłej gąsieniczce pożywienia znoszą następnie do komórek ubezwładnione żądłem gąsienice, pająki i różnorodne owady, poczem otwór starannie zalepiają trocinami, jeśli się znajduje w drzewie, piaskiem i gliną, gdy znajduje się w ziemi. Z czasu, jaki upływa między złożeniem przez osę jajka, a przyniesieniem zdobyczy i zamurowaniem komórki, korzysta złotka i wkradłszy się do cudzego mieszkania, składa w kącie swe małe jajeczko. Dopiąwszy swego celu, szybko się oddala i obserwuje z daleka, czy gospodarz nie spostrzeże niemiłego nabytku. Zdarza się jednak, że gospodarz wróciwszy wcześniej do domu, zastaje nieproszonego gościa; wtedy karze go dotkliwie silnymi szczękami i z gniazda wyrzuca. Na podobne wypadki przygotowane są odpowiednio złotki, uzbrojone w twarde wypolerowany pancerz, po którym obślizgują się szczęki przeciwnika, a nadto posiadają możność zwijania się w kłębek, podobnie, jak to czynią jeże, stonogi i wije, i ukrywania w ten sposób słabszych organów, jak nogi i rożki. Mimo to jednak często się zdarza, że złotka wydostawszy się z szczęk przeciwnika, uchodzi okulawiona lub pozbawiona jednego z rożków.

Jeśli gospodarz nie spostrzegłszy ukrytego w kącie jajka złotki, zamuruje komórkę, to po upływie 3 lub 5-ciu dni wykluwa się z niego drobna beznożna gąsieniczka, opatrzona wysuwalnym pyszczkiem, uzbrojonym parą krótkich, silnych, trójzębnych szczęk. Zapomocą tych szczęk wgryza się gąsieniczka złotki w skórę ostatniego pierścienia ciała gąsienicy osy, która pierwiej wylęgłszy się, już znacznie podrosła. Odtąd zwolna, by jej od razu nie zabić, wysysa mała gąsieniczka swą żywicielkę, która ginie dopiero, gdy po upływie 12—18 dni gąsieniczka złotki dorosła do swej normalnej wielkości. Po upływie tego czasu gąsieniczka poczyną się oprzędzać, snując nitkę z lepkiego, z pyszczka wydzielanego płynu, który na powietrzu zaraz krzepnie. Kokon złotki bywa różnej wielkości, kształtu zwykle nieregularnie obłego, barwy białej, żółtej lub brunatnej. Oprzędłszy się, gąsienica traci ruchliwość i pozostaje w tym stanie aż do następnej wiosny. Dopiero, gdy słońce zacznie znowu dogrzewać, ulega gąsieniczka przeobrażeniu w delikatną przeźroczystą nimfę, której skóra po 8—10 dniach twardnieje i złotka się wykluwa. Życie złotek w formie doskonałej nie jest długie, gdyż u samiczek trwa nie wiele więcej jak dwa miesiące od czasu wyklucia się z kokonu; u samców zaś znacznie jest krótszem.

Ciekawem jest, że gąsienica złotki nie tknie nigdy zapasów swej żywicielki, a w przypadkach, gdzie umyślnie usuwano gąsienice osy, pozostawiwszy jej zapasy żywności gąsienicze złotki, ta ostatnia zawsze ginęła z głodu, nie tknąwszy zapasów nie dla niej przeznaczonych.

Liczba poznanych dotąd z całego świata złotek wynosi 600 gatunków. Zdawaćby się powinno, że stworzenia tak ściśle związane z ciepłem i światłem słonecznym, powinny najliczniej i w najpiękniejszych formach występować w strefie gorącej. Tymczasem rzecz ma się wręcz przeciwnie, gdyż największa liczba gatunków i najpiękniej ubarwionych należy do strefy palearktycznej. Pod względem rozsiedlenia ich w różnych częściach świata stosunek jest mniej więcej następujący: Europę zamieszkuje gatunków około 240, Azyę 220, Afrykę 200, Amerykę 165, Australię 31.

Stanowisko złotek w systematyce nie jest ustalone. Budową anatomiczną zbliżone są najwięcej do żądłówek, podczas gdy sposób ich życia podobny jest jak u gąsieniczników, zwłaszcza że i między złotkami jest pewien rodzaj, mianowicie *Cleptes*, który podobnie jak gąsieniczniki składa jajka wprost w gąsienice pilarzy z rodziny *Nematidae*.

W Galicyi złotkami zajmował się tylko Prof. Dr. A. Wierzejski, który w roku 1867 podał w swym Przyczynku do fauny owadów błonkoskrzydłych<sup>1)</sup> 20 gatunków złotek. Odtąd dziełem tym nikt się więcej nie zajmował. W roku ubiegłym zabrałem się do opracowania tej ciekawej, choć nielicznej rodziny błonkówek. Za materiał służyły mi zbiory częścią moje, pochodzące z różnych stron Galicyi, częścią zbiory Prof. W. Kulczyńskiego (zgromadzone częścią przez ś. p. Jana Cieślika), i Komisji fizyograficznej. Te ostatnie zebrane głównie przez Prof. Dr. A. Wierzejskiego, w południowej części Podola, Prof. B. Kotulę i Prof. A. Wagę.

Nowych dla fauny Galicyi przybyło gatunków 20 (w spisie oznaczonych gwiazdkami) tak, że suma ogólna wynosi 40 gatunków. Liczba ta, jak sądzę, powiększy się jeszcze znacznie po dokładnem zbadaniu okolic górskich i Podola. To ostatnie wyróżnia się znaczną ilością gatunków, znanych tylko z południowej i południowo-wschodniej Europy. Liczba znanych dotąd z Galicyi gatunków nie jest zbyt małą, wzięwszy na uwagę to, że Niemcy, które są pod względem faunistycznym dosyć dokładnie zbadane, posiadają gatunków tylko 63, a z całego Państwa Austriackiego znanych jest gatunków 77.

<sup>1)</sup> Sprawozd. Komisji fizyograf. c. k. Tow. nauk. Krak. T. II.

W spisie podaje również niektóre miejscowości z Królestwa Polskiego i Ukrainy, z których złotki znajdują się w zbiorach Prof. A. Wagi.

## CHRYSIDIDAE. Latr.

### Cleptinae. Aaron.

#### Cleptes. Latr.

*nitidulus* Fabr. Toutry <sup>1)</sup> 11. sierpnia, Ustrzyki.  
*semiauratus* Latr. Kraków, 6. czerwca; Bieńkowice 26. lipca; Nowa Wieś 10. sierpnia; Ustrzyki; Lwów, 5. czerwca; Lisienice, 1. czerwca.

### Ellampinae. Aaron.

#### Ellampus. Spinola.

*aeneus* Spin. Dobczyce, 14. lipca; Janów, 27. sierpnia; Bucyki, 3. sierpnia; Sinków, 8. sierpnia; Skala, 22. sierpnia.  
*auratus* Spin. Kraków, 30. maja, 23. czerwca; Bieńkowice, 25. sierpnia; Witkowice, w sierpniu; Ustrzyki; Zegiestów, 19. sierpnia; Lwów; Drańcza (pagórek pod Brodami); Tulin (Podole), 12. czerwca; Kalinowce, 3. września.  
*\*bidens* Schek. Podole w sierpniu.  
*pusillus* Dahlb. Ustrzyki; Lwów; Krzywczyce, 28. czerwca; Janów, w sierpniu; Stanisławów, 14. czerwca; Bucyki, 25. lipca; Sinków, 6. sierpnia; Skala, 10. lipca.  
*scutellaris* Dalla-Torre. Kraków, 18. lipca; Bieńkowice, 9. sierpnia; Sicha, 3. sierpnia; Ustrzyki; Lwów, 5. czerwca; Bucyki, 14. czerwca.  
*\*truncatus* Dahlb. Kraków; Bucyki, 12. czerwca; Sinków, 4. sierpnia.  
*\*violaceus* Wesm. Szczawnica; Lwów; Lisienice.  
*\*Wesmaëlii* Chevr. Kraków, 6. lipca; Ustrzyki; Bucyki; Skala, 28. sierpnia.

### Hedychrinae Mocsáry.

#### Holopyga Dahlbom.

*amoenula* Dahlb. Bieńkowice, 24. lipca; Lwów, 8. czerwca; Ustrzyki; Bucyki, 14. czerwca; Warwaryńce, 6. lipca; Skala, 16. lipca; Sinków, 4. sierpnia; Przydonica <sup>2)</sup>, 16. lipca.

<sup>1)</sup> Miodobory.

<sup>2)</sup> Koło Gródka nad Dunajcem.



- ardens* Mocs. Borek Fałęcki, 29. czerwca; Sucha; Ustrzyki; Lwów; Sinków, 4. sierpnia.
- \**curvata* Mocs. Tatry, 2. lipca; Lisienice, 4. lipca; Skała, 30. czerwca; Stawiszczce.
- \**fervida* Ab. Sinków, 25. czerwca; Kalinowce, 13. lipca.
- \**gloriosa* Dahlb. Krzywczyce, 6. czerwca.
- rosea* Mocs. Kraków, 13. lipca; Bieńkowice, 26. lipca; Nowa Wieś, 23. sierpnia; Żegiestów, w lipcu; Sinków, 9. sierpnia; Mielnica, 17. sierpnia; Warwaryńce, 6. lipca; Skała, 23. sierpnia; Bucyki, 19. sierpnia.
- \**sculpturata* Mocs. Kraków, 7. lipca; Pieniaki, 7. sierpnia; Sinków, 4. września.

### Hedychrum Latréille:

- \**caerulescens* Schuck. Lwów.
- nobile* Mocs. Kraków, 13. lipca; Bieńkowice, 23. lipca; Regulice, w lipcu; Zabierzów, 30. sierpnia; Sucha; Tenczyn; Szczawnica; Ustrzyki; Sucha; Lwów; Skała, 17. sierpnia; Mielnica, 17. sierpnia; Sinków, 9. sierpnia; Bucyki, 18. sierpnia; Tulin, 12. sierpnia; Przydonica, 13. lipca.
- rutilans* Dahlb. Ustrzyki; Lwów; Janów, 29. sierpnia; Sinków, 4. sierpnia; Bucyki, 12. sierpnia; Toutry, 11. sierpnia; Stawiszczce.
- \**Szaboi* Mocs. Kraków, 4. września; Lwów; Stawiszczce.

### Chrysidina Mocsáry.

### Chrysogona Förster.

- \**pumila* Mocs. Galicya.

### Stilbum Spinola.

- cyanurum* Mocs. *var. nobile* Spin. Skała, 12. sierpnia; Filipkowce, 14. lipca.

### Chrysis Linné.

- austriaca* Fabr. Kraków, 11. lipca; Bieńkowice, w maju; Szczyrzyce; Dobczyce, 15. lipca; Ustrzyki; Krościenko, 13. lipca; Sucha; Żegiestów; Przydonica, 18. lipca;
- cyanea* L. Kraków, 12. czerwca; Bieńkowice, 20. lipca; Sucha; Tatry; Bojanów koło Niska; Żegiestów; Szczyrzyce; Ustrzyki; Lwów; Głęboka, 15. lipca; Drohobycz; Przydonica, 17. lipca; Sinków, 8. sierpnia; Tulin, 21. sierpnia; Warszawa.
- \**dichroa* Dahlb. Galicya.

- fulgida* L. Kraków, 20. czerwca; Bieńkowice, 11. sierpnia; Witkowice, 19. maja; Wadowice; Żegiestów, 19. sierpnia; Szczyrzyce; Głęboka, 15. lipca; Przydonica, 15. lipca; Sucha, Szczawnica; Skala, 1. sierpnia; Droginia; Warszawa; Krośniewica.
- gnita* L. Kraków, 5. czerwca; Bieńkowice, 15. lipca; Dziekanowice, 19. lipca; Droginia; Sucha; Szczawnica; Chrzanów, 11. czerwca; Szczyrzyce; Rabka; Lachowice, 26. lipca; Przydonica, 20. lipca; Tatry; Głęboka, 7. czerwca; Drohobycz; Lwów; Ustrzyki; Tarnopol, 20. lipca; Zaleszczyki, 23. lipca; Bucyki, 3. czerwca; Tulin, 17. czerwca; Mielnica, 15. sierpnia.
- \**incrassata* Spin. Skala, 25. czerwca.
- Leachii* Schuck. Sinków, 6. sierpnia.
- \**neglecta* Schuck. Kraków, 10. czerwca; Rabka.
- \**pulchella* Spin. Sinków, 7. sierpnia.
- \**pustulosa* Ab. Galicya.
- \**rutilans* Ol. Sinków, 4. sierpnia.
- splendidula* Rossi. Lwów.
- \**succincta* L. var. *bicolor*. Lep. Szczawnica; Ustrzyki; Lwów.
- \**sybarita* Först. Krościenko, 13. lipca; Konina, 6. lipca; Głęboka, 4. sierpnia, w wielkiej ilości na drewnianych ścianach budynków.
- \**viridula* L. Kraków, 13. lipca, na urwistym brzegu; Szczawnica; Konina, 6. lipca; Ustrzyki; Lwów; Sinków, 4. sierpnia.

### Parnopinae. Aaron.

### Parnopes. Latreille.

- grandior* Moes. Kraków (za Botanicznym ogrodem), 7. VIII; Ustrzyki; Hucisko Rażniowskie pod Brodami w lipcu.



# Otwornice miocenu Pokucia

podał

Jarosław L. M. Łomnicki.



Przesiedlony z końcem lata r. 1898. do Kołomyi, rozpocząłem wycieczki przyrodnicze, mające na celu przedewszystkiem poznanie geologicznej budowy najbliższej okolicy. Z początku niejasnym było nawet, jaki utwór leży pod pleistocenijskimi żwirami i gliną Kołomyi, to też pierwsze promienie światła pewniejszego rzuciła dopiero wycieczka odbyta w r. 1898 nad potok Kosaczówkę. Wyniki badania przepłukanego łu z dna tego potoku ogłosiłem w Kosmosie<sup>1)</sup>. W ciągu badania zawartości łu z Kosaczówki zbierałem próbki łów z różnych bliższych i dalszych punktów okolicy Kołomyi i oddawałem je stopniowo do przepłukiwania chętniejszym uczniom. Dwóch nadto z nich używałem także do wybierania otwornic z miałów otrzymanych przez przepłukiwanie, jakoteż po odpowiednim przygotowaniu do oznaczania. Oznaczano je początkowo pod moim nadzorem, a później samodzielnie; zawsze jednakże oddane po oznaczeniu otwornice sam jeszcze przeglądałem dla skontrolowania oznaczeń. W ten sposób wyłoniła się potrzeba wydania niniejszego spisu otwornic, zwłaszcza, że w spisie ten wciągnięte są wszystkie miocenijskie otwornice, poznane dotychczas z Pokucia.

Kołomyja leży nad Prutem, to też wszelkie głębsze sztuczne odsłonięcia na obszarze miasta odkrywają pod zmiennej grubości czarnoziemem i gliną żółtą żwiry dawniejszych łóżysk Prutu. Dopiero wycieczka na przeciwległy prawy brzeg Prutu, znany pod nazwą Góry Oskresinieckiej przekonywa nas, że Prut wyłobił sobie swoje łóżysko w łożach miocenijskich. 11, z którego

<sup>1)</sup> Kosmos. R. 1900, T. XXV. str. 472—476. Jar. Łom. II miocenijski z doliny potoku „Kosaczówka“ w okolicy Kołomyi. Lwów 1900.

zbudowana jest Góra Oskrziesiniecka, zawiera miejscami tyle soli, że w skwarne dni letnie ziemia i niższe rośliny bieleją w tych miejscach wykwittem podobnym do szronu. Iły na Górze Oskrziesinieckiej leżą tam, gdzie nie uległy usunięciu, poziomo.

Drugim miejscem, w którym możemy poznać utwór, na którym pośrednio stoi Kołomyja, jest dolina potoku Kosaczówki. W niej i w potoku Kołomyjskim, który jest dalszym jej ciągiem, widzimy ił odsłonięty w kilku miejscach, przeważnie w warstwach pochylonych. Pochylenia te jednak należy przypisać prawdopodobnie usunięciom brzegu potoka. Wreszcie w samej Kołomyi znaleziono ił mioceni nad Czarnym Potokiem, przy kopaniu studni przy ulicy Sobieskiego.

Iłu tego w okolicy najbliższej Kołomyi nie zdołano przebić. Tak np. w Korolówce przy browarze, kopiąc studnię, przebito 2—3 m. gliny i żwiru, a następnie około 28 m. sinego iłu, wśród którego znaleziono kawałki rudowęgla, ale nadaremnie, bo iłowi nie było końca. Natomiast w dalszej okolicy, jak np. w Ostrowcu i w Bełełui pod iłem tym spoczywa gips mioceni.

Ił ten, nazwany przeze mnie iłem pokuckim<sup>1)</sup>, zawiera w wielu okolicach międzywarstwy cieńsze lub grubsze piasku (Dzurów, Potoczek i t. d.), piaskowca (Góra Oskrziesiniecka, Śniatyn i t. d.), węgla (Myszyn, Dzurów, Korolówka, Tuławy i t. d.), a nawet wapienia słodkowodnego (Dzurów).

Ił ma barwę popielatą z zielonkawym lub niebieskawym (stąd: „ił siny“) odcieniem. Często przez częściowe chemiczne przestoczenie przybiera odcień cisawy, zdradzający obecność wodorotlenku żelazowego. Po przepłukaniu pozostawia najczęściej piasek miałki, ostrokrawędzisty, z łuseczkami muskowitu i nieliczne skorupki otwornic.

## I. Kosaczówka<sup>2)</sup>.

Do wyliczonych l. c. otwornic dołączam jeszcze *Truncatulina lobatula*, Walk. et Jacob. Występuje rzadko w okazach bardzo drobnych.

<sup>1)</sup> Szczegółowe opisanie stosunku tego iłu do innych skał wyjdzie w tekście do map Kołomyi i Śniatyna, opracowanych przeze mnie dla Atlasu geol. Galicyi. — Myszyn i Dzurów opisał pod tym względem prof. Dr. T. Wiśniowski: *O miocenie podkarpackim w Dzurowie i Myszyńcu*. Kosmos. R. 1899. Z. IX, str. 411.—443. Lwów 1899.

<sup>2)</sup> Prawie równocześnie z moją, wyżej wymienioną notatką, ze spisem otwornic z Kosaczówki, podały *Verhandlungen des naturf. Vereines in Brünn* XXXVIII. Bd. str. 261.—273. rozprawkę p. t.: *Die miocänen Foraminiferen der Umgebung von Kolomea* von J. Swidkes. Autor tej rozprawki, jeden z byłych moich uczniów gimnazjalnych, towarzyszył mi często na bliższych wycieczkach i przepłukiwał iły. Ponieważ obok tego używałem go także do oznaczania otwornic,

## II. Kołomyja.

Jak wyżej wspomniałem, wydobyto kopiąc studnię przy ulicy Sobieskiego il barwy popielato-zielonawej. Po przepłukaniu pozostałość składa się z ostrokrawędzistych okruchów kwarcu bezbarwnego i mlecznego, rzadziej żółtego, z drobnych łuseczek muskowitu, z rzadkich okruchów rdzawożółtego drobnoziarnistego piaskowca i z domieszanych drobnych okruchów ciała czarnego żużłowatego i minerału zielonego (glaukonitu, chlorytu?).

Z otwornic zdarza się bardzo drobna *Globigerina bulloides*, d'Orb. dość często. Niektóre okazy jej zgadzają się zupełnie z Challengerem<sup>1)</sup> *Globigerina bulloides*, d'Orb. Pl. LXXIX t. 6. (*typical form, bottom adult specimen of the starved form common on the British coast*), niektóre znowu okazują zbliżenie do *Globigerina dutertrei*, d'Orb.

Łatwo zrozumieć, skąd ułamkowe i w wielu miejscach niedokładne relacje o miocenie pokuckim wsiąkły w przedwczesny elaborat J. Świdkesa. Ów autor ogłaszając bez mojego upoważnienia wyniki pracy, w której mi tylko był pomocny, popełnił szereg niedokładności, które obecnie muszę bądź sprostować bądź uzupełnić.

Z niewiadomych mi bliżej powodów wybrał sobie Świdkes tylko siedm miejscowości, mianowicie Kosaczówkę, Oskrzesińcer Berg (= Góra Oskrzesiniecka), Mikulińce, Śniatyn, Rohynię, Ostrowiec i Gross (sic!) Kamionka. O występowaniu ilu w samej Kołomyi nie mówi, choć na moje polecenie il z ulicy Sobieskiego sam przepłukiwał.

W wycieczkach nad Kosaczówkę towarzyszył mi Świdkes, a mimoto, że pokazywałem mu pochylone warstwy, tłumacząc mu jeszcze, że pochYLENIA te powstały skutkiem usunięć, pisze autor: „*Der Tegel an der Kosaczówka ist horizontal geschichtet*“.

W pozostałości z przepłukania widział Świd. wprawdzie piasek kwarcowy, wymierzył dokładnie rurki z martwicy wapiennej 6 — 8 mm. długie, widział zwęglone szczątki roślin i kołce jeżowca, którego rodzajowo nawet oznacza jako *Echinus* (oznaczenie to jest bardzo wątpliwe), ale natomiast pomija okruchy i otoczaki drobne innych skał i nadzwyczaj charakterystyczne łuseczki muskowitu.

Z otwornic opuścił autor następujące formy:

- Gaudryina pupoides*, d'Orb.
- Bulimina affinis*, d'Orb.
- Truncatulina ungeriana*, d'Orb.
- „ *lobatula*, Walk. et Jacob.
- Rotalia beccarii*, L.
- Nonionina granosa*, d'Orb.,

natomiast wylicza jeszcze obok podanych przeze mnie:

- Bulimina ovata*, d'Orb.
- „ *pupoides*, d'Orb.
- Bolivina robusta*, Brady.
- Cristellaria rotulata*, Lam.

<sup>1)</sup> Report on the voyage of H. M. S. Challenger. Zoology. Vol. IX. Report on the Foraminifera by Henry B. Brady. London 1884.

### III. Oskrzesińce (Hłyje).

Il pękający po wyschnięciu na ostrokrawędziste kawałki, uławicony poziomo, barwy sinej<sup>1)</sup>. Po przepłukaniu pozostałość przedstawia się jako nadzwyczaj drobny piasek złożony z ostrokrawędzistych, pod mikroskopem dających się dokładnie odróżnić okruchów kwarcu bezbarwnego, mlecznego, z łuseczek muskowitu, z nieco większych ułamków miążkoziarnistego piaskowca barwy jasnobrunatnej i z nielicznych skorupki otwornic:

1. *Bulimina elegans*, d'Orb. (okazy wydłużone).
2. *Bolivina dilatata*, Reuss.
3. *Cassidulina crassa*, d'Orb.
4. *Glandulina laevigata*, d'Orb.
5. *Globigerina bulloides*, d'Orb. (najpospolitsza, w okazach bardzo drobnych).

Obok wymienionych wyżej składników tego piasku, występują jeszcze dodatkowo i podrzędnie okruchy i otoczaki innych skał i minerałów<sup>2)</sup>.

<sup>1)</sup> Świdkes l. c. pisze: „Hłyi . . . . . führt grau-braunen, viel Sand enthaltenen Tegel“. (Str. 263). Widocznie wziął autor zabarwienie wtórne powierzchniowych partyi ilu za coś istotnego. Przy tem znowu popełnia w rozprawie, która jest jedną wielką niedyskrecją, pomniejsze. Jak nie wahał się pisać, że Kołomyja i jej okolica leżą na miocenijskich ilach, tak jakby to było jego odkryciem, tak też pisze o ostrokrawędzistości ziarenek kwarcu w ile, na co w moich notatkach zawsze zwracałem uwagę, w notatkach, które nie były tajemnicą dla niego jako towarzysza moich wycieczek. Moje objaśnienia pochodzenia nazw miejscowości Hłyi i Hłynyszcza osądził autor także za godne opublikowania w berneńskich „Verhandlungen“ (Hłyi albo hłyje znaczy po polsku: iły).

<sup>2)</sup> Autor rozprawki w berneńskich „Verhandlungen“ podaje jeszcze z Hłyjów:

- Bulimina aculeata*, d'Orb.  
*Globigerina (cretacea, d'Orb.?)* Brady.  
*Truncatulina lobatula*, Walk. et Jacob.  
*Rotalia soldanii*, d'Orb.

O *Globigerina (cretacea, d'Orb.?)* Brady pisze autor, że żyje począwszy od utworu kredowego (!). Prawdą jest, że typowa *Glob. cretacea* d'Orb. jest charakterystyczną dla kredy, natomiast rysunek Bradyego, cytowany przez autora, przedstawia niewątpliwie formę zupełnie od kredowej odmienną, żyjącą dziś i znaną przeze mnie w miocenie Wieliczki. Dla uniknięcia nieporozumień na przyszłość proponuję formę wyrysowaną u Bradyego l. c. T. LXXXII, f. 10, a u mnie: Kosmos R. 1899. Z. IV—V. T. I, f. 2. nazywać: *Globigerina subcretacea*.

Autor opuścił z form występujących w ile z Hłyjów: *Bolivina dilatata*, Reuss, *Cassidulina crassa*, d'Orb., *Glandulina laevigata*, d'Orb.

#### IV. Oskrzesińce (Hłynyszcze).

Hłynyszcze jest to nazwa (pochodząca od ruskiego wyrazu: „hłyna“, to jest: glina) wschodniej części Góry Oskrzesinieckiej. Il na Hłynyszczu wygląda nieco inaczej niż il na zachodnich Hłynjach. Zawiera sól, uwarstwowany jest poziomo tam, gdzie nie jest usunięty, a barwę ma zielonkawo-popielatą.

Il ten <sup>1)</sup> zawiera następujące otwornice:

1. *Quinqueloculina* sp. (rzadko, okruchy).
2. *Bulimina elegans*, d'Orb (często).
3. „ *pupoides*, d'Orb. (rzadko).
4. *Bolivina dilatata*, Reuss. (często).
5. *Glandulina laevigata*, d'Orb. <sup>2)</sup> i *var. ovula* d'Orb. (często).
6. *Globigerina bulloides*, d'Orb. <sup>3)</sup> (bardzo drobne okazy nie rzadko).
7. *Truncatulina lobatula*, Walk. et Jacob (rzadko).
8. *Heterolepa dutemplei*, d'Orb. sp. (b. często).
9. *Rotalia soldanii*, d'Orb. (rzadko).

#### V. Myszyn.

Z Myszyzna podaje otwornicę: *Rotalia beccarii*, L. sp. jako bardzo rzadką, prof. Dr. T. Wiśniowski l. c., str. 423.

#### VI. Kamionka Wielka <sup>4)</sup>.

Il z Kamionki jest barwy zielonawoszarej i na spojach warstw okazuje lśniące łuseczki miki. Z otwornic znalazły się w nim:

<sup>1)</sup> Według rozprawki Świdkesa jest ten il: „mehr bläulich“ i zawiera mało piasku i to ostrokrawędzistego. Autor wylicza jeszcze z Hłynyszcza:

*Biloculina* sp.  
*Bulimina aculeata*, d'Orb.  
*Bolivina robusta*, Brady.  
*Globigerina subcretacea*, mihi,  
natomiast opuścił: *Quinqueloculina* sp.  
*Bulimina pupoides*, d'Orb.  
*Glandulina var. ovula*, d'Orb.

<sup>2)</sup> Niektóre okazy należą prawdopodobnie do odmiany *Glandulina var. rotundata*, Reuss, a przynajmniej są do niej mocno zbliżone.

<sup>3)</sup> Większość naszych okazów odbiega od typu, przypominając: *Glob. inflata*, d'Orb. i *Glob. dutertrei*, d'Orb.

<sup>4)</sup> Miejscowości tej wprawdzie niema w elaboracie Świdkesa, ponieważ jednak z jednej strony wymienia w swoim spisie: „Gross-Kamionka“, której niema na mapie kołomyjskiej, z drugiej zaś strony przypominam sobie, że dałem mu do przepłukania il, który przywiozłem z Kamionki Wielkiej, przypuszczam, że te miejscowości są identyczne.

1. *Bulimina elegans*, d'Orb. (b. często).
2. " sp. (rzadko).
3. *Glandulina laevigata*, d'Orb. (kawałek skorupki).
4. *Cristellaria rotulata*, Lam. (b. małe okazy rzadko).
5. *Uvigerina pygmaea*, d'Orb. (rzadko).
6. *Sphaeroidina bulloides*, d'Orb. (rzadko).
7. *Heterolepa dutemplei*, d'Orb. sp. (często).
8. *Rotalia soldanii*, d'Orb. (jeden młody okaz).
9. *Nonionina umbilicatula*, Mont. var. *soldanii*, d'Orb. (często).

## VII. Dżurków.

W Dżurkowie spotkałem okruchowiec powstały na miejscu ze zlepiania okruchów przeistoczonego iłu barwy żółtawo-popielatej. Po przepłukaniu pozostałość składa się z zaokrąglonych i płaskatych grudek iłu, zlepionego prawdopodobnie lepiszczem wapiennym, barwy popielato-zielonkowatej i z grudek barwy brunatnej, pochodzących ze zlepiania okruchów różnych skał nieoznaczalnych pod mikroskopem wskutek powleczenia warstewką pyłkowatego limonitu. Z otwornic spotkałem:

1. *Bulimina affinis*, d'Orb. (b. rzadko).
  2. *Sphaeroidina bulloides*, d'Orb. (b. rzadko).
  3. *Discorbina (Rosalina) simplex*, d'Orb. (b. rzadko).
  4. *Nonionina umbilicatula*, Mont. var. *soldanii*, d'Orb. (często)
- i szczątki skorupek innych otwornic nieoznaczalne dokładnie.

## VIII. Chomiakówka.

W ile mioceńskim z Chomiakówki znaleziono:

1. *Uvigerina canariensis*, d'Orb.
2. " *pygmaea*, d'Orb. (w drobnych okazach bardzo pospolita).
3. *Sphaeroidina bulloides*, d'Orb.
4. *Discorbina (Rosalina) simplex*, d'Orb.

II ten podług autora: „bläulich-grau, enthält viel Sand (meistentheils scharfkantige Bruchstücke von Quarz), ziemlich wenig Foraminiferen“.

Podaje obok wymienionych przeze mnie otwornic jeszcze:

*Bulimina aculeata*, d'Orb.

" *pyrula*, d'Orb.

*Lagena semistriata*, Willmsn.

*Truncatulina lobatula*, Walk. et Jacob.,

nie podał natomiast:

*Glandulina laevigata*, d'Orb.

*Nonionina umbilicatula*, Mont. var. *soldanii*, d'Orb. oznacza autor jako *N. umbilicatula*, Mont. typ!



5. *Heterolepa dutemplei*, d'Orb. sp. (okruchy).
6. *Rotalia soldanii*, d'Orb.
7. *Nonionina umbilicatula* Mont. var. *soldanii*, d'Orb.

## IX. Tryfanówka (Ścianka nad Czerniawą).

W Tryfanówce wziąłem próbkę iłu ze ścianki wznoszącej się nad lewym brzegiem Czerniawy. Il ten daje po przepłukaniu pozostałość złożoną z drobnego piasku. W skład tego piasku wchodzi okruchy ostrokrawędziste kwarcu bezbarwnego, mlecznego i piaskowca o lepiszczu czerwono-brunatnym, oraz skorupki otwornic:

1. *Plecanium* sp.
  2. *Bulimina elegans*, d'Orb. (najpospolitsza).
  3. *Bolivina dilatata*, Reuss.
  4. *Cristellaria rotulata*, Lam.
  5. *Uvigerina* sp.
  6. *Discorbina* sp.
  7. *Heterolepa dutemplei*, d'Orb. sp.
- i innych nieoznaczalnych dokładnie, głównie wskutek znacznie gorszego zachowania, niż wyżej wymienione.

## X. Tryfanówka.

(Glinisko przy drodze).

Obok próbki iłu wziąłem także z obszaru wsi próbkę gliny nawianej (loessu), w której obok innych składowych części znalazły się też (oczywiście na złożu drugorzędnym) skorupki miocennych otwornic. Ponieważ Tryfanówka leży wśród Pokucia zdala od Podola i Karpat, mogły dostać się te otwornice do gliny w Tryfanówce tylko z miocenu pokuckiego, gdyż niema na Pokuciu właściwem odsłoniętego żadnego innego utworu morskiego. Otwornice znalezione w tej glinie są:

1. *Globigerina bulloides* d'Orb. (bardzo dobrze zachowany jeden okaz).
2. *Heterolepa dutemplei*, d'Orb. <sup>1)</sup> sp. (jeden z dwu okazów bardzo dobrze zachowany).
3. *Polystomella crista*, L. sp. (jeden bardzo dobrze zachowany okaz).

<sup>1)</sup> Otwornica ta, pospolita w wielu innych miocennych ilach Galicyi, występuje także w okazach połamanych w piasku otrzymanym z Baliniec. wsi niedaleko odległej od Tryfanówki.

## XI. Wkop drogi „pod Czerem“.

Wkop ten wzięto już wśród Podola gipsowego, ponieważ jednak otwornice znalezione wśród iłu wziętego u tego wkopu nie zawierają ani jednego gatunku, któryby nie występował także w miocenie Pokucia, musimy ił z wkopu pod Czerem uważać za zupełnie identyczny z iłami pokuckimi, zwłaszcza, że ta część Podola przytyka do właściwego Pokucia i przez wielu nie znających przyrodzonych granic naszej krainy wprost bywa do Pokucia zaliczana.

Ił ten jest barwy popielato-zielonkawatej, rdzawoplamisty wskutek częściowego przeistoczenia i dlatego na pierwszy rzut oka trudny do odróżnienia od gliny pleistocenijskiej. Po przepłukaniu daje pozostałość złożoną z większych zaokrąglonych bryłek żelazistego piaskowca miałkoziarnistego i z mniejszych bryłek ziarnistego żużlowatego pirytu, oraz z konkrecyi limonitu i wapienia różnej wielkości.

Do tego domieszane są nieliczne skorupki otwornic:

1. *Bulimina elegans*, d'Orb. (b. rzadko).
2. *Bolivina dilatata*, Reuss. (b. rzadko).
3. *Uvigerina pygmaea*, d'Orb. (rzadko).
4. *Sphaeroidina bulloides*, d'Orb. (b. często).
5. *Heterolepa dutemplei*, d'Orb. sp. (b. często).
6. *Rotalia soldanii*, d'Orb. (często).
7. *Nonionina umbilicatula* Mont. var. *soldanii*, d'Orb. (często).

## XII. Ostrowiec <sup>1)</sup>.

Przez Ostrowiec przechodzi granica Podola i Pokucia; ił wziętem jeszcze z obszaru Pokucia. Miejsce to jest ważne, gdyż można w niem stwierdzić, że ily pokuckie są nadgipsowe.

Ił ten szarosiny pozostawia po przepłukaniu grudki barwy również szarosinej. Niektóre z tych grudek dochodzą kilkumilimetrowej długości. Grudki te dlatego nie rozpadają się w wodzie, bo są marglem, to jest ılem zlepionym kalcytem, rozpuszczającym się wśród burzenia w kwasach. Grudka taka oblana kwasem azotowym pozostawiła mikroskopowo drobny pył, który składa się z okruchów bezbarwnego minerału (kwarcu?) ostrokrawędzistych i z bryłek pochodzących ze zlepiania mnogości takich okru-

<sup>1)</sup> Świdkes l. c. opisuje także ił z Ostrowca, przy czem barwa podana: „bläulich-grau“ jest dosłownie przetłómaczona z moich notatek, w których spotykam określenie barwy słowami: „szaro-siny“. Natomiast fałszywie widział autor, że: „der Schlammrückstand besteht aus kleinen, abgerundeten und abgeplatteten Bruchstücken von Kalkstein . . . .“ Te odłamki (!) nie są wapieniem, tylko ılem spojonym kalcytem, a obecność kalcytu jako lepiszcza da się wykryć dopiero chemicznie.

chów jeszcze drobniejszych. Obok grudek wspomnianych zawiera reszta z przepłukania iłu jeszcze kolce jeżowców (? *Echinus* sp.). Z małżów znalazło się drobnutkie *Cardium*, obok tego liczne szczątki skorup wapiennych bliżej nieoznaczalne i liczne wapienne ośrodki, rzadziej skorupki otwornic:

1. *Biloculina* sp. (jedna skorupka źle zachowana).
2. *Spiroloculina* <sup>1)</sup> sp. (bardzo często).
3. *Quinqueloculina* sp. (bardzo często).
4. *Bulimina elegans*, d'Orb. <sup>2)</sup> (często).
5. „ *elongata*, d'Orb. (b. często).
6. *Uvigerina pygmaea*, d'Orb. (b. często).
7. *Globigerina bulloides*, d'Orb. (drobne okazy bardzo częste, obok tego jeden okaz wielki).
8. *Sphaeroidina bulloides*, d'Orb. (b. często).
9. *Nonionina umbilicatula*, Mont. v. *soldanii*, d'Orb. (często).

Uwagi godne, że wszystkie wymienione otwornice, z wyjątkiem Miliolin i wielkiej Globigeriny, występują w naszym marglowym iłu jako ośrodki wapienne <sup>3)</sup>.

### XIII. Rohynia <sup>4)</sup>.

Przy kopaniu studni we dworze wyrzucono ił barwy zielonkowato - popielatej, pękający po wyschnięciu na ostrokrawędziste

<sup>1)</sup> Tę otwornicę oznacza Świdkes l. c. jako *Spiroloculina tenuis*, Cziż.

<sup>2)</sup> W starszej mojej notatce znajduję jeszcze *Bulimina affinis*, d'Orb. Po dokładniejszym zbadaniu iłu skreśliłem tę otwornicę w Ostrowcu, Świdkes jednakże l. c. podaje w miejsce znalezionych Bulimin: *Bulimina* sp. . . . . *die anscheinend von der B. affinis, d'Orb. nicht verschieden sind*<sup>4)</sup>.

<sup>3)</sup> Świdkes podaje jeszcze z Ostrowca obok wymienionych wyżej:

- Spiroloculina tenuis*, Cziż.
- i *Bulimina* sp.
- także: *Virgulina (texturata)*, Brady?)
- i *Truncatulina lobatula* Walk. et Jacob.,

natomiast opuszcza znalezione przeze mnie:

- Biloculina* sp.
- Bulimina elegans*, d'Orb.
- „ *elongata*, d'Orb.
- Nonionina umbilicatula*, Mont. var. *soldanii*, d'Orb.

O otwornicy *Uvig. pygmaea*, d'Orb. pisze: „*Die Exemplare sind sehr schlank, ihre jüngsten Kammern meistentheils glatt*“. Nie leży to w charakterze ich skorupek, mamy tu bowiem do czynienia z ośrodkami; stąd częściowy zanik żebrowania.

<sup>4)</sup> Ił z Rohyni przepłukiwał na moje polecenie autor rozprawy w berneńskich „*Verhandlungen*“. Charakteryzuje on ten ił słowami: „*Der Tegel ist grau-braun, enthält wenig Sand (scharfkantige Bruchstücke von Quarz, Kalkstein), birweilen kleine Schalen von Schnecken und Muscheln; verhältnissmässig viel Forami-*

kawałki. Próbkę tego łu dostałem za pośrednictwem ucznia mego, W. Domańskiego, po czym jeździłem jeszcze na miejsce wydobywania łu, aby je oglądać.

Pozostałość z przepłukania łu z Rohyni składa się z okruców ostrokrawędzistych kwarcu bezbarwnego, mlecznego, łuseczek miki potasowej i większych grudek piaskowca szarego, miałkoziarnistego (z miką i glaukonitem) nieogładzonych; niekiedy piaskowiec ten jest limonitem brunatno zabarwiony.

Z otwornic znaleziono następujące:

1. *Clavulina communis*, d'Orb. (szczątki rzadko).
2. *Glandulina laevigata*, d'Orb. (rzadko).
3. *Uvigerina canariensis*, d'Orb. (często).
4.       "       *pygmaea*, d'Orb. (często).
5.       "       *asperula*, Cžiž. (często).
6. *Spaeroidina bulloides*, d'Orb. (b. często).
7. *Heterolepa dutemplei*, d'Orb. (b. często).
8. *Rotalia soldanii*, d'Orb. (często).
9. *Nonionina umbilicatula*, Mont. var. *soldanii*, d'Orb. <sup>1)</sup>  
(b. często).

#### XIV. Śniatyn.

Ł pod Śniatynem odsłonięty nad Prutem jest uławiony poziomo i zawiera międzywarstwy zwięzłego piaskowca. Barwy jest popielatozielonawej. <sup>2)</sup> Po przepłukaniu daje pozostałość barwy szarej, złożoną z drobnych, przeważnie ostrokrawędzistych okruców kwarcu bezbarwnego i mlecznego, rzadziej innego i z łuseczek muskowitu; do tego domieszane są otoczone, większe (paru-

*niferen, die manchmal mit Eisenoxyd gefärbt sind*<sup>u</sup>. Otóż w opisie barwy łu jest niedokładność. Tak wyglądają partye łu mocno przeistoczone. W reszcie z przepłukania okruców wapienia prócz skorupki organicznych niema!

<sup>1)</sup> Świdkes l. c. podaje z Rohyni nadto:

- Spiroloculina tenuis*, Cžiž.
- Bulimina aculeata*, d'Orb.
- "       *elegans*, d'Orb.
- Bolivina dilatata*, Reuss.
- Cassidulina crassa*, d'Orb.
- Nodosaria inflexa*, Rss.
- Globigerina bulloides*, d'Orb.
- Truncatulina ungeriana*, d'Orb.
- "       *lobatula*, Walk. et Jacob.
- Rotalia (orbicularis)*, d'Orb. ?).

Zamiast *Nonionina umbilicatula* Mont. var. *soldanii*, d'Orb. wymienia autor formę typową *N. umbilicatula* Mont.!

<sup>2)</sup> Świdkes l. c. o śniatyńskim łu pisze: „Der Tegel ist grau, enthält viel Sand (abgerundete Quarzstücke), wenig, aber gut erhaltene Foraminiferen.“ Piasek z przepłukania zawiera przeważnie ostrokrawędziste okrucy kwarcu.

milimetrowej średnicy) i spłaszczone grudki ilu, które przy przepłukaniu nie rozpadły się prawdopodobnie wskutek zlepiania inną istotą, może kalcytem. Zawiera skorupki otwornic:

1. *Bulimina elegans*, d'Orb. (b. rzadko).
2.       "       *elongata*, d'Orb. (często).
3. *Cristellaria rotulata*, Lam. (często, okazy bardzo drobne okazują zbliżenie do *C. v. cultrata*, Montf.).
4. *Globigerina bulloides*, d'Orb. (okazy bardzo drobne, często).
5. *Heterolepa dutemplei*, d'Orb. sp. (rzadko, okazy połamane).
6. *Rotalia beccarii*, L. (rzadko).
7.       "       *soldanii*, d'Orb. (okazy bardzo drobne, często) <sup>1)</sup>.

## XV. Mikulińce.

Mikulińce leżą nad Prutem nieco powyżej Śniatyna <sup>2)</sup>. W ile przepłukanym znaleziono otwornice:

1. *Bulimina elegans*, d'Orb. (rzadko).
2. *Bolivina dilatata*, d'Orb. (rzadko).
3. *Uvigerina pygmaea*, d'Orb. (rzadko).
4. *Sphaeroidina bulloides*, d'Orb. (często).
5. *Heterolepa dutemplei*, d'Orb. sp. (często, skorupki przeważnie połamane).
6. *Rotalia soldanii*, d'Orb. jeden okaz połamany.
7. *Nonionina umbilicatula*, Mont. var. *soldanii*, d'Orb. (często) <sup>3)</sup>.

<sup>1)</sup> Świdkes l. c. podaje jeszcze ze Śniatyna:

*Bulimina aculeata*, d'Orb.  
*Bolivina dilatata*, Reuss.  
*Globigerina bulloides*, var. *triloba*, Reuss.  
*Nonionina depressula*, Walk. et Jacob.  
      "       *umbilicatula*, Mont.  
*Polystomella crispa*, L. sp.  
      "       *striatopunctata*, Ficht. et Moll.

Brak w spisie autora natomiast: *Bulimina elongata*, d'Orb. Autor nie wyrobił sobie jeszcze pojęcia, co jest gatunek, a co odmiana, skoro pisze przy *Globigerina var. triloba*, Reuss: „Diese Species reicht . . . .“ Gdy uważa formę: *triloba*, Reuss. za gatunek, niepotrzebnie dodaje przed wyrazem: *triloba* słówko: var.

<sup>2)</sup> Świdkes l. c. umieszcza Mikulińce w pobliżu Kołomyi, a o ile pisze: „Der Tegel ist grau und enthält viel kleinkörnigen Sand (scharfkantige Bruchstücke von Quarz, selten von anderen Gesteinen (sic!)). Die Foraminiferengehäuse, wenig an Zahl, sind gut erhalten“. Szkoda, że nie podaje, jakie to są te „andere Gesteine“.

<sup>3)</sup> Świdkes l. c. podaje jeszcze z Mikuliniec:

*Spiroloculina tenuis*, Cziż.  
*Textularia carinata*, d'Orb.  
*Bulimina aculeata*, d'Orb.  
*Cassidulina crassa*, d'Orb.  
*Cristellaria rotulata*, Lam.



kuckie, powyżej zaś Książdwora nad Prutem utwór solny. Choć iłu z Książdwora nie dawałem do przepłukiwania, to jednak na miejscu w czasie wycieczki udało mi się zapomocą lupy oznaczyć: *Glandulina laevigata*, d'Orb.

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Wąziutki pas kraju między granicą Podola z jednej strony a granicą Podgórze karpackiego z drugiej strony, zwany pospolicie w mowie potocznej Pokuciem, jest więc wypełniony utworami miocenu, przeważnie ilem ze znamioną morską fauną, którą odnieść należy nie tyle skutkiem poznania ubogiej fauny otwornic, ile skutkiem stratygraficznych cech (występywania nad gipsami) do wyższego miocenu, do ogniwa naderwiliowego<sup>1)</sup>.

### Systematyczny przegląd otwornic miocenu Pokucia<sup>2)</sup>.

1. *Biloculina* sp. Skorupkę źle zachowaną otwornicy należącej do tego rodzaju znaleziono w Ostrowcu. Rodzaj ten rozpoczyna swe istnienie już w liasie, a dziś zamieszkuje wszystkie morza kuli ziemskiej od brzegów aż do głębokości 3000 sążni morskich.

2. *Spiroloculina* sp. Bardzo pospolita w Ostrowcu. Sięga od dolnego liasu. Ojczyzną tego rodzaju są brzegi mórz w strefie gorącej i umiarkowanej. Niektóre formy żyją w głęb. większej niż 1000 s (= sążni morskich).

3. *Quinqueloculina* sp. Bliżej nie dające się oznaczyć otwornice, należące do tego rodzaju zdarzają się rzadko w ile na Hłynszczu, pospolicie w Ostrowcu. *Quinqueloculina* poczyna swój żywot w kredzie. Dziś żyje w różnych morzach. Występuje jeszcze w głęb. 2425 s.

4. *Plecanium* sp. Tryfanówka (ił).

5. *Gaudryina pupoides*, d'Orb. Kosaczówka. Poczawszy od kredy do dziś pospolita forma. Żyje w głęb. 129—2425 s.

6. *Clavulina communis*, d'Orb. W Rohyni występuje rzadko w okazach bardzo pokruszonych. Pojawia się w eocenie. Challenger zebrał ją w Atlantyku i Pacyfiku w głęb. 147—2300 s. Żyje i w innych morzach.

7. *Bulimina elegans*, d'Orb. Jest to w ilach pokuckich pospolita forma. W okolicy najbliższej Kołomyi występuje na

<sup>1)</sup> Kosmos. R. 1900. Str. 476.

<sup>2)</sup> Dane, odnoszące się do występywania otwornic w innych utworach i w morzach dzisiejszych wyjęte są przeważnie z dzieła: *Report on the voyage of H. M. S. Challenger. Zoology. Vol. IX. Report on the Foraminifera by Henry B. Brady. London. 1884.*

Oskrzesinieckiej górze, tak na Hłyjach (okazy wydłużone) jak i na Hłynyszczu, obok tego jest pospolita w Kamionce Wielkiej, w ile z Tryfanówki, w Ostrowcu, bardzo rzadko natomiast zdarza się w ile ze Śniatyna, rzadka jest także w Mikulińcach i we wkopie pod Czerem.

Należy do otwornie charakterystycznych dla znacznej części ilów pokuckich. Otwornica ta znaleziona przez d'Orbignyego koło Rimini w Adryi, żyje w północnym Atlantyku w głęb. 11—1630 s. Oprócz tego rozpowszechniona jest w morzach całego świata.

8. *Bulimina pyrula*, d'Orb. Dotychczas poznana na Pokuciu tylko w ile z nad Kosaczówki<sup>1)</sup>. Na pewne żyła w eocenie, możliwe jednak że już była w górnym tryasie. Pospolita dziś w Atlantyku, Pacyfiku, w oceanie Indyjskim i w morzu Śródziemnym, najpospolitsza jednakże w północnej części Atlantyku. Żyje w głęb. 37—2550 s., najpospolitsza między 100 a 1200 s.

9. *Bulimina affinis*, d'Orb. Na Pokuciu występuje rzadko w ilach z Kosaczówki, bardzo rzadko w Dzurkowie i w Sopowie. Pojawia się, jak się zdaje, w kredzie<sup>2)</sup>. Jedyne okaz d'Orbignyego pochodził z piasku brzeżnego wyspy Kuby, Challenger dostarczył jej z zachodniego brzegu Patagonii (565 s.) i z głębokiej arei północnego Pacyfiku (3125 s.).

10. *Bulimina pupoides*, d'Orb. Zdarza się rzadko na Hłynyszczu. Forma ta poczyna się w miocenie. Dziś żyje od brzegów morza aż do głęb. 1000 s. Atlantyk, Ocean Indyjski, Pacyfik południowy.

11. *Bulimina elongata*, d'Orb. Bardzo często zdarza się w Ostrowcu, często w Śniatynie i w Sopowie. Na pewne znana od miocenu, być jednak może, że już żyła w kredowym utworze. Według d'Orbignyego żyje w Adryi; znaleziono ją w Atlantyku północnym w głęb. 630 s, w południowym w głęb. 1425 s.

12. *Bulimina sp.* Nieoznaczone bliżej formy tego rodzaju znaleziono w Kosaczówce i w Kamionce Wielkiej.

13. *Bolivina dilatata*, Reuss. Należy do skamielin charakteryzujących znaczną część ilów Pokucia. Częsta na Hłynyszczu, jest także na Hłyjach, nad Kosaczówką, w ile z Tryfanówki, we wkopie pod Czerem, w Mikulińcach, w Sopowie. Pojawia się w miocenie. Dziś żyje w północnym Atlantyku; znaleziono ją w Piasku z Azorów (450 s), z Bermuda

<sup>1)</sup> Okaz z Kosaczówki posiada o jeden skręt więcej, niż przedstawiony przez d'Orbignyego i w ogólnym zarysie jest nieco więcej wydłużony.

<sup>2)</sup> Jeśli *Bulimina ovulum*, Reuss. z kredy lwowskiej należy do tego gatunku.



(435 s), w okolicy zachodniego brzegu Irlandyi (183—1180 s.) i południowego (96 s), w zimnej arei kanału Faröe (540 s), w płytkiej wodzie na brzegu przy m. Dublin i Wicklow.

14. *Cassidulina crassa*, d'Orb. Znalazłem ją w ile z Hłyjów. Pojawia się w środkowym trzeciorzędzie. Żyjąc w dzisiejszych morzach sięga po  $83^{\circ} 19'$  półn. szer.; znaleziono ją na brzegach Kraju Franciszka Józefa i Szpicbergów. Rozprze-strzeniona po całym Atlantyku północnym do głęb. 2760 s. Wyławiano ją także w Atlantyku południowym, przy Przylądku Dobrej Nadziei i stąd począwszy na całej drodze przy Kerguelach, wyspach Heard aż do antarktycznej lodowej baryery (Antarctic Ice-barrier). Żyje także w morzu Śródziemnem, a w Pacyfiku w głęb. 40—2475 s.

15. *Glandulina laevigata*, d'Orb. Kosaczówka, Hłyje, Hłynyszcze (często), Kamionka Wielka (bardzo rzadko), Rohynia (rzadko), Książdwór. W ogólności więc często występuje w ilach pokuckich i dlatego musi być uważana za gatunek cechujący ilę pokuckie.

Na Hłynyszczu obok formy typowej występują jeszcze odmiany: *Gl. var. ovula*, d'Orb. i *Gl. var. rotundata*, Reuss.

Otwornica ta znana od górnego tryasu jest jak wiele innych kosmopolitką, ale szczególnie często występuje w północnej części północnego Atlantyku. Zresztą sięga od  $79^{\circ} 45'$  pn. szer. do  $53^{\circ}$  pd. szerokości. W północnym Atlantyku żyje w głęb. 50—1360 s., w Atlantyku południowym 350—1025 s., w Pacyfiku północnym 7—95 s., w Pacyfiku południowym 28—1070 s., w morzu Czerwonym 30—372 s., a w oceanie Południowym w głęb. 1375 s.

16. *Cristellaria rotulata*, Lam. (*v. inornata*, d'Orb. sp.). Małe okazy występują nie rzadko w ilach pokuckich. Znaleziona w Kamionce Wielkiej, gdzie jest rzadka, w ile z Tryfanówki, spotyka się często w Śniatynie i w Sopowie.

Występuje już w górnym tryasie. Dziś żyje od  $79^{\circ} 45'$  pn. szer. aż do Ziemi Ognistej (Tierra de Fuego). W Atlantyku północnym od pasu brzeżnego do głęb. 1630 s., w południowym do 2200 s., w Pacyfiku pn. do 345 s., w południowym do 2075 s. a w morzu Śródziemnem do 1200 s.; jest także w płytkich wodach Adryi.

17. *Cristellaria rotulata*, Lam., *var. cultrata*, Montf. Kosaczówka, Śniatyn.

Pojawia się w liasie. Dziś żyje na północy do koła polarnego i do brzegów Norwegii, na południu do  $50^{\circ}$  pd. szer. u brzegów Patagonii. Sięga głębiej niż forma poprzednia, a wiatle u brzegów Patagonii. Sięga głębiej niż forma poprzednia, a wiatle jej okazy rzadko poławiano płycej niż w głęb. 100 sążni. Atlantyk północny (390—2435 s.), południowy (350—675 s.), Pacyfik

północny (95 s.), południowy (38—275 s.), morze Śródziemne, Adrya i t. d. Małe okazy z bardzo wązkim brzeżkiem (carina) okolicznościowo wyłowiono w płytkich wodach mórz brytyjskich.

18. *Uvigerina canariensis*, d'Orb. (= *urnula*, d'Orb.). Znalaziona w Chomiakówce, częsta w Rohyni. Siega od miocenu i dolnych warstw z *Clavulina szabói*. Dziś spotyka się w brzeżnym piasku Teneryfy; inne miejscowości: Bermuda (435 s.), Atlantyk pd. (na wschód od Buenos Ayres w głęb. 1900 s.), Przylądek Dobrej Nadziei (150 s.), Pacyfik południowy (40—1375 s.), między wyspami zach. brzegu Patagonii, przy brzegach Anglii, Atlantyk pn.

19. *Uvigerina pygmaea*, d'Orb. W pokuckich ilach dość często się zdarza. Tak więc występuje w Kamionce Wielkiej (rzadko), w Chomiakówce okazy drobne są bardzo częste, jest także choć rzadka we wkopie drogi pod Czerem, w Ostrowcu bardzo częsta, w Rohyni częsta, w Mikulińcach rzadka.

Otwornica ta pojawiająca się w miocenie i w warstwach z *Clavulina szabói* zamieszkuje dziś morza całego świata. Pospolita w Atlantyku pn. i południowym, w morzu Śródziemnym i w Adryi, w Oceanie Spokojnym południowym, rzadka natomiast w północnym. Siega od Smith Sound i Kraju Franciszka Józefa (79° pn. szer.) do mniej więcej 46° pd. szer. w Oceanie południowym. Żyje tak w głęb. 2 s. jak i w głębi 2600 s.

20. *Uvigerina asperula*, Cziz. Częsta w Rohyni.

Pojawia się w miocenie i w ile septaryowym (*septaria-clay*). Dziś jest pospolita od mniej więcej 56° pn. szer. w Atlantyku aż do miejsca na południe od wysp Kerguelskich (52° pd. szer.) w Oceanie południowym.

Atlantyk pn. 435—1675 s., Atlantyk pd. 420—2350 s., Ocean południowy 120—2600 s., Pacyfik pd. 37—2335 s., Pacyfik pn. 345—2300 s.

21. *Uvigerina sp.* Blżej nie oznaczyłem gatunku występującego w ile z Tryfanówki.

22. *Globigerina bulloides*, d'Orb. Szczególnie okazy drobne charakteryzują większą część ilów pokuckich. Otwornica ta jest bardzo częsta w Kosaczówce, gdzie wraz z nią występuje odmiana *var. triloba*, Reuss., w Kołomyi, na Hłyjach i w Ostrowcu, często występuje też na Hłynyszczu, w Śniatynie i w Sopowie, znalazła się także w glinie z Tryfanówki na złożu drugorzędnym.

Okazy z Kosaczówki, Kołomyi, z Hłyjów i Hłynyszczu, z Ostrowca (gdzie spotkałem jeden tylko okaz większy), ze Śniatyna i Sopowa są bardzo drobne.

Kosmopolityczna ta otwornica pojawiła się już w kredzie.

Dziś wydobyto ją w łówkach wierzchnich i dennych z mórz prawie wszystkich szerokości geograficznych.

Do fauny ilów pokuckich można zaliczyć jeszcze następujące globigeriny:

- a) *Globigerina subcretacea*, mihi. Między okazami z Kosaczówki spotyka się formy zgadzające się mniej więcej z rysunkiem Bradyego l. c. T. LXXII. f. 10 i z rysunkiem podanym u mnie (Kosmos. 1899. Z. IV—V.) T. I. f. 2a—c. Dla uchylenia nieporozumień proponuję dla tej formy nową nazwę. Dotychczas była podawana jako *Glob. cretacea*, d'Orb. ze znakiem zapytania. Mniejszą ilością komór i mniej rotalinowym ich układem wyróżnia się ta otwornica niewątpliwie wybitnie od formy kredowej. Znana od miocenu począwszy (okolice Ostrawy Mor., Wieliczka — il nadsolny), jest, jak się zdaje, ściśle pokrewna z *Glob. bulloides*, d'Orb. (może tylko jej odmiana).
- b) *Globigerina dutertrei*, d'Orb. Niektóre okazy z Kołomyi i znaczna część globigerin z Hłynyszcza przypomina tę formę. Czy okazy pokuckie rzeczywiście do tego gatunku mają być zaliczone, czy też przedstawiają tylko pewną formę pospolitej *Glob. bulloides*, d'Orb., trudno na razie rozstrzygnąć.
- c) *Globigerina inflata*, d'Orb. Znaczna część okazów globigerin z Hłynyszcza przypomina ten gatunek, który równie jak *Glob. subcretacea*, mihi i *Glob. dutertrei*, d'Orb. podaję na razie z zastrzeżeniem.

23. *Sphaeroidina bulloides*, d'Orb. Kamionka Wielka (rzadko), Dżurków (bardzo rzadko), Chomiakówka; często w Mikulińcach, bardzo często w części Pokucia przytykającej do Podola, a więc we wkopie pod Czerem, w Ostrowcu i w Rohyni. W ogólności więc częsta na Pokuciu i może być zaliczona do otwornic cechujących il pokucki.

Pojawia się już w kredzie (Meudon i Rugia). O ile dotychczas wiadomo nie jest pelagiczna. Znaleziono ją na zachodnich brzegach Norwegii, przy wyspach Wielkiej Brytanii, przy Belgii, Francji, w morzu Śródziemnym, w Adryi i w morzu Czerwonym; w Atlantyku pn. łowiono ją w głęb. 85—1750 s., w Atlantyku pd. 420—2350 s., w Pacyfiku pd. 37—1375 s., w Pacyfiku pn. 95—2050 s., w Oceanie południowym w głęb. 1570 i 2600 s., w Oceanie indyjskim.

24. *Discorbina simplex*, d'Orb. sp. (= *Rosalina simplex*, d'Orb.). Występuje w środkowym pasie Pokucia w Dżurkowie, gdzie jest bardzo rzadka, i w Chomiakówce.

Rodzaj *Discorbina* pojawia się w końcu utworu kredo-

wego, a żyje dziś prawie we wszystkich morzach od Nowej Zemli aż do cieśniny Magellana i do wysp Kerguelów. Najpospolitszy w wodach płytkich, im głębiej tem rzadszy, dochodzi jednak do 1000 s. głębokości.

25. *Discorbina sp.* Bliżej nieoznaczony gatunek tego rodzaju występuje w ile z Tryfanówki.

26. *Truncatulina lobatula* Walker et Jacob. Występuje rzadko na Hłynyszczu i w Kosaczówce. Okazy z Kosaczówki są bardzo drobne.

Wrzekomo poczyna się już w utworze węglowym. Dziś pospolita we wszystkich szerokościach geogr. od najdalej na północ wysuniętych, dotychczas zbadanych punktów Oceanu Arktycznego aż do antarktycznej lodowej baryery. Najpospolitsza w brzegowym, laminaryowym i corallinowym pasie, ale żyje także w głęb. około 3000 s.

27. *Truncatulina ungeriana*, d'Orb., var. *pachyderma*, Rzehak sp.<sup>1)</sup> T. I. f. 5. W Kosaczówce bardzo rzadka, podana w spisie otwornic z Kosaczówki pierwotnie jako *T. ungeriana*, d'Orb. typ.

Poznana z neogenu okolic Ostrawy Morawskiej. Prawdopodobnie żyje jeszcze dziś, gdyż forma Bradyego więcej się zgadza z nią, niż z formą typową.

28. *Heterolepa dutemplei*, d'Orb. sp. W ilach pokuckich bardzo częsta, a ponieważ we większej części próbek znaleziona, musi być zaliczona do otwornic charakteryzujących ily pokuckie.

Kosaczówka, Hłynyszcze (bardzo częsta), Kamionka Wielka (często), Chomiakówka (okruchy), Tryfanówka (w ile i na złożu drugorzędnym w glinię), wkop drogi pod Czerem (bardzo częsta), Rohynia (bardzo częsta), Śniatyn (rzadka, okazy połamane), Mikulińce (często, skorupki przeważnie połamane).

Dość rozpowszechniona w starszym i młodszym trzeciorzędzie. Należy, jak się zdaje, do form wygasłych, gdyż małe okazy przedstawione przez Bradyego, a wyłowione w Atlantyku południowym w głęb. 1900 s. i w Pacyfiku w głęb. 1070 s. mocno odbiegają od typu d'Orbignyego. Jeśli nawet okazy Bradyego należą do tego gatunku, to w każdym razie forma typowa charakteryzuje trzeciorzęd. W neogenie jest forma typowa we wielu miejscach nawet bardzo pospolita, tymczasem forma Bradyego, jak widzimy, jest dziś rzadka.

29. *Rotalia beccarii*, L. sp. Znaleziona w Kosaczówce,

<sup>1)</sup> *Die Foraminif. der Neog. Umg. Mähr. Ostrau. Verh. nat. Ver. Brünn.* Tom XXIV. T. I. f. 5.

w Myszynie (bardzo rzadka), w Śniatynie (rzadka), w Dzurowie (bardzo częsta).

Jako skamielina znana dopiero od miocenu. Jest to gatunek wód płytkich, najpospolitszy w brzeźnym i laminaryowym pasie mórz strefy umiarkowanej. Zamieszkuje brzegi wszystkich wielkich oceanów z wyjątkiem Arktycznego i Antarktycznego, brzegi morza Śródziemnego, Adryi i Czerwonego. Znalazł się także w piasku, który wziętem z brzegu morza Czarnego w Konstancy. Najdalej na północy spotkano tę otwornicę w szerokości około 60° w morzach szetlandzkich, najdalej na południu przy Przylądku Dobrej Nadziei (35° pd. szer.). Jej ojczyzną jest morze w głębokości mniejszej niż 50 sążni, ale małe okazy występują sporadycznie w głębszych znacznie wodach aż do 2950 s.

30. *Rotalia soldanii*, d'Orb. Na Hłynyszczu rzadka, w Kamionce Wielkiej bardzo rzadka, jest w Chominkówce, często zdarza się we wkopie pod Czerem, w Rohyni i w Śniatynie (okazy bardzo drobne), bardzo rzadko w Mikulińcach.

Ponieważ zdarza się w znacznej części próbek ilów pokuckich, musi być zaliczona do form charakteryzujących miocen pokucki. Obecność tej otwornicy w próbkach wyklucza atoli najczęściej poprzedzającą, gdyż o ile *Rotalia beccarii*, L. sp. lubi wody płytkie, o tyle omawiana forma najczęściej ich unika.

Pojawia się już w starszym trzeciorzędzie (oligocen, warstwy z *Clavulina szabóii*), a może nawet już w kredzie.

Dziś jest pospolita w półn. i połudn. Atlantyku, w morzu Śródziemnym, w Oceanie południowym, w Oceanie Spokojnym pn. i pd. od 60° 14' pn. szer. (w Atlantyku) do 64° 18' pd. szer. (przy antarktycznej baryerze lodowej w Oceanie południowym).

Ojczyzną jej jest denny namuł (ooze) głębokiego morza. Rzadko zdarza się w głębi mniejszej niż 300 s., najpospolitsza w głębi. większej niż 1000 s., a pośrednio w głębi. większej niż 2000 s.

31. *Nonionina depressula*, Walk. et Jacob. (= *N. granosa*, d'Orb.) Jeden okaz z Kosaczówki.

Pojawia się w eocenie. W morzach arktycznych sięga dziś do 82° 33' pn. szer., pospolitą jest przy brzegach Europy w Atlantyku pn. Chociaż rzadsza między zwrotnikami, zdarzała się od czasu do czasu między wyspami południowego Pacyfiku, w Atlantyku połud., w morzu Czerwonym i gdzieindziej. Pominąwszy to, że nie wiele wątpliwie oznaczonych okazów znaleziono w większych głębiach oceanu, można uważać za ojczyznę tej formy dno morza w miejscach płytszych niż 50 sążni.

32. *Nonionina umbilicatula*, Montagu, var. *soldanii*, d'Orb. Otwornicę tę zebraną w znacznej części badanych próbek, uwa-

żam za charakterystyczna dla iłów pokuckich. Towarzyszy wszędzie otwornicy: *Sphaeroidina bulloides*, d'Orb. Często występuje w Kamionce Wielkiej, w Dzurkowie, we wkopie pod Czerem, w Ostrowcu i w Mikulińcach, bardzo często w Rohyni, nie brak jej też w Chomiakówce.

Znana od eocenu. Gatunek ten (forma typowa) jest kosmopolitą. Rozprzestrzeniony od Smith-Soundu i brzegów Kraju Franciszka Józefa w szer. pn. mniej więcej 80° do południa Patagonii (około 51° pd. szer.). Pospolity w całym Atlantyku i Pacyfiku, zdarzał się także w Oceanach Indyjskim i Południowym, w morzach Śródziemnym i Czerwonym. Sięga od 30 i 40 s. do 3125 s.

33. *Polystomella crispa*, L. sp. Bardzo rzadka w Dzurkowie; jeden okaz (bardzo dobrze zachowany) znaleziono także w glinie z Tryfanówki na złożu drugorzędnej.

Sięga od eocenu. Dziś jest jedną z najpospolitszych otwornic wód płytkich. Znaleziona w Atlantyku pn. aż do Disco-Bay, Grenlandyi i kanału Farøe, na brzegach W. Brytanii, Danii, Belgii, Francyi, Hiszpanii, w morzu Śródziemnym, w Adryi, między wyspami Indyi Zachodnich i wyspami Przylądka Zielonego. Na południe sięga aż do wysp Falklandzkich. Zdarza się także na brzegach Oceanu Indyjskiego i Południowego aż do Kerguelów, na zachodnim brzegu Patagonii i między wyspami Pacyfiku pd. a w Pacyfiku pn. aż do Japonii.

Batymetrycznie rozprzestrzeniona od brzeżnego pasu do głęb. 355 s.

Utwory miocenijskie Pokucia rozwinęły się w najniższym, dotychczas zbadanym miejscu, to jest przy poziomie Prutu w Śniatynie (około 210 m n. p. m.), jako ily poprzegradzane warstwami piaskowca (Śniatyn) lub piasku (Potoczek). Ponieważ warstwy miocenu pokuckiego leżą tam, gdzie nie uległy usunięciu, poziomo<sup>1)</sup>, musimy warstwy okolic Śniatyna uważać za starsze od odsłoniętych w okolicach nad wyższym biegiem Prutu.

O ile w miocenie śniatyńskim zmienność petrograficzna świadczy o częstych oscylacjach linii brzegowej, o tyle w młodszym miocenie okolic Kołomyi panują przeważnie ily, pominąwszy cienką warstwę piaskowca, której ślady spotkałem na górze Oskrze-sinieckiej. Jeszcze młodsze ily z Kamionki Wielkiej (330 m

<sup>1)</sup> Wyjątek stanowi część Pokucia bliższa Karpatom, z czem bliżej zaznajamia nas Wiśniowski l. c.

n. p. m.) tak są podobne petrograficznie i paleontologicznie do iłów innych stron Pokucia, że śmiało możemy uważać cały ten kompleks utworów mioceńskich od Śniatyna do Kamionki Wielkiej, mimo znacznej miąższości około 120 m., za jeden oddział miocenu.

Co do utworów Myszyna i równoczesnych z nimi utworów Dżurowa (Nowosielicy), to już Wiśniowski l. c. osądził, wnosząc po nachyleniu ogólnie w Myszyńcu panującym, że muszą być młodsze od mogących występować przy Kołomyi. Czy są młodsze od iłów z Kamionki Wielkiej, nie wiadomo. Miocen dżurowsko-nowosielicko myszyński odznacza się wielką zmiennością petrograficzną, jako utwór brzeżny. Z innych danych co do wieku miocenu pokuckiego najważniejsze, że ił w Bełeui spoczywa na gipsach a w Ostrowcu na wapieniu nadgipsowym.

### Przegląd zbadanych miejscowości.

**Śniatyn.** Pewnem świadectwem przynależności iłu śniatyńskiego do trzeciorzędu<sup>1)</sup> jest występowanie w nim typowej formy gatunku *Heterolepa dutemplei*, d'Orb. sp. W jakiej głębokości osadził się ił śniatyński, z próbki badanej trudno oznaczyć, częste jednak występowanie otwornicy *Rotalia soldanii*, d'Orb.<sup>2)</sup> przemawia za głębią większą niż 300 sążni morskich. O wiele głębiej nie osadził się pewnie, gdyż występuje w nim również brzeżna *Rotalia beccarii*, L. sp., choć rzadko. Zresztą, gdyby zbadano w Śniatynie iły z różnych wysokości, okazałoby się niewątpliwie, że w ciągu osadzania się miocenu śniatyńskiego panowały stosownie do częstych oscylacji linii brzeżnej, różne stosunki głębokościowe.

Ił z **Mikuliniec** osadził się, sądząc po obecności otwornicy *Rotalia soldanii*, d'Orb., w głębokości większej niż 300 s.

Ił w **Kołomyi** przedstawiałby namuł brzeżny, gdyby nie znaleziono nic więcej w przyszłości, prócz dotychczas poznanej z niego jedynie formy dennej *Globigerina bulloides*, d'Orb. żyjącej dziś przy wybrzeżach Anglii. W każdym razie do oceny bliższego trzebaby znaleźć punkt, w którymby fauna otwornic była bogatsza.

Ił z **Kosaczówki**. Z jednej strony obecność formy *Gaudryina pupoides*, d'Orb. przemawiałaby za głębokością przechodzącą 130 sążni,

<sup>1)</sup> Że to jest ił mioceński, przemawia za tem jak już wyżej wspomniano, ułożenie takiego samego iłu nad gipsem w Bełeui. Gips w utworach mioc. Podola, należy do ogniwa młodszego, naderwiliowego.

<sup>2)</sup> Częste występowanie tej otwornicy świadczyłoby właściwie o głębokości znacznie większej, wobec równoczesnego jednakże występowania drugiej, brzeżnej rotalii, trudno w tym przypadku przyjmować znaczniejszą głębokość.

z drugiej zaś występująca brzeżna *Rotalia beccarii*, L. sp., i *Nonionina depressula*, W. et J. kazałyby wnosić o głębokości mniejszej niż 50 sążni. Wobec tego jednakże, że obydwie formy przybrzeżne zachodzą okolicznościowo głębiej, możemy wnosić, że ił ten osadził się w głębokości około 130 sążni, niezbyt daleko od brzegu, ale dalej niż ily, w których ma przewagę *Rotalia beccarii*, L. sp.

İł z **Hłyjów** osadził się wnosząc z występowania w nim *Cassidulina crassa*, d'Orb. w głębi większej niż 40 s., że jednak i ił z **Hłynyszcz**a, osadzony w głębi. większej niż 300 s. (*Rotalia soldanii*, d'Orb.) nie wiele się różni co do wieku od ılı z Hłyjów, więc dla ılıw z góry Oskrzesinieckiej wogóle na podstawie dotychczasowych danych przyjmujemy głębokość większą niż 300 s.

W jakiej głębokości osadził się ił z **Tryfanówki**, trudno odgadnąć na podstawie skromnej fauny, że jednak obecna w nim *Heterolepa dutemplei*, d'Orb. sp. typ. pojawia się masowo w iłach miocenijskich Pokucia zwykle w towarzystwie *Rotalia soldanii*, d'Orb., więc można wnosić, że ił ten osadził się w głębokości przechodzącej 300 s.

İł w **Ostrowcu** osadził się w głębokości większej niż 37 s., za czem przemawia obecność otwornicy *Sphaeroidina bulloides*, d'Orb.

İł w **Rohyni** osiadał na dnie morza głębszego niż 1000 s., o czem świadczy częste występowanie *Rotalia soldanii*, d'Orb. Także *Clavulina communis*, d'Orb. zamieszkuje głębie większe niż 350 s.

İł w **Dzurkowie** osadził się w głębi. większej niż 37 sążni (*Sphaeroidina bulloides*, d'Orb.), a ił z **Chomiakówki** w głębi. większej niż 300 s. (*Rotalia soldanii*, d'Orb.).

*Rotalia beccarii*, L. sp. bardzo pospolita w **Dzurowie**, a występująca także w **Myszynie**, każe wnosić o głębokości morza nie przechodzącej 50 s.

İł z wkopu drogi **pod Czerem** osadził się w głębokości większej niż 1000 s. (*Rotalia soldanii*, d'Orb. — często), o ile z **Sopowa** i **Kniaźdwora** na podstawie dotychczasowych danych wiele powiedzieć się nie da, ił zaś z **Kamionki Wielkiej** pochodzi z głębi. większej niż 300 s. (*Rotalia soldanii*, d'Orb.).

### Zakończenie.

Dotychczasowe badania rzucają na stosunki panujące na Pokuciu w miocenie światło jeszcze bardzo słabe. Pokucie, to jest wązki pas kraju między Podkarpaciem w dorzeczu Prutu a brzegiem Podola, które w stronach przytykających do Pokucia znamionuje się potężnym rozwojem gipsu ku powierzchni — wypeł-



nione jest utworami miocenu nadgipsowego. Miocen też ten spotykamy we wszelkich najgłębszych odsłonięciach Pokucia, w tej głębokości, w której na sąsiednim Podolu występuje już kreda. Świadczy to o usunięciu się w głąb całej krainy Pokucia<sup>1)</sup> wzdłuż uskoku podolskiego i wzdłuż linii brzeżnej Karpat w ciągu trwania miocenu, prawdopodobnie tuż po osadzeniu się gipsów Podola. Powstał w ten sposób dość szeroki rów tektoniczny, który zwolna wypełnił się ilami i piaskami do tego stopnia, że łącznie z późniejszą denudacją zanikło wszelkie powierzchownie widoczne rozgraniczenie między Podkarpaciem a Pokuciem z jednej strony, a z drugiej strony między Pokuciem i Podolem.

Ogniwo miocenu podolskiego naderwiliowe, zbudowane z utworów przeważnie brzeżnych, przedstawia brzeżną facies ilów pokuckich, osadzonych w znacznie większych głębiach ówczesnej Mediterranei.

W Kołomyi, dnia 10. grudnia 1900 r.

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<sup>1)</sup> *Atlas geol. Galicyi. Tekst do zeszytu pierwszego. 1887. Str. 43., 45., 76.* Jeden z autorów tekstu (ś. p. Bieniasz) widział różnicę w wysokości terenu Pokucia i Podola ale odnosił ją do późniejszej doby geologicznej.





otwornic<sup>1)</sup> mioceńskich Pokucia.

Rohyňa	Šniatyn	Mikulínice P. d. Schnürrha	Džurów	Sopów	Knjaždów	Wiek (utwór, lub ogniwo, w którym się po raz pierwszy pojawia)	Dzisiejsze rozprzestrze- nienie batymetryczne	U w a g i
—	—	—	—	—	—	?	?	
—	—	—	—	—	—	?	?	
—	—	—	—	—	—	?	?	
—	—	—	—	—	—	?	?	
r.	—	—	—	—	—	kreda	129—2425 s.	
—	—	—	—	—	—	eocen	350—2300 s.	W Pacyfiku pd. raz w głęb. 147 s.
—	b.r.	r.	—	—	—	0	od brzegu do głęb. 1630 s.	
—	—	—	—	—	—	eocen	37—2550 s.	
—	—	—	—	b.r.	—	kreda	od brzegu do 3125 s.	
—	—	—	—	—	—	miocen	" " " 1000 s.	
—	c.	—	—	c.	—	miocen	630—1425 s.	Prawdopod. i w płytszych miejscach, gdyż już d'Or- bigny znalazł ją w Adryi
—	—	—	—	—	—	?	?	
—	—	r.	—	b.r.	—	miocen	od wód płyt. do głęb. 1180 s.	
—	—	—	—	—	—	trzeciorzęd śród.	40—2760 s.	
r.	—	—	—	—	+	tryas górny	7—1375 s.	
—	c.	—	—	c.	—	tryas górny	od brzegu do głęb. 2200 s.	
—	+	—	—	—	—	lias	" " " " 2435 s.	
c.	—	—	—	—	—	warstwy z Cla- vulina szabóí	" " " " 1900 s.	
c.	—	r.	—	—	—	warstwy z Cla- vulina szabóí	2—2600 s.	
c.	—	—	—	—	—	ił septaryowy	37—2600 s.	
—	—	—	—	—	—	?	?	
—	c.	—	—	c.	—	} kreda	} pelagiczna forma (od powierzchni morza do dna).	
b.e.	—	c.	—	—	—			kreda
—	—	—	—	—	—	miocen	?	
—	—	—	—	—	—	?	?	
—	—	—	—	—	—	utwór węglowy (?)	pospolita w pasie brzeżnym Corallineów i Laminariaceów, sięga do głęb. 3000 s.	
—	—	—	—	—	—	miocen	?	
b.c.	r.	e.	—	—	—	trzeciorzęd	0	właściwą ojczyzną tej formy są miejsca płytsze niż 50 s.
—	r.	—	b.c.	—	—	miocen	pospolita w pasie brzeżnym Laminariaceów, sięga do głęb. 2950 s.	rzadko w głęb. mniej. niż 300 s., najposp. w więk. niż 1000 s., ale żyje też w większej niż 2000 s.
c.	c.	b.r.	—	—	—	oligocen	denny namuł morza w głęb. większej niż 300 s.	
—	—	—	—	—	—	eocen	od brzegu do głęb. 50 s.	Challenger znalazł nie- pewnie oznaczone okazy we większej głębokości
b.e.	—	c.	—	—	—	eocen	30—3125 s.	
—	—	b.r.	—	—	—	eocen	od brzegu do głęb. 355 s.	

r. = rzadko, b. r. = bardzo rzadko, + = obecna, 0 (w rubryce dla wieku) = w stanie

# Trechus fontinalis n. sp.

descripta

a M. Rybiński.

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## Trechus fontinalis (nov. sp.)

Trecho lato Putz. valde affinis. Differt ab eo statura paululo maiore, thorace angulis posticis longius emarginatis, foveis basalibus thoracis atque coleopterorum striis profundioribus magisque expressis, imprimis vero articulo primo tarsorum posteriorum longiore et crassiore.

Nigro-piceus, antennarum basi, pedibus, parte media marginis basalis thoracis, scutello, margineque coleopterorum rufis; thorace lateribus rotundato, postice angustato, angulis posticis rectis, acute prominulis, foveis basalibus latis, profundis; coleopteris breviter ovatis, latis, convexis, striis quinque primis distinctis, externis subtilibus; articulo primo tarsorum posteriorum reliquis bis crassiore et aequo longo atque secundus et tertius simul sumpti. Long. 4.5—5 mm.

Habitat in montibus Carpaticis orientalibus (Czarna Hora) in altitudine 1500—1900 m. sub lapidibus ad parvos fontes frigidos et prope nivem.

Cracoviae die 8. Martii 1900.

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# PRZYCZYNEK

## do fauny galicyjskich szarańczaków

podał

Stanisław Smreczyński.

W roku 1899. i 1900. zbierałem szarańczaki w W. Ks. Krakowskiem i w najbliższej okolicy Krakowa poza Wisłą. Z wyjątkiem *Stenobothrus pullus* Phil. i *Chrysochraon dispar* Heyer znalazłem wszystkie gatunki, które podał pan inżynier Stobiecki w swoich „Materyałach do fauny W. Ks. Krakowskiego“ (Spraw. Kom. fiz. T. XX.), a nadto 9 gatunków nowych dla fauny W. Ks. Krakowskiego<sup>1)</sup>, z tych dwa nowe dla fauny krajowej<sup>2)</sup>. Ta okoliczność, jakoteż możność podania wielu nowych miejscowości dla wszystkich gatunków, skłoniła mnie do napisania tego przyczynku.

Jako dodatek podaję osobno spisy szarańczaków zebranych w lipcu r. 1900. w powiecie nowosądeckim w okolicy Gródka nad Dunajcem i w Kłaju, podczas wycieczki w dniu 11. października 1900. r.

### Blattodea.

#### Ectobia Westw.

*lapponica* L. Sikornik, w czerwcu; Bielany, we wrześniu.

<sup>1)</sup> *Chrysochraon brachypterus* Oesk., *Stenobothrus nigromaculatus* Herr. Schäffer, *St. apricarius* L., *St. vagans* Fieb., *St. bicolor* Charp., *Leptophyes albivittata* Kollar, *Xiphidium dorsale* Latr., *Thamnotrizon cinereus* L., *Platycleis brachyptera* L.

<sup>2)</sup> *Stenobothrus nigromaculatus* Herr. Schäffer i *St. vagans* Fieb.

**Phyllodromia** Serv.

*germanica* L. Gatunek ten jest po wsiach daleko rzadszy od następnego. Kraków; Dębniaki; Alwernia; Regulice.

**Periplaneta** Burm.

*orientalis* L. Kraków; Grzegórzki; Regulice.

**Acridiodes****Mecostethus** Fieb.

*grossus* L. Mydlniki, 2. sierpnia; Alwernia, 3. sierpnia; Regulice, 4. sierpnia; Poręba Żegoty, 18. sierpnia; Trzebinia, 30. września; Dębniaki, 20. września; Krzemionki, 20. września; Łagiewniki, 27. września.

**Chrysochraon** Fisch.

*brachypterus* Oesk. Kościelec, 30. września (leg. J. Król).

**Stenobothrus** Fisch.

*lineatus* Panz. Regulice, od 28. lipca do końca września; Krzemionki, 18. września; Bielany 22. września.

*nigromaculatus* Herr. Schäfer. W jednym miejscu na Krzemionkach, od początku września do końca października.

*stigmaticus* Ramb. Bukowica, 17. sierpnia.

*apricarius* L. Po polach i słonecznych trawnikach wszędzie pospolity, lecz nigdzie w większej ilości okazów. Regulice, od końca lipca do listopada; Tenczynek, 28. lipca; Alwernia, 3. sierpnia; Mydlniki, 2. sierpnia; Płaza, 5. sierpnia; Bołecin, 16. sierpnia; Sikornik, 18. września; Dębniaki, 12. października; Krzemionki, 18. września.

*viridulus* L. Alwernia, 3. sierpnia; Regulice, 4. sierpnia; Trzebinia, 22. sierpnia i 30. września.

*rufipes* Zett. Sikornik, 19. września; Alwernia, 4. października.

*haemorrhoidalis* Charp. Mydlniki, 2. sierpnia; Płaza, 5. sierpnia; Bołecin, 16. sierpnia; Bukowica, 17. sierpnia; Trzebinia,

30. września; Kościelec, 30. września; Bielany, 22. września;

Przegorzały, 22. września; Krzemionki, 18. września.

*vagans* Fieb. Jedyne spotkanie w Trzebini, 30. września.

*bicolor* Charp. Regulice, 11. sierpnia; Płaza, 5. sierpnia; Tenczynek,

28. lipca; Przegorzały, 23. września; Skała Kmity, 8. września; Bukowica, 17. sierpnia; Sikornik, 18. września; Krzemionki, 20. września.

*biguttulus* L. Regulice, 27. lipca; Bukowica, 17. sierpnia; Bołecin, 16. sierpnia; Bielany, 21. września; Przegorzały, 22. września.

O ile te oba ostatnie gatunki, stanowiące dla siebie osobną grupę, doskonale się wyróżniają od innych grup rodzaju *Stenobothrus*, o tyle znów trudną jest rzeczą odróżnić je od siebie. W powyższym spisie miejscowości podaję tylko takie, w których znalazłem okazy, dające się dobrze wyróżnić. Pozostaje jeszcze bardzo obfity materiał, którego nie podobna rozdzielić, bo cechy są pomieszane. Nasuwa się przypuszczenie, że są to gatunki dopiero powstające, z całym jeszcze mnóstwem form pośrednich. Grupa ta (dawny *Stenobothrus variabilis* Fieb.) należy do najpospolitszych w tym rodzaju.

*elegans* Charp. Bukowica, 29. lipca; Alwernia, 3. sierpnia; Regulice, w sierpniu i wrześniu; Trzebinia, 22. sierpnia; Podgórze, 20. września.

*dorsatus* Zett. Regulice, 2. sierpnia; Alwernia, 3. sierpnia; Trzebinia, 22. sierpnia i 30. września; Olsza, 3. października; Krzemionki, 18. września; Podgórze, 20. września.

*parallelus* Zett. Regulice, 28. lipca; Tenczynek, 27. lipca; Alwernia, 3. sierpnia; Mirów, 26. sierpnia; Trzebinia, 22. sierpnia i 30. września; Sikornik, 18. września; Olsza, 3. października; Podgórze, 20. września; Czarna Wieś, 7. listopada.

### Gomphocerus Thunb.

*rufus* L. Regulice, 30. sierpnia; Skała Kmity, 8. września; Sikornik, 18. września i 7. listopada; Bielany, 22. września.

*maculatus* Thunb. Regulice, 22. lipca; Oblaszki, 4. sierpnia; Płaza, 5. sierpnia; Bołecin, 16. sierpnia; Bukowica, 17. sierpnia; Mirów, 26. sierpnia; Mydlniki, 2. sierpnia; Trzebinia, 30. września; Kościelec, 30. września.

### Oedipoda Latr.

*coerulescens* L. Tenczynek, 28. lipca; Bukowica, 17. sierpnia; Płaza, 5. sierpnia; Bołecin, 16. sierpnia; Mirów, 26. sierpnia; Krzemionki, 11. października.

### Pachytylus Fieb.

*migratorius* L. Dębniaki, 15. września (1 okaz); Kraków (Groble), we wrześniu (1 okaz).

**Psophus** Fieb.

*stridulus* L. Bołecin, 16. sierpnia, na piaskach porośłych zrzadka małemi sosnami, dość licznie.

**Tettix** Charp.

*bipunctatus* L. Regulice, od marca do sierpnia; Bukowica, 29. lipca; Bołecin, 16. sierpnia; Mirów, 18. sierpnia; Kraków (Wały), 15. kwietnia; Krzemionki, 18. września.

*subulatus* L. Regulice, 30. marca; Płaza, 5. sierpnia; Sikornik, 18. września; Olsza, 25. kwietnia; Dębnyki, 26. kwietnia; Krzemionki, 15. kwietnia, 18. września i 11. października.

**Locustodea.****Leptophyes** Friv.

*albovittata* Kollar. Płaza, 5. sierpnia; Regulice, 16. sierpnia; Skala Kmity, 8. września; Sikornik, 18. września.

**Xiphidium** Serv.

*dorsale* Latr. Poreba Żegoty, 18. sierpnia; Trzebinia, 28. sierpnia.

**Locusta** De Geer.

*viridissima* L. Regulice, w sierpniu; Bołecin, 16. sierpnia; Sikornik, we wrześniu.

*cantans* Fuessly. Regulice, 4. sierpnia; Sikornik, 19. września.

**Thamnotrizon** Fisch.

*cinereus* L. Bukowica, 27. lipca i 17. sierpnia; Sikornik, 18. września; Bielany, 22. września; Panięskie Skały, 7. listopada.

**Platycleis** Fieb.

*brachyptera* L. Trzebinia, 22. sierpnia i 30. września; Kościelec, 30. września.

*Roeselii* Hagenb. Alwernia, 28. lipca; Regulice, 15. sierpnia; Trzebinia, 22. sierpnia i 30. września; Sikornik, 21. września; Płaza, w sierpniu; Grojec, w sierpniu.



**Decticus** Serv.

*verrucivorus* L. Tenczynek, 28. lipca; Regulice, 5. sierpnia; Bo-  
lecin, 16. sierpnia; Sikornik, 18. września.

**Gryllodea.****Gryllus** L.

*campestris* L. Regulice, w czerwcu; Bielany, w lipcu; Krzemionki,  
15. czerwca.

*domesticus* L. Chrzanów, 18. listopada. (W Regulicach i wsiach  
okolicznych niema świerszcza domowego zupełnie).

**Gryllotalpa** Latr.

*vulgaris* Latr. Regulice, 28. sierpnia.

*Spis szarańczaków sebranych w lipcu r. 1900. w okolicy  
Gródka nad Dunajcem.*

*Mecostethus grossus* L. Gródek.

*Chrysochraon dispar* Heyer. Gródek, Przydonica.

*Stenobothrus stigmaticus* Ramb. Przydonica.

*St. apricarius* L. Gródek, Przydonica.

*St. viridulus* L. Przydonica.

*St. rufipes* Zett. Przydonica.

*St. bicolor* Charp. Zbyszyce, Przydonica.

*St. biguttulus* L. Zbyszyce, Przydonica.

*St. elegans* Charp. Gródek, Przydonica.

*St. dorsatus* Zett. Gródek, Przydonica.

*St. parallelus* Zett. Przydonica, już od 7. lipca zupełnie wy-  
kształcony.

*Gomphocerus rufus* L. Gródek, Przydonica.

*Tettix bipunctatus* L. Przydonica.

*Barbitistes serricauda* Fab. Przydonica.

*Leptophyes albovittata* Kollar. Przydonica.

*Xiphidium dorsale* Latr. Gródek.

*Locusta cantans* Fuessly. Przydonica.

*Thamnotrizon cinereus* L. Przydonica.

*Platycleis Roeselii* Hagenb. Gródek, Przydonica.

*Decticus verrucivorus* L. Gródek, Przydonica, Glinik.

*Gryllus campestris* L. Przydonica.

*Gr. domesticus* L. Przydonica.

*Gryllotalpa vulgaris* Latr. Przydonica.

U w a g a: W okolicy tej niema po domach ani karaczanów, ani persaków, natomiast spotyka się wszędzie świerszcza domowego.

*Spis szarańczaków zebranych w Kłaju podczas wycieczki  
w dniu 11. października 1900.*

*Ectobia lapponica* L. (larwy).

*Mecostethus grossus* L.

*Stenobothrus lineatus* Panz.

*St. stigmaticus* Ramb.

*St. viridulus* L.

*St. rufipes* Zett.

*St. biguttulus* L.

*St. elegans* Charp.

*St. dorsatus* Zett.

*St. parallelus* Zett.

*Gomphocerus maculatus* Thunb.

*Oedipoda coeruleascens* L.

*Tettix bipunctatus* L.

*T. subulatus* L.

*Xiphidium dorsale* Latr.

*Gryllus campestris* L. (larwy).



# MATERIAŁY

## do flory śluzowców (*Myxomycetes*) Galicyi.

Przez

Romana Gutwińskiego.

—◆—

Materyał, stanowiący treść niniejszej drobnej pracy, zebrałem — o ile sam wpadł mi w oko podczas wycieczek algologicznych — w Dębowcu w Jasielskiem, Cetuli i Czercach w Jarosławskiem, w Lwowskiem, Tarnopolskiem, a także w Skawcach, Suchy i Zakopanem. Ogłaszam go przez wzgląd na nowe stanowiska.

Nadto wspominam o paru gatunkach znalezionych przeze mnie w lipcu 1898. r. w Karlsbadzie.

Okazy uwzględnione w tej pracy złożyłem Komisji fizyograficznej Akademii Umiejętności.

## ENDOSPOREAE.

Calcareae.

Physaraceae.

Physarum Pers.

1. *Ph. nefroideum* Rostaf., Maworek nerkowaty Rostaf. Monogr. pag. 93. Nr. 3.

Średn. zarodników = 11  $\mu$ .

Gatunek rzadki — zdaje się — u nas; dotychczas znaleziony tylko w okolicy Lwowa (Zniesienie i Hołosko)<sup>1)</sup>. Zebrałem

<sup>1)</sup> J. Krupa. Zapiski..., Spraw. Kom. fiz. Akad. Umiej. T. XXII. pag. 14.

go w 1885. roku w Jarosławskim we wsi Cetuli (las „Niwka“) na mchach.

### Fuligo Haller.

2. *F. varians* Sommerf. Wykwit zmienny Rostaf. Monogr. pag. 134. Nr. 43.

Średnica zarodników =  $6.6 \mu$  —  $8.8 \mu$  —  $11 \mu$  —  $13 \mu$ .  
Sucha — na starym pniu w „potoku Świerkosza“ 16. VIII, 1897; Karlsbad — na zmurszałych pniach za Gamsenfels, na Schwindelweg 25. VII, 1898 i między Katharinenplatz a Bild Aberg 10. VII, 1898.

### Amaurochaeteae.

#### Stemonitaceae.

#### Stemonitis Gled.

3. *S. dictyospora* Rostaf. Paździorek podobny Rostaf. Monogr. pag. 195. Nr. 95.

Zarodnie z trzonkiem 10 mm długie, trzonek 4 mm. Średnica zarodników  $6.6 \mu$ .

Znany u nas tylko z Krakowskiego [Raciborski, Śluzowce Krakowa i jego okolicy. Spraw. Kom. fiz. Akad. Um. T. XVIII, pag. (7)]. Zebrałem ten gatunek w Dębowcu (Jasielskie) — „pod Skalą“ na pniach *Salix* 13. VIII, 1889. r. i w Tarnopolu — na sztakietach ogrodowych 15. VIII, 1890.

### Comatricha Preuss.

4. *C. typhina* (Roth). Czuprynka gęsta Rostaf. Monog. pag. 197. Nr. 97.

Zarodnie z trzonkiem 3 mm długie, trzonek 1 mm. Średnica zarodników  $5.5 \mu$  —  $6.6 \mu$ .

Skawce — na *Carpinus betulus* w ogrodzie dworskim 6. VII, 1893. r. i na *Salix* nad brzegiem Skawy. Karlsbad — zmurszałe pnie przy drodze z Friedhofu do Kronprinz. Stephanie-Warte 7. VII, 1898.

### Anemeae.

#### Liceaceae.

#### Tubulina Pers.

5. *T. cylindrica* (Bull), Zlepniczek walcowaty Rostaf. Monogr. pag. 220. Nr. 117.

Średnica zarodników 4·9  $\mu$  — 6·6  $\mu$ .

Gatunek raz tylko koło Krakowa poniżej Kopca Kościuszki znaleziony<sup>1)</sup>, spotykany częściej w okolicach Lwowa (Brzuchowice, Nawarya<sup>2)</sup>, Barszczowice<sup>3)</sup>, a znany u nas także z Niepołomic i okolicy Skolego<sup>4)</sup> — zebrałem w Skawcach, na pniach wierzb nad brzegiem Skawy 6. VII, 1893. roku. Karlsbad — między Jägerhaus Karl IV a Aberg 13. VII, oraz na Schwindelweg 25. VII, 1898.

## Heterodermeae.

### Cribrariaceae.

#### Cribraria Pers.

*C. aurantiaca* Schrad. Przetaczek pospolity Rostaf. Monog. pag. 233. Nr. 126.

Karlsbad — na zmurszałym pniu przy ścieżce z Friedhofgasse do Kronprinz. Stephanie Warte 7. VII, 1898.

6. *C. vulgaris* Schrad. P. zmienny Rostaf. Monog. pag. 234. Nr. 127.

Średnica zarodników = 5·5  $\mu$ .

Skawce — wierzby nad brzegiem Skawy, 6. VII, 1893.

*C. argillacea* Pers. P. gromadny Rostaf. Monogr. pag. 238. Nr. 131.

Karlsbad — zmurszały pień na Schwindelweg koło Park Schönbrunn, 25. VII, 1898.

## Calonemeae.

### Trichiaceae.

#### Hemiarcyria Rostaf.

7. *H. rubiformis* (Pers.) Zapletka malina Rostaf. Monogr. pag. 262. Nr. 147.

Gatunek podany przez Krupę z okolic Lwowa: Sieciechów, Nawarya, Biłhorszczce i Zimna Woda<sup>5)</sup> — zebrałem w tej samej okolicy w lesie Krzywczyckim, na spróchniałym pniu *Carpinus betulus* 27. X, 1889.

<sup>1)</sup> Raciborski l. c. Spraw. Kom. fiz. Akad. Umiej. T. XVIII. pag. (8).

<sup>2)</sup> Krupa l. c. T. XXII, pag. 16.

<sup>3)</sup> i <sup>4)</sup> Krupa l. c. T. XXIII, p. 146.

<sup>5)</sup> l. c. T. XXII, pag. 17.

Uwaga. Okazy przeze mnie zebrane mają włosnię  $4\cdot4\ \mu$  grubą, rozdęcia przed końcami ( $2\cdot2\ \mu$  —  $1\ \mu$  grubymi) na  $6\cdot6\ \mu$  grube, a zarodniki o średnicy  $8\cdot8\ \mu$  —  $11\ \mu$ , o błonie gęsto małemi brodaweczkami pokrytej, a nie gładkiej, jak czytamy w Monografii Prof. Dra Rostafińskiego. Wobec tego sędzę, że *H. rubiformis* występuje w dwóch odmianach: a) o zarodnikach gładkich (Rostaf. l. c.) var. *glabra* nob. i b) o zarodnikach brodaweczkowatych var. *aspera* nob.

8. *H. clavata* (Pers.) Z. maczugowata Rostaf. Monog. pag. 264. Nr. 148.

Włosnia  $4\cdot4\ \mu$  gruba o 5—4 węzownicach. Średnica zarodników =  $6\cdot6\ \mu$  —  $8\cdot8\ \mu$  a w kilku —  $13\cdot2\ \mu$ .

Krupa znalazł ten gatunek w okolicy Lwowa w Zimnej Wodzie<sup>1)</sup>, ja zaś zebrałem go w Bednarówce, na *Aesculus Hippocastanum* przy gościńcu stryjskim 9. X, 1889.

### Arcyriaceae.

#### Arcyrella Rostaf.

*A. incarnata* Pers. Strzępek kulawka Rostaf. Monogr. pag. 275. Nr. 155.

Karlsbad — na zmurszałym pniu między Gensenfels a Hirschsprung 25. VII, 1898.

9. *A. nutans* (Bull.) S. zwisły Rostaf. l. c. pag. 277. Nr. 157.

Włosnia  $3\cdot3\ \mu$  —  $4\cdot4\ \mu$  z kolcami na  $1\cdot1\ \mu$  —  $2\cdot2\ \mu$  długimi. Średnica zarodników  $6\cdot6\ \mu$  —  $7\cdot7\ \mu$  —  $9\cdot9\ \mu$ .

Zarodniki w okazach moich są pokryte małymi brodaweczkami, a nie gładkie. Włosnia obok typowej budowy zgrubień i kolców okazuje na swej powierzchni sieć podobną jak u *A. dictyonema* Rostaf. i *A. inermis* Rac.

Czerce — gmina Czerwona Wola, las „Głazyzna“ na zmurszałym pniu sosny 25. II, 1899. r. (Jarosławskie). Zakopane — las za Muzeum Chałubińskiego na lewo od gościńca na Bystre 6. VIII i las pod Kozińcem na zmurszałych pniach 7. VIII, 1899. Karlsbad — przy Schwindelweg 25. VII, 1898.

#### Lycogala Mich.

10. *L. epidendrum* Bux. Rulik groniasty Rostaf. Monog. pag. 285. Nr. 164.

Zarodniki  $4\cdot4\ \mu$  —  $6\ \mu$  średnicy, gładkie, zgodnie z dya-

<sup>1)</sup> l. c. T. XXII, pag. 18.

gnozą w Monografii cytowanej i z twierdzeniem J. Schroetera w Kryptogamen Flora von Schlesien Bd. III<sup>1)</sup>.

Rulika tego nie znaleźliśmy dotychczas z okolic Lwowa (Por. Krupa l. s. c.). Okazy moje zebrałem w lesie Krzywczyckim 27. X, 1889; nadto w Karlsbadzie — między Jägerhaus Karl IV a Aberg 13. VII, 1898.

11. *L. flavo-fusca* (Ehrenb.) R. olbrzymi Rostaf. Monogr. pag. 288. Nr. 165.

I tego gatunku nie podaje Krupa z Lwowskiego; zebrałem go w lesie Oświeca rew. Zubrza — na pniu *Quercus*, 9. X, 1889. Karlsbad — na zmurszałym pniu przy drodze z Friedhofu do Kronprinz. Stephanie Warte 7. VII, 1898.

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<sup>1)</sup> Cfr. M. Raciborski, Bemerkungen über einige in den letzten Jahren beschriebene Myxomyceten. Hedwigia 1887. Heft. III, pag. 2 (in separat).



# O nowych i mało znanych gatunkach motyli fauny galicyjskiej.

Przyczynek drugi.

Napisał

**Dr. Stanisław Klemensiewicz.**

Przyczynek ten zawiera wykaz uwagi godniejszych gatunków motyli, jakie przeważnie w ciągu dwóch lat ostatnich w kraju zebrałem. Uwzględniam gatunki dla fauny galicyjskiej nowe oraz mało znane, zwłaszcza takie, które w kraju na nowych odkryłem stanowiskach.

W dwóch ostatnich latach pojawiły się następujące prace, dotyczące fauny i biologii motyli galicyjskich:

- I. Schille F. Fauna lepidopterologica doliny Popradu i jego dopływów. Część III; Sprawozd. Kom. fizyogr. Akad. Umiej. w Krakowie; T. XXXIV, 1899.
- II. — Tej samej pracy część IV; w tychże Spraw.; T. XXXV, 1900.
- III. — *Dasychira* Stph. *fascelina* L. *ab. laricis* Schille; Societ. entomolog. XIV Jahrgg. Zürich-Hottingen 1899.
- IV. — Neue aberrative Schmetterlinge aus Galizien; Societ. entomolog. XV Jahrgg. Zürich-Hottingen 1900.
- V. — *Pleretes Matronula* L.; Illustrierte Zeitschr. für Entomologie; V Band. Neudamm 1900.
- VI. Viertl A. Die Biologie von *Botys palustralis* Hb.; Rovartani Lapok IV, p. 120. Budapest.
- VII. Klemensiewicz Dr. S. O nowych i mało znanych gatunkach motyli fauny galicyjskiej. Przyczynek pierwszy;



Sprawozd. Komisji fizyogr. Akad. Umiej. w Krakowie; T. XXXIV, 1899.

VIII. — Merkwürdige Fühlerbildung bei einer *Zygaena spec.* Illustr. Zeitschr. für Entomolog.; V Band, Neudamm 1900.

W pracy (I) i (II) uzupełnia Schille swe lokalno-faunistyczne badania z szczególniejszem uwzględnieniem motyli drobnych; w (IV) opisuje nowe aberacye czterech gatunków z rodzaju *Cidaria* Tr. i gatunku *Pleretes Matronula* L., zaś w (V) podaje biologię tegoż gatunku. W końcu nadmienić należy wspomnianą już w moich poprzednich wykazach rozprawę C. Hormuzakiego „Die Schmetterlinge (Lepidoptera) der Bukowina“, którą autor w r. 1899 wykończył; zawiera ona tylko motyle większe.

Liczba znalezionych w kraju po dziś dzień głównych form gatunków motyli wynosi 2160, odmian i aberacyi 323, razem form 2483, przeto o 44 więcej, jak przed dwoma laty.

Gatunki niżej wykazane pochodzą przeważnie z tych samych miejscowości<sup>1)</sup>, co poprzednio, nadto z okolicy Szczakowy, gdzie w porze letniej r. 1899. jakiś czas bawiłem. Obszar wsi Szczakowy (w powiecie chrzanowskim), wzniesiony na 307 m n. p. m., przypomina poniekąd swem równem położeniem, obfitością piasków, moczarów i wysokopiennych borów sosnowych, okolice Brodów; różni się jednak obfitszym strumieniem Koziobrodem, lewym dopływem Przemszy, który w ostro zagłębionem piaszczystem korycie porusza się leniwie wśród bujnych łąk, przeważnie podmokłych. W okolicy przeważają lasy sosnowe, role, pastwiska i wielkie obszary, pokryte żółtym, częstokroć lotnym piaskiem; stawy i moczary uzupełniają krajobraz tej monotonnej okolicy. Grunt borów jest przeważnie jałowy, piaszczysty, miejscami podmokły, ich brzegi urozmaicone krzakami jałowcowymi. Wobec podobnych warunków topograficznych okolicy Szczakowy i Brodów, daje się zauważyć także pod względem fauny motyli niejakie podobieństwo; Szczakowa posiada jednak swoje specjalności, jakich dotąd gdzieindziej w kraju nie zauważono (*Ypsolophus Marginellus* F., *Coleophora Clypeiferella* Hofm. i inn.).

W następującym wykazie zestawilem i nazwałem gatunki według katalogu Staudingera i Wockego z r. 1871., zaznaczając gwiazdką formy, dla fauny krajowej nowe. Rzymskie liczby w nawiasie odnoszą się do prac wyżej wymienionych. Głoski „m. w.“ oznaczają w skróceniu „mój wykaz“ z r. 1898. (O nowych i mało znanych gatunkach motyli fauny galicyjskiej; Sprawozd. Komis.

<sup>1)</sup> Zobacz wstęp do moich wykazów w T. XXXIII. Sprawozd. Komisji fizyogr.

fizyogr. T. XXXIII), do którego czasem odwoływać się wypadnie. „Ex l.“ oznacza wykazy wyhodowane w domu z gąsienic.

## RHOPALOCERA.

### *Polyommatus* Latr.

1. *Dispar* Hw. v. *Rutilus* Wernb. Gatunek właściwy Anglii w formie głównej; u nas (dotychczas tylko w Galicyi wschodniej) jakoteż we Francyi, Niemczech, południowo-wschodniej Europie i Transkaukazyi znany tylko w odmianie<sup>1)</sup> *Rutilus* Wernb., która od formy głównej różni się tylko rozmiarem znacznie mniejszym i mniejszemi plamami czarnemi. W r. 1900. wyhodowałem dnia 5. czerwca we Lwowie, z gąsienicy znalezionej w maju na *Rumex* sp. piękną samicę, którą z powodu wielkiego rozmiaru (długość skrzydła przedn. wynosi blisko 21 mm, zaś u *Rutilus* 17—19 mm) i bardzo wielkich plam czarnych, skłonny byłbym uważać za formę główną *Dispar* Hw. Plamy czarne szeregu za środkiem skrzydła są promienisto wydłużone, ku nasadzie zaostrome; również w komórce 1 b i środkowej wybiega z nasady skrzydła promienisty czarny nalot. Na skrzydłach tylnych są plamy także pokaźne i podłużne.

\*2. *Dorilis* Hufn. ? v. *Orientalis* Stdgr. Czerwony nalot na przednich skrzydłach jest u galicyjskich okazów samiec często mocno zredukowany. Trzy egzemplarze z Brodów, znalezione w połowie maja, odznaczają się skrzydłami jednostajnie czarno-brunatnemi; na przednich niema śladu zaczerwienienia; szeregi czarnych plamek są wyraźne, plamki przed krańcem od strony wewnętrznej czerwono obwiedzione. Spód jak u formy zwyczajnej. Forma bardzo zbliżona do środkowo azyatyckiej v. *Orientalis* Stdgr. (Pojawia się także na Bukowinie).

### *Lycaena* F.

3. *Hylas* Esp. Jeden okaz samca na łąkach górskich w Czorszynie nad Dunajcem, przy końcu lipca.

<sup>1)</sup> Niektórzy autorowie uważają formę *Rutilus* Wernb. za odrębny gatunek.

**Coenonympha Hb.**

4. *Tiphon* Rott. ab. *Philoxenus* Esp. Rzadki, między okazami formy głównej, na podmokłych łąkach przy Lwowie, od końca czerwca do końca lipca.

**SPHINGES.****Macroglossa O.**

5. *Fuciformis* L. Lokalny. W dolinie Maruńki koło Lwowa, na wilgotnych łąkach leśnych, co roku w drugiej połowie maja i pierwszej czerwca, nie rzadki.

**Sesia F.**

6. *Ichneumoniformis* F. Dotychczas był wykazany w jednym okazy (przy końcu czerwca) z okolicy Lwowa; znalazłem go następnie przy N. Sączu w olszynie nad rzeką Kamienicą, 7. sierpnia.

7. *Empiformis* Esp. Rozprzestrzeniony, przeważnie w Galicyi wschodniej; jeden okaz znalazłem w Gołębkwicach koło N. Sącza, na górskich pochyłościach 9. sierpnia.

**Naclia B.**

8. *Ancilla* L. W połowie lipca przy lampie w Brodach. Gatunek daleko rozprzestrzeniony, jednak wszędzie rzadki.

**BOMBYCES.****Fumea Hb.**

9. *Sepium* Spr. W okolicy Lwowa co roku, zwłaszcza w stanie gąsienicy nie rzadki; gąsienice w charakterystycznych wozeczkach równowazkich, zachodzą się na wiosnę po pniach drzew i płotach, których porostami żyją. Motyl lęgnie się przy końcu czerwca i na początku lipca, gdzieindziej dotychczas nieznany.

**Psilura Stph.**

\*10. *Monacha* L. ab. *Eremita* O. Odmiany mniej lub więcej ciemne zdarzają się czasem między okazami formy głównej. Egzemplarze niemal całkiem czarne znajdowałem w lasach liścia-

stych, zmieszanych ze sosną, w Brzuchowicach koło Lwowa, mniej typowe w lasach sosnowych Szczakowy.

### Drepana Schrk.

11. *Cultraria* F. Pojawia się w całym kraju, lecz wszędzie pojedynczo i rzadko, w dwóch pokoleniach. We Lwowie wylągt się u mnie okaz z przezimowanej poczwarki 23. kwietnia; gąsienice znalazłem późną jesienią roku poprzedniego na buku. W Rytrze jeden okaz przy lampie 10. lipca.

### Notodonta O.

12. *Dictaeoides* Esp. Gatunek rzadki, znany dotąd tylko w okolicy Stanisławowa i Lwowa. Werchratski<sup>1)</sup> wspomina o dwóch generacjach motyla, pojawiających się w maju oraz znowu w drugiej połowie lipca i początku sierpnia. W okolicy Lwowa znalazłem go w połowie czerwca.

### Lophopteryx Stph.

13. *Camelina* L. Wszędzie dość pospolity w dwóch pokoleniach, z których drugie o wiele rzadsze. W Brodach znalazłem okaz świeżo wylęgły 29. sierpnia, zaś we Lwowie wyhodowałem go dopiero 14. listopada.

### Drynobia Dup.

14. *Velitaris* Rott. Lwów ex l. w drugiej połowie czerwca. Gąsienice zeszłej jesieni na dębie, poczwarki zimują w ziemi, niekiedy dwa, lub nawet trzy razy.

15. *Melagona* Bkh. W lesie grabowym wsi Brzuchowic koło Lwowa, 6. lipca przy lampie. Znacznie rzadszy od poprzedniego.

### Cymatophora Tr.

16. *Fluctuosa* Hb. Gatunek daleko rozprzestrzeniony, lecz powszechnie za rzadki pożytywany. W roku zeszłym pojawił się przy lampie, w cienistej alei wśród lasu grabowego Brzuchowic koło Lwowa, w znacznej ilości 6. lipca.

<sup>1)</sup> Motyle większe Stanisławowa etc. Sprawozd. Kom. fizyogr. T. XXVIII.

## NOCTUAE.

## Agrotis O.

\*17. *Tritici* L. ab. *Eruta* Hb. Jeden okaz tej rzadkiej aberacyi pojawił się przy lampie w Rytrze, 31. lipca 1895.

## Mamestra Tr.

18. *Albicolon* Hb. Gatunek bardzo podobny do *M. Brassicae* L. Rozsiedlony daleko lecz rzadki; wymieniono go w pojedynczych egzemplarzach z okolicy Lwowa i Krakowa. Jeden okaz znalazłem także koło Brodów. Pojawia się przez cały czerwiec i lipiec.

## Hadena Tr.

19. *Didyma* Esp. ab. *Nictitans* Esp. Jedna z najrzadszych aberacyj tego gatunku, znana z okolicy Lwowa (Garb.) i Szczakowy (Klem.).

## Cosmia O.

20. *Palaearctica* Esp. Jeden okaz tej rzadkiej w kraju nocnicówki wyhodowałem we Lwowie przy końcu lipca z gąsienicy, znalezionej na wiosnę tego samego roku, o ile się nie mylę, na dzikiej róży.

## Chariclea Stph.

21. *Umbra* Hufn. Przy końcu jesieni 1899. r. pojawiło się na cmentarzu lwowskim mnóstwo gąsienic tego gatunku na *Geranium pratense*, objadających niedojrzałe jeszcze owoce tej rośliny; w roku następnym było ich tam bardzo mało. Barwa gąsienic zmienna, brudno-zielona, lub czerwono-brunatna. Poczwaraki zimują w ziemi i wydają motyla między 8. czerwca a 8. lipca roku następującego. Dotychczas podawano drzewa liściaste i *Ononis spinosa* jako pokarm gąsienicy.

## GEOMETRAE.

## Acidalia Tr.!

22. *Ochrata* Sc. Jeden okaz w zrzebie sosnowym koło Brodów 14. sierpnia. Gatunek rzadki, znany w pojedynczych egzemplarzach z niewielu miejsc, tylko Galicyi wschodniej.

23. *Dimidiata* Hufn. Rozsiedlony w całym kraju, w nizinie i w górach, lecz nie częsty. Zauważyłem go w okolicach Szczakowoy, N. Sacza, Piwniczny, Brodów i Lwowa, w lipcu i na początku sierpnia.

24. *Straminata* Tr. Wykazany był w formie głównej, przed 35 laty, tylko z okolicy Janowa<sup>1)</sup>. Trzy okazy znalazłem w roku zeszłym na suchym, piaszczystym cmentarzu brodzkim, w sierpniu. Gatunek lokalny.

25. *Nemoraria* Hb. Koło Lwowa w czerwcu; bardzo rzadki.

### Boarmia Tr.

\*26. *Cinctaria* Schiff. S. V. *ab.*

„*Unicolor, albicans, alae vix pulverulentae, absque umbra media, lineis distincte nigris, prima solum geminata, lunulis mediis alarum anteriorum dilutioribus, non obscure cinctis, posteriorum absentibus*“.

Aberacya wybitnie albinistyczna, zbliżona do *ab. Consimilaria* Dup. Odznacza się skrzydłami, wszędzie jednostajnie białopopielatemi, bardzo słabo i delikatnie ciemno naprószonemi. Na skrzydłach przednich są obie rysy poprzeczne wybitnie czarne, tylna pojedyncza, na żyłkach ostro ząbkowana, przednia zdwojona zapomocą towarzyszącego jej od strony nasady, słabszego cienia brunatnego; obie leżą w zwykłych miejscach. Z półksiężyców środkowych pozostały na skrzydłach przednich tylko ślady białawych źrenic, pozbawionych ciemniejszego otoczenia; na skrzydłach tylnych brak ich zupełnie. Cień środkowy zaznaczony tylko przy brzegu ramiennym skrzydeł przednich, nad półksiężycem środkowym. Linia falista nieco jaśniejsza, na skrzydłach przedn. w komórkach 4—6 od zewnątrz (słabiej od wewnątrz) brunatnocieniona. Na skrzydłach tylnych znajduje się tylko tylna rysa i linia falista. Ciało nie wiele od skrzydeł ciemniejsze, drugi pierścień kałduna czarno-brunatny.

Znaleziony w jednym okazie ♂ na cmentarzu brodzkim, 27. kwietnia 1899. r.

27. *Crepuscularia* Hb. *ab. Schillei* Klem. Dwa śliczne okazy wyhodowałem we Lwowie roku zeszłego w kwietniu z gąsienic, znalezionych w późnej jesieni roku poprzedniego na jesionie. Gąsienice różnią się znacznie od zwyczajnych tego gatunku. Poczwarzki zimują w ziemi.

<sup>1)</sup> M. Nowicki, Beitrag zur Lepidopterenfauna Galiziens. Verh. d. zool. bot. Ges. Bd. XV.

**Lithostege Hb.**

\*28. *Griseata* Schiff. S. V. *ab. infuscata* Ev. Jeden egzemplarz tej rzadkiej aberacyi pojawił się na jałowych wzgórzach Łyczakowskich przy Lwowie, 9. maja.

**Cidaria Tr.**

29. *Picata* Hb. Kilka okazów przy lampie w Brzuchowicach (las grabowy) koło Lwowa, na początku lipca.

30. *Bilineata* L. *ab. Infuscata* Gump. Forma odznaczająca się mniej lub więcej zaciemnionem polem środkowem skrzydeł przednich. Pojawia się czasem między okazami formy zwyczajnej, *Ab. Testaceolata* Stgr. jeszcze w Galicyi nie znaleziono.

**Eupithecia Curt.**

31. *Rectangulata* L. *ab. Subaerata* Hb. oraz

32. *Rectangulata* L. *ab. Nigrosericeata* Hw.

Pierwsza z nich ma skrzydła prawie całkiem zielone, druga czarnawe z wyjątkiem zielonej, zewnętrznej rysy poprzecznej. Zdarzają się w formach charakterystycznych tylko rzadko między okazami zwyczajnymi. Pierwszą znalazłem w Rzeszowie, drugą (częstsza) we Lwowie, w czerwcu.

33. *Tenuiata* Hb. We Lwowie wychowałem w zeszłym roku dwadzieścia kilka okazów z gąsienic, przebywających od wczesnej wiosny w baziach wierzby iwy; gąsienice zapoczwarczały się na dnie pudła pod baziami. Motyle legły się od 7. czerwca blisko do połowy lipca.

34. *Exiguata* Hb. Kilka egzemplarzy ex l. we Lwowie. Gąsienice żyją w jesieni na tarce, poczwarki zimują pod mchem. Motyle lęgną się przy końcu kwietnia i w maju.

**PYRALIDINA.****Scoparia Hw.**

35. *Crataegella* Hb. Znalazłem go koło Lwowa i Piwniczny jest zresztą daleko rozprzestrzeniony, chociaż dość rzadki. We Lwowie wylągl się wskutek sztucznie przyspieszonego rozwoju już 22. kwietnia; w naturze pojawia się w czerwcu i lipcu.

**Botys Tr.**

36. *Purpuralis* L. v. *Ostrinalis* Hb. Tę rzadką odmianę, znaną tylko Nowickiemu, znalazłem w okolicy Brodów 18. lipca.

37. *Aerealis* Hb. Jeden okaz na stepowatych łąkach w Dikowcach koło Brodów, 2. sierpnia.

38. *Ferrugalis* Hb. Rzadki, lecz daleko rozsiedlony. W Piwniczny płoszyłem go z krzaków przy końcu lipca, w Krakowie i Lwowie w połowie września.

39. *Olivalis* Schiff. S. V. Dotąd znany mi tylko z okolic górskich zachodnich Karpat (góry rytrzańskie, Witów w Tatrach), w lipcu.

### Psamotis Hb.

\*40. *Pulveralis* Hb. Bardzo rzadki. Jedyne okaz znalazłem w Klęczanach koło N. Sącza, 9. lipca 1873. r.

### Schoenobius Dup.

41. *Forficellus* Thnb. W Brodach co roku dość zwyczajny, tylko przy lampie, od końca czerwca do pocz. września; samce są o wiele rzadsze.

### Crambus F.

42. *Hamellus* Thnb. Jeden już nieco zlatany egzemplarz w Brzuchowicach przy Lwowie, w miejscu piaszczystym, porośniętym z rzadka młodemi sosnami, dopiero 22. września (porówn. m. w.).

43. *Fascelinellus* Hb. Przebywa pojedynczo po stepowatych miejscach piaszczystych, w pobliżu lasów sosnowych, w okolicy Brodów i Szczakowy, w lipcu i sierpniu.

44. *Deliellus* Hb. Dotychczas był wykazany tylko w jednym okazy z okolicy Janowa<sup>1)</sup>. Pojawia się nielicznie także koło Brodów, po miejscach piaszczystych, słońcem spieczonych, w pobliżu lasów sosnowych, w drugiej połowie sierpnia. Samice są rzadsze<sup>2)</sup>.

\*45. *Deliellus* Hb. ab. *Unicolorellus* m.

„*Alae anteriores omnino pallide stramineae, absque signatura fusca*“.

Nalot ciemno-brunatny, który ogranicza w kształcie ostrych promieni tylną żyłkę środkową, srebrzysto połyskującą, jakoteż brunatny pyłek przy brzegu pachowym skrzydeł przednich, są u niektórych okazów gatunku *Deliellus* mniej wyraźne (zwłaszcza u samic).

<sup>1)</sup> Nowicki, Beitrag etc. l. c.

<sup>2)</sup> Przy sposobności prostuję błąd, zawarty w m. w., w który zostałem wprowadzony przez jednego z zakrajowych determinatorów. Mianowicie opisana tam przeze mnie rzekomo nowa aberacja gatunku *Tristellus* F. (215, g.), jest gatunkiem *Deliellus* Hb.



U dwóch samców z Brodów brak tych ciemnych nakreśleń prawie zupełny, a u jednego są tylko słabe ślady charakterystycznych dla tego gatunku czarnych kropeczek na krańcu. Skrzydła przednie są przeto zupełnie jednostajnie słomiano żółte, a tylna żyłka środkowa tylko bardzo słabo połyskująca. Aberacya wybitna, godna odrębnej nazwy.

46. *Tristellus* F. ab. „*Alis anterioribus ubilibet hepaticis*“.

Tę rzadką, jednostajnie ciemno-brunatną aberacyę, znalazłem na wilgotnych łąkach koło Brodów, 22. sierpnia (porówn. m. w.).

### **Dioryctria Z.**

47. *Abietella* Zk. Pojawia się nielicznie w całym kraju po lasach szpilkowych, od równin do przedgórzy, (okolice Brodów, St. Sącza, Czarnego Dunajca), prawdopodobnie w dwóch generacyach, od końca maja blisko do końca sierpnia.

### **Pempelia Hb.**

48. *Adornatella* Tr. Rzadki. Jeden samiec w Młodowie koło Rytra 31. lipca. Zresztą znany z okolic Lwowa, Sambora i Krynicy.

### **Hypochoalcia Hb.**

\*49. *Ahenella* Zk. ab. *Luridella* Schl. Różni się od formy zwyczajnej żółtawą barwą skrzydeł przednich i brakiem nakreślenia, z wyjątkiem miejsca ciemniejszego w komórce środkowej. Jeden okaz znalazłem na Górze Piaskowej przy Lwowie, 15. czerwca 1899. r.

### **Myelois Z.**

50. *Cribrum* Schiff. S. V. Suche łąki przy Lwowie 23. czerwca; w Brodach kilka okazów przy lampie między 7. lipca a 7. sierpnia. U nas jeszcze mało znany.

### **Nyctegretis Z.**

51. *Achatinella* Hb. Znany był tylko Nowickiemu w jednym okazy z Zapola koło Hołoska<sup>1)</sup>. We Lwowie pojawił się dość licznie na piaszczystych, słońcem spieczonych łąkach, porośniętych artemisją, w drugiej połowie czerwca 1895. r.

<sup>1)</sup> Żebrawski wymienia go z Chrobrza w Królestwie Polskiem.

### Homoeosoma Curt.

52. *Nimbella* Z. U nas dotąd mało znany. Nowicki znalazł jeden okaz pod Lwowcem (w pow. samborskim), 8. czerwca. Koło Brodów pojawia się pojedynczo i rzadko na suchym, wapiście piaszczystym gruncie od połowy lipca do połowy sierpnia; we Lwowie jeden okaz jeszcze 12. września. Samce są rzadsze.

## TORTRICINA.

### Rhacodia Hb.

53. *Caudana* F. ab. *Emargana* F. Bardzo rzadki. Jeden okaz strzasnąłem z krzaków leszczynowych w Brzuchowicach koło Lwowa, 29. września zeszł. roku. Odznacza się bladożółtym tłem skrzydeł przednich, których połowa nasadowa aż po skośną ryse za środkiem, jest wybitnie kratkowana prążkami fioletowo-brunatnymi, zaś połowa zewnętrzna całkiem zakryta barwą fioletowo-brunatną.

### Teras T.

54. *Cristana* F. W Krzywczycach przy Lwowie, strząśnięty z zarośli 17. października.

### Tortrix Tr.

55. *Sorbiana* Hb. W lasach mieszanych koło Brodów, na pocz. lipca. Zdaje się być daleko rozprzestrzeniony, lecz tylko do niektórych miejsc przywiązany.

56. *Paleana* Hb. Rozprzestrzeniony, jednak mało znany; kilka okazów zebrałem w okolicach N. Sącza, Rytra i Brodów, też *ex l.* na *Scabiosa*. Motyl pojawia się w lipcu i sierpniu.

### Cochylis Tr.

57. *Rutilana* Hb. Rzadki; w miejscach porośniętych mchem. Jeden okaz w Szczakowy przy lampie, inny w Piwniczny, wypłoszony z jałowców; oba na pocz. sierpnia. Żebrowski znalazł go w Borku przy Krakowie na pocz. maja; zapewne przeto dwa pokolenia.

\*58. *Smeathmanniana* F. ab. *Stachydana* H. S. Tę drobną aberację napotkałem w drugiej generacji 21. sierpnia w okolicy Brodów, na piaszczystych łąkach.

59. *Notulana* Z. W dwóch ostatnich latach zebrałem kilka okazów w okolicy Lwowa w drugiej połowie maja; pojawia się przeto w dwóch pokoleniach i jest daleko rozprzestrzeniony (por. m. w.).

### Grapholitha Tr.

60. *Tripunctana* F. Mało znany, chociaż daleko rozprzestrzeniony i nie rzadki. Posiadam wiele okazów z okolicy Bochni i Lwowa, zebranych przy końcu maja i na pocz. czerwca.

61. *Sordidana* Hb. Bardzo lokalny, znany tylko Nowickiemu. W drugiej połowie września r. 1900. latał w Brzuchowicach koło Lwowa późnym wieczorem dość licznie pod olszami, których liśćmi gąsienica żyje. Zebrałem kilka okazów, jak się okazało, same samce.

62. *Bilunana* Hw. Skały Panińskie koło Krakowa, Boratyn koło Brodów, Lesienice przy Lwowie; przy końcu maja i w pierwszej połowie czerwca. Mało znany, chociaż daleko rozsiadlony i nierzadki.

63. *Cosmophorana*<sup>1)</sup> Tr. Jeden okaz koło Lwowa, wypłoszony ze sosny 27. maja 1900. r. Rzadki.

### Phthoroblastis Ld.

64. *Regiana* Z. Dotychczas był wymieniony tylko z Krakowa (Zebr.). Posiadam trzy okazy z okolicy Lwowa, jeden z nich *ex l.* Gąsienica żyje w lecie liśćmi klonów, w jesieni włazi pod korę drzewa, sporządza sobie tęgi oprzęd, w którym po przezimowaniu zamienia się w poczwarkę. Motyle pojawiają się w maju.

### Steganoptycha H. S.

65. *Corticana* Hb. Gatunek, ten wykazany tylko przez Nowickiego z Galicyi wschodniej (*Enumeratio* etc.), jako wszędzie bardzo pospolity (!), znalazłem dotychczas tylko w jednym okazy koło N. Sącza (Gołąbkowice), na początku lipca.

### Phoxopteryx Tr.

66. *Obtusana* Hw. Pojawia się także koło Lwowa, przeto jest w Galicyi daleko rozprzestrzeniony (porówn. m. w.).

<sup>1)</sup> Wymienia go tylko Garbowski w dodatku swej pracy (l. c.), bez wszelkiej daty.

**Dichrorampha Gn.**

67. *Alpinana* Tr. W okolicy N. Sącza przy końcu maja, koło Lwowa przy końcu czerwca; u nas nie zwyczajny.

**TINEINA.****Lypusa Z.**

68. *Maurella* F. W Zubrzy koło Lwowa, na mokrych łąkach, porośłych z rzadka krzakami olszowymi, 25. maja, jeden samiec.

**Diplodoma Z.**

69. *Marginepunctella* Stph. We Lwowie wyhodowałem 7. czerwca 1900. r. jedną samicę tego rzadkiego motylka. Gąsienica znaleziona na grobowcu w późnej jesieni roku poprzedniego, przebywa w obszernym woreczku, ostro trójkrawędzistym, ku tyłowi nieco zeszczipionym, blisko 8 mm długim, w środku około 4 $\frac{1}{2}$  mm szerokim; woreczek obłożony ziarnkami ziemi, piasku oraz szczątkami owadów, składa się właściwie z dwóch części, wsuniętych w siebie. Gąsienica zimuje w swym woreczku, a po przezimowaniu je dalej. Żywiłem ją porostami kory drzew. Według G. Stange'go ma pożerać także nieżywe owady. Gatunek u nas bardzo rzadki, lecz daleko rozprzestrzeniony (porówn. m. w.).

**Xysmatodoma Z.**

70. *Melanella* Hw. Wykazał go tylko Nowicki (*Enumeratio* etc.) przed 60 laty. W r. 1899. wyhodowałem we Lwowie jedną parę przy końcu maja. Gąsienica żyje w krótkim (około 5 mm), dość obszernym, przy końcach nieco zwężonym woreczku, oblepionym drobnymi ziarnkami ziemi i szczątkami porostów; woreczek jest trójklapowy, niewyraźnie trójgraniasty, zwłaszcza o bardzo niewyraźnej krawędzi grzbietowej, spodem nieco spłaszczony. Gąsienica żywi się porostami drzew i starych płotów, na których się w maju znachodzi.

**Tinea Z.**

71. *Parasitella* Hb. Daleko rozprzestrzeniony, jednak dość rzadki. W Brodach na płocie 6. czerwca; we Lwowie jeden okaz *ex l.* w maju. Przezimowaną gąsienicę znalazłem w marcu pod

kora grabu w dość tęgim oprzędzie, silnie przytwierdzonym do wnętrza kory; w nim też przeobraziła się w poczwarkę.

### Lampronia Stph.

72. *Redimitella* Z. Przy Lwowie kilka okazów, wypłoszonych z krzaków agrestowych 24. maja; przeto w Galicyi daleko rozsiedlony (porówn. m. w.).

### Incurvaria Hw.

73. *Muscalella* F. Znany mi z okolicy Krakowa, Wieliczki i Lwowa; pojawia się pojedynczo w maju.

\*74. *Intermediella* Hein. W zaroślach koło Lwowa (Zubrze, Lesienice), w drugiej połowie maja i w czerwcu; rzadki. Bardzo podobny do pokrewnych gatunków (*Muscalella* F., *Oelmanniella* Tr.).

### Adela Latr.

75. *Leucocerella* Sc. Zauważył go tylko Nowicki. Gatunek daleko rozsiedlony (Rzeszów, Lwów, Brody) i, zwłaszcza w Galicyi wschodniej, nierzadki; pojawia się w maju i czerwcu na kwiatach łąk leśnych.

### Nemotois Hb.

76. *Minimellus* Z. W zrębie sosnowym koło Brodów, 14. sierpnia jeden samiec. Wykryty w kraju przed 40 laty przez Nowickiego w górzystych okolicach Sambora.

### Roeslerstammia Z.

77. *Pronubella* Schiff. S. V. Dotychczas tylko koło Lwowa; po łąkach leśnych w maju i na początku czerwca. Rzadki.

### Hyponomeuta Z.

78. *Malinellus* Z. Koło Rytra przy końcu lipca. Zauważany pojedynczo, jak dotąd tylko w zachodniej części kraju.

### Swammerdamia Hb.

79. *Combinella* Hb. W okolicy Brodów i Lwowa koło krzaków tarninowych, na pocz. maja; rzadki.

80. *Oxyacanthella* Dup. Daleko rozsiedlony, lecz dość rzadki. Koło Lwowa wypłoszyłem z krzaków kilka okazów w maju i lipcu; dwie generacye.

81. *Pyrella* Vill. Wszędzie nierzadki. Dwa pokolenia, pierwsze od końca kwietnia do początku czerwca, drugie w sierpniu. Gąsienice znajdowałem także na wiśni; poczwarki z gąsienic jesiennych zimowały w zwiniętym liście.

### Cedestis Z.

82. *Gysseleniella* Dup. W okolicy N. Sącza i Lwowa, po lasach szpilkowych w czerwcu i lipcu. We Lwowie z gąsienicy, żyjącej w maju pomiędzy lekko sprzedzonymi liśćmi sosny (*Pinus sylvestris*). Poczwarka zmienia na kilka dni przed wylęgiem motyla, zupełnie swą postać, gdyż pteroteki odstają mocno od ciała.

### Cerostoma Latr.

83. *Sequella* Cl. Bardzo rzadki, znany tylko ze Lwowa; tamże wyhodowałem jeden okaz 20. czerwca z gąsienicy znalezionej w maju tego samego roku na dzikim kasztanie.

84. *Radiatella* Don. ab. *Byssinella* Hb. 380. Aberacya rzadka, rdzawo żółtawa ze słabym odcieniem miedzianym, niekiedy ciemno ochrowa o żyłce subkostalnej delikatnie biało kropkowanej, lub brunatnawo zaciemnionej. Jeden okaz znalazłem w Gołabkowicach koło N. Sącza, 15. lipca.

85. *Radiatella* Don. ab. *Lutarella* Hb. 168. Oliwkowo popielata o miedziano czerwonej strzępinie. Wypłoszona ze suchych już liści dębów koło Brodów, 15. października.

86. *Lucella* F. Daleko rozprzestrzeniony, lecz przeważnie rzadki. Znalazłem go w okolicy N. Sącza (Gołabkowice) i Brodów, na początku lipca; także *ex l.* na dębie.

87. *Nemorella* L. Krynica, przy końcu lipca, pojedynczo.

88. *Xylostella* L. W okolicy N. Sącza i Krynicy, lecz tylko miejscami, przy końcu lipca i w sierpniu.

### Depressaria Hw.

\*89. *Ocellana* F. ab. *Fumata* m. „*Alis anter. saturate fumatis, maculis obscuris marginis anter. distinctis*“.

Piękny okaz tej nieznaney mi melanotycznej aberacyi wypłoszyłem 1. sierpnia 1900. r. w okolicy N. Sącza, nad Łubinka z krzaków agrestowych. Różni się od zwykłej formy, u której skrzydła przednie są bardzo jasno popielate, o wiele ciemniejszą,

brunatno popielatą barwą<sup>1)</sup>. Nalot ciemny, u zwykłych okazów słaby, zakrywa gęsto powierzchnię skrzydła z wyjątkiem jaśniejszego pólka przy nasadzie i nasadowej części brzegu ramiennego; plamki ciemne przy brzegu ramiennym są bardzo wybitne. Znamię środkowe jak u formy zwyczajnej, jednak ciemnym tłem zakryte. Także skrzydła tylne i spód są o wiele ciemniejsze, jak zwykle. Głowa i tułów zabarwione jak pólko nasadowe<sup>2)</sup>.

### Gelechia Z.

90. *Lentiginosella* Z. Bardzo rzadki. We Lwowie jeden okaz *ex l.* w drugiej połowie lipca. Gąsienica żyje w maju na *Genista tinctoria* w sprzedzonych kończynach bocznych gałęzi; przepoczwarcza się na ziemi w drobnym oprzędzie.

91. *Diffinis* Hw. Kilka okazów na stepowatych łąkach piaszczystych koło Brodów i Lwowa, na początku czerwca i w drugiej połowie sierpnia; drugie pokolenie liczniejsze. Dotąd w Galicyi wschodniej nie zauważany.

\*92. *Lugubrella* F. Tego pięknego molowca odkryłem w stanie już nieco zlatanym, na murze cmentarnym koło Brodów, w pobliżu lasu sosnowego, 18. sierpnia 1899. r.

93. *Maculatella* Hb. Po dwudziestu kilku latach udało mi się napotkać kilka okazów tego rzadkiego gatunku, na ograniczonym terenie w zrębie sosnowym koło Brodów, 14. sierpnia (porówn. m. w.). Jest w kraju daleko rozprzestrzeniony, lecz bardzo lokalny i rzadki.

### Bryotropha Hein.

94. *Decrepidella* H. S. Zauważyłem go licznie na całym obszarze, w nizinie i w górach, od Brodów po Szczakowę, w rozmaitych odmianach; przebywa przeważnie po suchych, piaszczystych łąkach przyleśnych, (w Szczakowy po krzakach jałowcowych), w drugiej połowie czerwca i przez cały sierpień, może w dwóch generacjach.

### Teleia Hein.

95. *Notatella* Hb. Koło Bochni w połowie maja.

96. *Dodecella* L. W piaszczystej okolicy Szczakowy, ploszony ze sosen przy końcu lipca (porówn. m. w.).

<sup>1)</sup> Barwie tej odpowiada najlepiej kolor „*saturate fumatus*“ (Nr. 13 b tabeli farb w „Terminologia entomologica“ J. Müllera, II. wyd. 1872).

<sup>2)</sup> Aberacya zbliżona do nienazwanej *v. c.*, w Z. L. E. IX, p. 250: „*Thorace* cum alis anter. dense fusciscenti pulverulentis, lineola curvata in puncta duo mutata ♂“.

**Ptocheuusa Hein.**

97. *Subocellea* Stph. Jeden okaz w Szczawnicy, 23. lipca; rzadki.

**Parasia Dup.**

98. *Neuropterella* Z. W gajach koło Starego Sącza i po łąkach wśród wiklin nad Kamienicą przy N. Sączu, trzy piękne okazy między 31. lipca a 22. sierpnia. Mało znany.

**Lamprotes Hein.**

99. *Atrella* Hw. Koło Piwniczny po debrach na początku sierpnia. Znany był tylko z okolicy Lwowa.

100. *Unicolorella* H. S. W Galicyi wschodniej wykryłem go w kilku okazach przy końcu czerwca, w ogrodach lwowskich. Daleko rozprzestrzeniony, lecz nie zwyczajny.

**Anacamptis Curt.**

101. *Vorticella* Sc. W Lipkach koło Brodów na początku maja. Rozprzestrzeniony, jednak bardzo mało znany; w dwóch generacyach, w maju i lipcu.

**Gonia Hein.**

102. *Pudorina* Wk. Jeden mocno zlatany okaz wypłoszyłem z krzaków leśnych w Lipkach (koło Brodów), dopiero 20. sierpnia (porówn. m. w.).

**Cleodora Curt.**

\*103. *Anthemidella* Hein. Kilka pięknych egzemplarzy zebrałem na kwiecistych spadzistościach góry czorsztyńskiej, 25. lipca 1899. r.

**Ypsolophus F.**

\*104. *Marginellus* F. Odkryłem go w kraju w r. 1899. koło Szczakowy. Motylki ukrywają się między dolnymi gałęziami krzaków jałowcowych, w jakie piaszczyste brzegi lasów sosnowych tamże obfitują; spłoszone zrywają się do szybkiego lotu, lub też upadają jakby nieżywe na ziemię. Gąsienice żywią się szpilkami jałowców i to przeważnie krzaków precikowych. Motyle zbierałem (w pięknych okazach) przy końcu lipca i na początku sierpnia.



**Nothris Hb.**

105. *Sabinella* Z. W Szczakowy kilka egzemplarzy wypłoszonych z jałowców, równocześnie z poprzednimi (porówn. m. w.).

**Sophronia Hb.**

106. *Semicostella* Hb. Na początku lipca, w Brzuchowicach koło Lwowa.

**Harpella Schrk.**

107. *Bracteella* L, Tego ślicznego i rzadkiego molowca znalazłem na ścianie sieni we Lwowie, 1. lipca 1900. r. Znany prócz tego tylko z Rytra, przeto daleko rozprzestrzeniony.

**Oecophora Z.**

108. *Similella* Hb. W lasach świerkowych koło Czarnego Dunajca, przy końcu lipca.

**Oegoconia Stt.**

109. *Quadripuncta* Hw. Pojawił się przy lampie w Szczakowy 2. sierpnia. Daleko rozprzestrzeniony, jednak niezawodnie bardzo rzadki (porówn. m. w.).

**Glyphipteryx Hb.**

110. *Equitella* Sc. W okolicy Brodów i Lwowa dość zwyczajny; przebywa po otwartych i przyleśnych łąkach w dwóch pokoleniach, mianowicie przy końcu maja i na początku czerwca, oraz znowu w sierpniu.

**Gracilaria Z.**

111. *Rufipennella* Hb. W kraju odkryty przez Schillego w okolicy Rytra (I). Drugi okaz wypłoszyłem z krzaków na cmentarzu lwowskim, 18. września 1900. r.; jest przeto daleko rozprzestrzeniony.

**Coleophora Z.**

112. *Hemerobiella* Sc. W uzupełnieniu moich dawniejszych spostrzeżeń (porówn. m. w.) dodaję, że gatunek ten jest w okolicy Lwowa, zwłaszcza w stanie gąsienicy dość pospolity. Wiele

woreczków z gąsienicami znajdowałem tamże w porze wiosennej na gruszy i jarzębinie. W młodości przebywa gąsienica w małym, pistoletowato zakrzywionym woreczku, który w późniejszym wieku, skoro liście już się całkiem rozwinęły, zamienia na znacznie większy prosty; w czasie żarcia wysuwa się z woreczka głęboko w miąższ liścia. Opuszczone dawne woreczki zachodzą się na liściach obok zamieszkałych wielkich. Motyle lęgą się dopiero w lipcu.

113. *Anatipennella* Hb. Kilka egzemplarzy w Brodach częścią przy lampie, częścią w domu wyhodowanych, między 31. maja a 13. lipca. Gąsienica żyje liśćmi wierzby iwy w maju; jej woreczek jest tęgi, pistoletowaty, nieco ścieśniony, barwy czarno brunatnej.

114. *Conspicuella* Z. Bardzo rzadki. Jeden okaz w Szczawnicy na jałowym pastwisku koło potoku Grajcarka, 23. lipca 1899. r. Zresztą zauważany tylko w Rytrze.

\*115. *Clypeiferella* Hofm. Kilka pięknych okazów tego, u nas jeszcze nieznanego gatunku, pojawiło się przy lampie na dworcu kolejowym (leżącym wśród obszarów szczeropiaszczystych) w Szczakowy, 3. sierpnia 1899. r.

### Chauliodus Tr.

116. *Illigerellus* Hb. We Lwowie *ex l.* w połowie czerwca. Gąsienice w maju tego samego roku na poziomce; przeistaczają się w poczwarkę na ziemi w delikatnym oprzędzie siatkowatym.

### Elachista Stt.

117. *Obscurella* Stt. Dotychczas był wykazany tylko z okolicy Rytra (Schille); zauważyłem go także na łąkach leśnych przy Lwowie. W maju.

\*118. *Rudectella* Stt. W okolicy Lwowa na łąkach, zwłaszcza suchych, przez cały maj nie bardzo rzadki.

### Lithocolletis Z.

119. *Strigulatella* Z. Pojawia się w Rzeszowie i całej, nawet dalszej okolicy N. Sącza (Załubincze, Łyczana, Rytro, Piwniczna), po miejscach obfitujących w olszę, roślinę pokarmową gąsienicy; zwłaszcza w nowosądeckim ogrodzie strzeleckim jest w generacji wiosennej co roku liczny. Dwa pokolenia, pierwsze od połowy kwietnia do połowy maja, drugie w sierpniu.

120. *Spinicolella* Stt. Rozpowszechniony na całym obszarze, od nizin do przedgórzy, zwłaszcza w okolicach obfitych w tarninę. We Lwowie hoduję go z gąsienic, które żyją w liściach tarniny i śliwy<sup>1)</sup>. Zauważyłem, że w liściach utrzymywanych przez zimę zbyt wilgotnie, zamieniają się gąsienice (o ile nie zginą) w poczwarki dopiero na wiosnę, podczas gdy z reguły przepoczwarczają się jeszcze przed zimą. Motyl pojawia się w maju, oraz znowu przy końcu lipca i w sierpniu; generacja wiosenna jest liczniejsza.

121. *Nicellii* Stt. Także w okolicy Rzeszowa i Lwowa, pierwsza generacyu w maju (porówn. m. w.), przeto daleko rozprzestrzeniony.

122. *Froelichiella* Z. Myślenice, w zrębie leśnym przy końcu lipca.

123. *Kleemannella* F. Kilka okazów w okolicy Krakowa, Rzeszowa i Lwowa, w maju; przebywają w olszynach.

124. *Tremulae* Z. W Brodach i Lwowie, przeważnie *ex l.* Gąsienice i poczwarki znajdowałem wyłącznie w liściach osiki i tylko w jesieni. Motyle legły się między 19. września a 6. października tej samej jesieni; ponieważ w naturze zauważyłem motyle jeszcze w połowie listopada i znowu (zlatane) w połowie kwietnia, przypuszczam u nas tylko jedną: jesienną generację motyli, które po części zimują<sup>2)</sup>.

### Cemiostoma Z.

125. *Wailesella* Stt. W okolicy Lwowa, po leśnych łąkach koło *Genista tinctoria*, przez cały maj nierzadki; kilka okazów drugiej generacyi wyhodowałem tamże z gąsienic, minujących na wiosnę liście rzeczonyj rośliny. Dojrzałe gąsienice opuszczają swe chodniki i przeobrażają się w drobnym, białym kokoniku, w kątach liści; motylki legną się przy końcu czerwca i w pierwszej połowie lipca.

### Nepticula Z.

126. *Sericopeza* Z. Dotychczas znajdowałem go tylko koło Lwowa i Brodów, przy końcu maja, na początku czerwca i znowu w drugiej połowie sierpnia, przeto w dwóch pokoleniach.

<sup>1)</sup> L. Sorhagen (Beitrag zur Kenntniss der Gattung *Lithocolletis*. Illustr. Zeitschr. für Entomol., 1900) stara się wykazać, że motyle, które powstają z gąsienic minujących liście tarniny, a śliwy ogrodowej, należą do dwóch różnych gatunków; drugi z nich nazwał *Domesticella*.

<sup>2)</sup> W rodzaju *Lithocolletis* legną się niektóre okazy pierwszej generacyi motyla, miasto na wiosnę, już w jesieni i zimują; jednak u *L. Tremulae* nie zauważyłem dotąd zimujących poczwarek.

\*127. *Decentella* H. S. Bardzo rzadki. Wypłoszyłem go w jednym okazy z leszczyny, pod Wysokim Zamkiem we Lwowie, 12. czerwca 1900. r.

### Micropteryx Hb.

128. *Sparmannella* Bosc. Daleko rozsiedlony (okolice N. Sącza, Lwowa), lecz nie zwyczajny; koło brzoź i grabów przy końcu kwietnia i w maju.

129. *Semipurpurella* Stph. Także koło Lwowa, pojedynczo w drugiej połowie kwietnia (porówn. m. w.); daleko rozprzestrzeniony.

## PTEROPHORINA.

### Platyptilia Hb.

130. *Gonodactyla* Schiff. S. V. Rozprzestrzeniony wszędzie w dwóch generacjach; zauważyłem go od połowy maja do końca czerwca i znowu w połowie sierpnia. We Lwowie hodowałem często ten gatunek w pierwszej generacji. Gąsienica zimuje w młodym wieku i żyje już od początku wiosny w dętych szypułach koszyczków kwiatowych podbiału (*Tussilago farfara*); zrazu przebywa blisko ziemi, później u góry pod dnem koszyczka, zdradzając swą bytność kałem, który wyrzuca przez czarny, w dnie kwiatostanu wygryziony otwór. Gąsienice przepoczwarczają się częścią w sprężonym puchu owocostanu, częścią w delikatnym, białym oprzędzie pod liśćmi lub na łodygach.

131. *Nemoralis* Z. Jeden okaz przyleciał około godz. 11. w nocy, do lampy w Piwniczny, 30. lipca.

### Amblyptilia Hb.

132. *Acanthodactyla* Hb. Daleko rozsiedlony; zbierałem go w N. Sączu i okolicy (Podegrodzie), Brodach i Lwowie. Pora pojawu bardzo różna: przy końcu lipca, sierpnia, września (*ex l.*) i w połowie października. We Lwowie znajdowałem na *Geranium* w połowie września wyrosłe już gąsienice, z których motyle legły się pod koniec tegoż miesiąca. W Rytrze zauważano go w maju, w okolicy Sambora w czerwcu. Okazy z późnej jesieni zimują.

133. *Cosmodactyla* Hb. Rozprzestrzeniony jak poprzedni, zarazem częstszy. W okolicy N. Sącza (Załubincze, Żarnowiec) zbie-

rałem go przy końcu lipca i sierpnia, koło Lwowa (też *ex l.*) w trzech ostatnich tygodniach września. W r. 1899. znalazłem we Lwowie na *Geranium* kilka gąsienic i poczwarek w drugim tygodniu września, z których motyle legły się między 14. a 22. tegoż miesiąca. Poczwarki znajdują się najczęściej blisko szczytu gałęzi, przyczepione kuprem, zwrócone w dół głową.

### Oxyptilus Z.

134. *Tristis* Z. Zwyczajny po łąkach piaszczystych w okolicy Brodów i Lwowa, w dwóch pokoleniach między 20. maja a 10. czerwca, oraz liczniej od połowy sierpnia do połowy września. W Galicyi zachodniej jeszcze nie spostrzeżony.

135. *Distans* Z. Równocześnie z poprzednim i w tych samych miejscach, jednak rzadszy.

136. *Leonuri* Stange. W okolicy Lwowa, na wapnistych pochyłościach, wystawionych na działanie słońca, odkryłem stanowisko gąsienic tego rzadkiego gatunku. Przebywają w maju na *Leonurus cardiaca* L. Stange znalazł w lipcu 1880. r. dwie gąsienice i poczwarkę tego motyla na liściach pędu kwiatowego rzeczonyj rośliny, jednakże zaniedbał je opisać. Ponieważ opisu pierwszych stanów tego rzadkiego piórolotkowca nie znalazłem nigdzie, nie wyjmując najnowszej monografii Dra O. Hofmanna<sup>1)</sup>, podaję go tutaj według własnych, dokładnych spostrzeżeń.

Gąsienica dorosła jest na 9 do 10 mm długa, wałkowata, przy końcach nieco zeszczuplona. Jej barwa ciemno niebieskawozielona, wzdłuż szeregów brodaweczek jaśniejsza; również przeguby ciała są delikatnie jaśniejsze. Naczynie grzbietowe przebiega ciemniej. Naokoło każdego pierścienia mieści się 8 brodaweczek, które łącznie tworzą po każdej stronie ciała 4 podłużne rzędy. Brodaweczki drugiego rzędu (licząc od linii grzbietowej) są w środku czarne. Otoczenie wszystkich brodaweczek jest jaśniejsze, wskutego czego powstają wymienione poprzód jaśniejsze pręgi podłużne. Każda brodaweczka jest porośnięta jednym długim włosem i otaczającym go wieńcem włosków krótszych; włosy białe, tylko główny i niektóre boczne są czarne z białymi końcami. Między drugim a trzecim szeregiem brodaweczek mieszczą się małe, wybitnie czarne przetchlinki (z wyjątkiem 2. i 3. pierścienia). Głowa nieco jaśniej zielona, z dwoma brunatnymi plamkami u góry i kilku w kratkę ułożonemi bo bokach. Nogi prześwietlające o ciemnych stopach, brzuszne stosunkowo długie. Gą.

<sup>1)</sup> Die deutschen *Pterophorinen* etc. Berichte d. naturwiss. Vereins zu Regensburg, 1897.

sienica żyje na liściach *Leonurus cardiaca*, które wielokrotnie przedziurawia. Dziwnym zwyczajem przegryza ogonek liścia przeszło do połowy, powodując zwieszenie się jego i żyje tak w napół zwiędłym i pomarszczonym liściu aż do przepoczwarczenia się. Niekiedy przebywają na jednym większym liściu 2 lub 3 gąsienice. Zwyczajnie zamieszkują wyższe liście łodygowe, czasem listki małe blisko ziemi. Gąsienice zaczęły się u mnie zapoczwarczać dnia 25. maja; przeobrażają się częścią na ścianach swej klateczki, częścią na łodygach lub ogonkach liści, przytwierdzone kuprem, zwieszane w dół głową, przylegając spodem ciała ścielnie do przedmiotu przyczepu.

Poczwarka jest niewiele nad 8 mm długa, zielonawo brunatna, na grzbiecie tułowia i kałduna najczęściej jaśniejsz zielona; tułów niekiedy cały zielony. Grzbiet tułowia pokryty gęsto białymi szczecinkami. Po każdej stronie grzbietu kałduna przebiega szereg wyniosłych, z boku ścięśnionych, ku tyłowi malejących guzów, najeżonych pęczkiem szczecinowatych cierni. Mianowicie po bokach grzbietu każdego pierścienia kałduna znajduje się jeden guz, porośły pęczkiem 4—6 tęgich, mniej więcej palczasto ułożonych cierni; płaszczyzny co dwóch pęczków każdego pierścienia są ku tyłowi słabo rozbieżne. Dwa ciernie środkowe każdego pęczka są nieco grubsze, ścięśnione i w dwóch przeciwnych kierunkach (ku przodowi i tyłowi) słabo zagięte; inne są cieńsze i bardziej pochyle. Ciernie są żółtawo białe, środkowe przy końcu często zaciemnione. Pomiedzy szeregami tych pęczków znajduje się na pierścieniach 3—8, z każdej strony jedna mała brodaweczka, porośnięta parą małych, rozbieżnych szczecinek (rzadziej jedną tylko szczecinką). Wzdłuż boków i spodu ciała poczwarki przebiegają nadto z każdej strony po 4 szeregi drobnych brodaweczek, pokrytych cierniowatymi szczecinkami. Szereg pierwszy (najbliższy guzów grzbietowych) składa się z brodaweczek o dwu rozbieżnych szczecinach. Brodaweczki szeregu drugiego są trójszczecinowe (w środku mała ciemniejsza szczecinka, dwie inne dłuższe, białe, rozbieżne). Szereg trzeci tworzą brodaweczki dwuszczecinowe (przednia szczecina krótka, prostopadła, tylna dłuższa, ku tyłowi zwrócona). Szereg czwarty składa się z brodaweczek trójszczecinowych (szczeciny ku tyłowi pochylone, tylna najdłuższa i najskośniejsza). Pokrywy nóg nieco dłuższe od skrzydłowych. Żyłki skrzydeł różańcowato nabrzmięte i wraz z pokrywami rożków porośłe szeregami zakrzywionych szczecinek. Motyle legły się w pierwszej połowie czerwca.

137. *Parvidactylus* Hw. Także w Szczakowy na wilgotnych łąkach wśród młodej sośniny przy końcu lipca (porówn. m. w.).

**Leioptilus** Wallgr.

138. *Osteodactylus* Z. Gatunek przeważnie górski; zauważyłem go w lipcu koło Rytra i Krynicy pojedynczo w zrębach leśnych.

**Aciptilia** Hb.

139. *Baliodactyla* Z. W Piwnicznej, na górskiej łące 21. lipca.

We Lwowie, w styczniu 1901. r.



# PRZYCZYNEK

## do fauny kręgowców Galicyi

Napisał

Dr. Edward L. Niezabitowski.



Przez kilkanaście lat z rzędu, przepędzałem co roku wolne chwile u brata mego na wsi w Głębokiej za Chyrowem. W przeciągu tego czasu zapoznałem się na polowaniach i wycieczkach przyrodniczych dosyć dokładnie z fauną kręgowców tamtejszej okolicy, a przy pomocy brata mego Ludwika Niezabitowskiego i dwóch jego synów Stanisława i Witolda zebrałem dość znaczny materiał, znajdujący się obecnie częściowo w zbiorach Komisji fizyograficznej. Wiele ze zwierząt chowałem w domu, czyniąc spostrzeżenia nad ich zwyczajami, inne obserwowałem na wolności, w lesie, na łące i w polu. Wszystkie te obserwacye pozbierawszy z licznie poczynionych notatek, podaję, sądząc, że nie będą one całkiem bez znaczenia dla faunistyki krajowej w dziale zwierząt kręgowych.

Kręgowce należą wprawdzie do działów fauny zbadanych w ogólności dobrze, pracy jednak nad nimi nie można jeszcze bynajmniej uważać za skończoną. Od kręgowców rozpoczęła się galicyjska literatura faunistyczna, i w dalszym ciągu były one — z przerwami — przedmiotem bądź systematycznych i szczegółowych poszukiwań, bądź przygodnego zajęcia dla całego szeregu badaczy, jak A. Zawadzki, K. Pietruski, K. hr. Wodzicki, E. Schauer, Dr. M. Nowicki, Dr. J. Jachno, A. Kocyan, L. Wajgiel, Dr. A. Wierzejski, J. Schaitter, X. Andrzejowski, M. Łomnicki, E. Turczyński, Wł. hr. Dzieduszycki, A. Barta, I. Król,



A. Beill, Dr. A. Jaworowski, S. Stobiecki, M. Wierzbowski, J. Karliński i i. Mamy też w tym dziale cenne systematyczne zestawienia, monografie, dzieła opisowe; mimo to wszystko pozostają w samym wykazie krajowych kręgowców pewne szczegóły do uzupełnienia, inne do ostatecznego stwierdzenia lub usunięcia, i niedostateczne są też wiadomości, przynajmniej w pewnych grupach, o rozszedzeniu kręgowców w kraju. Braki te w zupełności tłumaczą się trudnościami połączonemi ze spostrzeganiem i zbieraniem kręgowców, większemi aniżeli w wielu innych działach zwierząt. Są też grupy kręgowców wymagające przy oznaczaniu nie mniej subtelnych dociekań, niż w innych trudnych działach fauny. Notatki niniejsze dodają jeden gatunek nowy do fauny galicyjskiej (*Arvicola agrestis* L.), zresztą tworzą tylko przyczynek do wiadomości o rozmieszczeniu kręgowców w Galicji.

Na początku kilka słów powiem o położeniu miejscowości, w której badania swoje przeprowadzałem.

Wieś i stacya kolei Głęboka leży w dolinie rzeki Strwiąża, wzniesiona około 270 m. nad poziom morza. Rzeka oddziela ją od gór na południe, a ku północy dolina podnosi się zwolna ku pasmu pagórków pokrytych długą linią lasów. Szeroka wstęga łąk ciągnie się z zachodu na wschód, oddzielona polami z jednej strony od rzeki z drugiej od lasów. Niegdyś w miejscu tych łąk rozlewały się ogromne stawy, dziś już należące do tradycyi i z wód stojących pozostały tylko dwie sadzawki koło dworu i dwie w lesie. Rzeka Strwiąż płynie tutaj szerokiem korytem. Lewy brzeg jej od północy wysoki i stromy ciągle bywa przez wodę obrywany. Ogromne pnie dębów zczerniałych przez wieki spoczywają tutaj gęsto obok siebie pod sześciometrową warstwą ziemi. Rzeka odkrywa w tem miejscu dno odwiecznej puszczy, którą jakiś kataklizm obalił. Pnie niektóre leżą wyrwane z korzeniami, inne w pół złamane, pomimo metrowej grubości. Z niektórych stoją pieńki z wrosniętymi jeszcze korzeniami, pokazując, gdzie niegdyś było podłoże puszczy. Wszystko to pokryte po wierzchu żwirem, gliną i grubą warstwą pruchnicy. Wśród tych pni spotyka się często kości jej mieszkańców jeleni i łosi.

Lasy Głębokiej są częścią szpilkowe, częścią liściaste. Pierwsze złożone w przeważnej ilości z jodeł, w mniejszej z świerków i sosen. Las liściasty utworzony jest głównie przez buki, obok których występuje dąb, brzoza, grab i olcha. Wśród lasu ciągną się gdzie-niegdzie zręby i gęste zapusty. Liczne bagniste, krzakami porośnięte parowy, dają schronienie dzikom i innej zwierzynie.

## CZEŚĆ PIERWSZA.

## Spis kręgowców z okolic Głębokiej.

## Mammalia.

## CHIROPTERA.

## Vespertiliones.

## Plecotus Geoffr.

*auritus* L. Gacek długouchy. Bardzo pospolity w tej okolicy. Za dnia przebywa po strychach domów, ukryty pod belkami i gąkami. Wieczorem wpada niekiedy do mieszkań przez otwarte okna i wtedy dopiero, chcąc go złapać, można poznać, jak zgrabny, chyży i niezmordowany lot posiada.

**Vesperugo** Keys. et Blas.

*noctula* Keys. et Blas. Nietoperz zwyczajny. Jest również dosyć pospolity. Wylatuje na żer bardzo wczesnie i lata wysoko pomiędzy drzewami.

Dział nietoperzy w tej okolicy jest bardzo ubogi tak pod względem gatunków jakoteż i ilości pojawiających się osobników. Główną przyczynę tego stanowi, zdaje się, mała ilość starych drzew, których dziuple służyłyby im za schronienie. Pomimo starannych poszukiwań po strychach, upustach i dziuplach drzewnych, jakoteż i urządzanych wieczór polowań, udało mi się tylko odnaleźć dwa powyżej wymienione gatunki. Oprócz nich, zdaje się, przebywa w tej okolicy jeszcze trzeci gatunek to jest *Vespertilio Daubentonii* Leissler. Widywałem go często latającego nad powierzchnią wody, nigdy nie dostałem go jednak na odległość strzału; z tego powodu nie mogę twierdzić stanowczo, że to on.

## INSECTIVORA.

## Talpina.

## Talpa L.

*europaea* L. Kret. Bardzo pospolity. Jednego znalazłem raz w grudniu na śniegu zmarzniętego opodal nory, którą z niewiadomego powodu opuścił.

**Soricina.****Crossopus** Wagl.

*fodiens* Pall. Ślepuszonka wodna. Niebardzo licznie spotyka się po łąkach ponad rowami.

**Sorex** L.

*alpinus* Schinz. Ślepuszonka góraska. Przebywa nielicznie po lasach i zaroślach.

*vulgaris* L. Ślepuszonka aksamitna. Jest pospolitsza od dwu poprzedzających po lasach i zaroślach w pobliżu wód.

**Crocidura** Wagl.

*araneus* Schreb. Ślepuszonka zwyczajna. Niezbyt rzadka po zaroślach i w pobliżu budynków.

**Erinacei.****Erinaceus** L.

*europaeus* L. Jeż. W tej okolicy, jak zresztą i gdzieindziej, nie jest częsty.

**CARNIVORA.****Canina.****Canis** L.

*vulpes* L. Lis. Stały mieszkaniec tamtejszych lasów. Znajduje się dosyć licznie i bywa regularnie strzelanym.

*lupus* L. Wilk. Zjawia się gościem podczas zimy w nielicznych gromadach. W ostatnich latach zabito ich kilka w tej okolicy.

**Mustelina.****Meles** Baiss.

*taxus* L. Borsuk. Należy do stałych, choć nielicznych mieszkańców lasu.

**Mustela** L.

*martes* Briss. Kuna leśna. Rzadka po lasach.

*foina* Briss. Kuna domowa. W pobliżu budynków nieliczna.

**Foetorius** Keys. et Blas.

*putorius* L. Tchórz. Bardzo pospolity koło budynków.

*vulgaris* Briss. Łasica łaska. Wszędzie pospolita.

*erminea* L. Łasica gronostaj. Nadzwyczaj liczna koło budynków, a tak śmiała, że uwija się w biały dzień koło ludzi i napastuje częstokroć małe kureczęta.

**Lutra** Raj.

*vulgaris* Erxl. Wydra. Dostyc często trafia się na Strwiążu.

## GLIRES.

Charakterystycznym dla tej okolicy jest szczególnie brak wiewiórek (*Sciurus*) pomimo wielkiej obfitości leszczyny. Zdaje się, że przyczyna tu będzie ta sama, co i nielicznego występowania nietoperzy, to jest brak starych drzew z dziuplami.

**Myoxina.****Myoxus** Zimm.

*glis* L. Popielica. Nieliczna w lasach.

**Muscardinus** Wagn.

*avellanarius* Wagn. Koszatka orzesznica. Bardzo częsta po zrębach leśnych wśród malin. Zakłada sobie ona najczęściej na krzakach malin zgrabne gniazdko z suchych liści, w którym przebywa. W lesie można je widzieć często o zachodzie słońca, jak wyszedłszy na ścięty pień, biegają po nim i rozglądają się na wszystkie strony.

**Murina.****Cricetus** Pall.

*frumentarius* Pall. Skrzeczek chomik. Znajduje się po wszystkich polach, jednak w małej ilości.

**Mus** L.

*decumanus* Pall. Szczur wędrowny. Wyparłszy zupełnie szczura zwyczajnego, gnieździ się spokojnie po wszystkich budynkach. Trafia się też ponad rowami.

*musculus* L. Mysz domowa. Oprócz budynków zamieszkuje także ogrody i pobrzeża rowów.

*sylvaticus* L. Mysz wytokowa. Zamieszkuje nielicznie lasy i pola.

*agrarius* Pall. Mysz polna. O wiele częstsza niż poprzednia, po polach i lasach.

*minutus* Pall. Mysz karłowata. Milutkie to stworzonko wije sobie z suchych traw małe kuliste gniazdeczko, które przyczepia do wysokich traw wśród zbóż rosnących. W okolicy Głębokiej jest dosyć pospolita.

### Arvicolidae.

#### *Arvicola* Keys. et Blas.

##### Podrodz. *Paludicola*.

*amphibius* Desm. Polnik ziemnowodny. Nieliczny nad wodami

##### Podrodz. *Agricola*.

*agrestis* L. Polnik ziemnik. Rzadki po brzegach lasów.

##### Podrodz. *Arvicola*.

*arvalis* Selys. Polnik zwyczajny. W roku 1899. rozmnożywszy się znacznie, wyrządził w tej okolicy znaczne szkody. Pola całe były podziurawione ich norami, a w pułapki, jakie zasta-  
wiałem, masami się łapały. W następnym roku znikły prawie zupełnie, niewiadomo, czy wyginęły, czy też wywę-  
drowały.

### Leporina.

#### *Lepus* L.

*timidus* L. Zając szarak. Najczęstsza zwierzyna tej okolicy. Przed dwoma laty zabito okaz zupełnie biały.

## ARTIODACTYLA.

### Cervina.

#### *Cervus* L.

*capreolus* L. Sarna. Liczna po lasach, gdzie zastępuje miejsce jelenia i łosia, niegdyś tu żyjących, których tylko potężne rogi Strwiąż od czasu do czasu wymula.

**Suina.****Sus L.**

*scrofa* L. Dzik. Król tamtejszych lasów. Dostyć jeszcze liczny i często też bywa strzelany. Przed dwoma laty zabito okaz o białym spodzie ciała i białych odnóżach.

**Aves.****RAPACES.****Aquilinae.****Pandion Sav.**

*haliaëtos* Keys et Blas. Rybołów. Gatunek ten obserwował raz jeden na Strwiążu P. Twaróg, nauczyciel z sąsiedniej wsi.

**Buteoninae.****Buteo Briss.**

*vulgaris* Bechst. Myszolów. Dostyć rzadki w tej okolicy.

**Archibuteo Brehm.**

*lagopus* Gould. Myszolów włochaty. Zalatuje dość licznie zimą z północy.

**Milvinae.****Milvus Cuv.**

*regalis* Cuv. Kania. Rzadka.

*ater* Gm. Kania czarna. Ten gatunek jest tak, jak i poprzedni, dostyć rzadki w tej okolicy, chociaż bardzo licznie znajduje się nad stawami niedalekiego Komarna.

**Falconinae.****Hypotriorchis Bp.**

*subbuteo* L. Kobuz. Nieczęsty.

**Erythropus Bp.**

*vespertinus* Bp. Kobczyk. Nawiedza małemi stadkami w końcu sierpnia te okolice. W Galicyi spostrzegalem go jeszcze koło Gródka i Brodów.

**Asturinae.****Astur Briss.**

*palumbarius* Bechst. Jastrząb. Najpospolitszy drapieżca ptasi tej okolicy, gnieździ się licznie w lasach, stąd urządza wycieczki na pola i w pobliże budynków mieszkalnych, polując na kury i inny drób. Śmiałość swą posuwa do najwyższych granic; tak np. brat mój zabił jednego kulą z okna pierwszego piętra, w chwili, gdy pod samem oknem na ziemi spożywał złowioną kurę. Znałem koło Brodów jednego jastrzębia, który stale porywał na leśniczówce kury, ale tylko wtedy, gdy widział, że leśny wyszedł z domu do lasu; z pozostałej w domu żony jego i dzieci nic sobie nie robił i w oczach ich drób napadał.

**Accipiter Briss.**

*nisus* Pall. Krogulec. Pospolity po lasach. Zalatuje zwłaszcza w zimie w pobliże mieszkań, łowiąc wróble i ptaki. Jednego obserwowałem przez długi czas, bo przez dwa lata, koło Krasnego za Lwowem. Towarzyszył on regularnie pociągowi osobowemu, idącemu z Krasnego do Ożydowa, i chwycił ptaki wypłoszone pociągiem z krzaków koło toru kolejowego rosnących.

**Circinae.****Strigiceps Bp.**

*cineraceus* Bp. Błotniak popielaty. Latem dość licznie znajduje się na łąkach tamtejszych. Podobnie śmiały, jak jastrząb. Jeden towarzyszył mi przez jakiś czas w polowaniu na błotne ptactwo, usiłując porwać zabite lub postrzelone sztuki, aż wreszcie sam, zbliżywszy się zanadto, przyplącił życiem swą zachwałność. W żołądku jego znalazłem szczątki kilku norników.

**Striginae.****Syrnium Sav.**

*uralense* Pall. Sowa uralaska. Dwa okazy tego gatunku zabito zimą przed trzema laty.

*aluco* Bp. Puszczyk. Bardzo pospolity po budynkach.

**Strix Sav.**

*flammea* L. Sowa płomykowata. Rzadsza od poprzedniego.

**Otus Cuv.**

*brachyotus* Cuv. Sowa błotna. Raz jeden spotkałem ten gatunek na polu.

## PASSERES.

**Caprimulginae.****Caprimulgus L.**

*europaeus* L. Lelek. Należy do częstych ptaków.

**Cypselinae.****Cypselus Illig.**

*apus* Illig. Jerzyk. Gnieździ się na dzwonnicy kościelnej w Fel-sztynie.

**Hirundininae.****Hirundo L.**

*rustica* L. Dymówka. Nie tak liczna, jak oknówka.

**Chelidon Boie.**

*urbica* Boie. Oknówka. Bardzo pospolita.

**Cotyle Boie.**

*riparia* Boie. Grzebółka. Gnieździ się miejscami w urwistych brzegach Strwiąża.

**Coraciadae.****Coracias L.**

*garrula* F. Kraska. Od kilku lat pojawia się stale w tej okolicy, podczas gdy dawniej nigdy jej tu nie widziałem. Okazy nie-zupełnie jeszcze wypierzone, jakie miałem w ręku, zdają się przemawiać za tem, że gnieździ się tutaj. W Galicyi naj-więcej krasek spotykałem w okolicy Raźniowa pod Brodami, gdzie gnieźdzą się po dziuplach drzewnych w towarzystwie kawek.



**Upupinae.****Upupa L.**

*epops* L. Dudek. Należy do ptaków dosyć częstych.

**Sittinae.****Sitta L.**

*caesia* L. Kowalik. Pospolity po lasach i ogrodach.

**Certhiinae.****Certhia L.**

*familiaris* L. Pełzacz. Małe stadka tego ptaszka można spotkać często po lasach i ogrodach.

**Troglodytidae.****Troglodytes Vieill.**

*parvulus* Koch. Strzyżyk. Dosyć liczny po lasach i ogrodach.

**Luscininae.****Calamodytinae.****Calamoherpe Bp.**

*palustris* Bp. Łozówka. Pospolita w krzakach wikliny na łąkach.

**Sylviinae.****Hypolais Brehm.**

*familiaris* Tacz. Zaganiacz. Trzyma się dość licznie w ogrodach i zaroślach.

**Phyllopneuste Meyer.**

*trochilus* Bp. Piecuszek. Nierzadki po ogrodach i zaroślach.

**Regulus Cuv.**

*cristatus* Koch. Mysikrólik. Odwiedza jesienią ogrody.

**Curruca** Briss.

*cinerea* Briss. Pokrzewka cierniówka. Pospolita.

*garrula* Briss. Piegża. Dosyć częsta.

*hortensis* Koch. Pokrzewka ogrodowa. Pospolita po lasach i zarosłach.

*atricapilla* Briss. Pokrzewka czarnołbista. Trafia się dosyć często.

*Accentorinae.***Accentor** Bechst.

*modularis* L. Pokrzywnica. Dosyć rzadka.

*Lusciolinae.***Ruticilla** Brehm.

*phoenicurus* Keys. et Blas. Pleszka. Dosyć pospolita.

*tithys* Bechst. Kopcuszek. Gnieździ się licznie po oborach.

**Philomela.**

*luscini*a Lath. Słowik rdzawy. Dosyć rzadki.

**Erythacus** Briss.

*rubecula* Keys et Blass. Rudzik. Dość liczny po brzegach lasów.

*Saxicolinae.***Pratincola** Koch.

*rubetra* Koch. Pokląskwa. Pospolita po łąkach i lasach.

**Turdidae.****Turdus** L.

*viscivorus* L. Paszkot. Pospolity po lasach.

*pilaris* L. Kwiczol. Tak częsty, jak i poprzedni.

*musicus* L. Drozd. Często spotyka się w lasach i ogrodach.

*merula* L. Kos. Liczny po zrębach i zapustach leśnych.

**Parinae.****Parus L.**

- major* L. Bogatka. Bardzo pospolita.  
*ater* L. Sosnówka. Częsta w jodłowych i świerkowych lasach.  
*palustris* L. Sikora uboga. Dosyć częsta.  
*coeruleus* L. Sikora modra. Pospolita.

**Mecistura Bp.**

- caudata* Bp. Raniuszek. Zalatuje niekiedy jesienią w te okolice, zresztą jest to ptaszek dosyć rzadki.

**Bombycillinae****Bombycilla Naum.**

- garrula* Naum. Jemiołuszka. Zalatuje niekiedy podczas zimy.

**Muscicapinae.****Muscicapa L.**

- parva* Bechst. Mucholówka mała. Dosyć częsta po lasach.  
*grisola* L. Mucholówka szara. Pospolita.

**Laniinae.****Lanius L.**

- excubitor* L. Srokosz. Pospolity.  
*minor* Gm. Dzierzba. Rzadszy od poprzedzającego.  
*rufus* Briss. Dzierzba rudogłowa. Rzadki, na brzegach lasów.  
*collurio* L. Gąsiorek. Bardzo pospolity wszędzie.

**Oriolinae.****Oriolus L.**

- galbula* L. Wilga. Przebywa licznie po ogrodach.

**Motacillinae.****Budytes Keys. et Blas.**

- flava* Keys. et Blas. Pliszka żółta. Bardzo liczna.

**Motacilla L.**

*alba* L. Pliszka siwa. Równie pospolita jak poprzednia.

**Anthinae.****Pipastes Kaup.**

*arboreus* Kaup. Świergotek drzewny. Przebywa po drzewach stojących nad brzegami łąk.

**Alaudinae.****Alauda L.**

*arvensis* L. Skowronek. Wszędzie pospolity.

**Galerita Boie.**

*cristata* Boie. Dzierlatka. Nie bardzo liczna.

**Sturninae.****Sturnus L.**

*varius* Mey. et Wolf. Szpak. Nie gnieździ się w tej okolicy, przylatuje tylko jesienią ze stadami czajek.

**Pastor Temm.**

*roseus* Temm. Pasterz różowy. Na wiosnę 1899. r. zabił brat mój samca z tego gatunku na topoli koło domu. Okaz ten znajduje się w zbiorach Komisji fizyograficznej w Krakowie.

**Corvinae.****Corvus L.**

*corax* L. Kruk. Zamieszkuje parami tę okolicę.

*cornix* L. Wrona. Gnieździ się licznie po lasach i ogrodach. Na wiosnę porywa koło domów młody drób, a w polach małe zające.

*frugilegus* L. Gawron. Gnieździ się kilka mil stąd około Niżankowic, skąd w ogromnych stadach wraz z kawkami odwiedza pola Głębokiej.

**Monedula Brehm.**

*europaea* Taczan. Kawka. Gnieździ się na dzwonnicy kościoła w Felsztynie. W lasach koło Rażniowa pod Brodami spotkałem kawki gnieźdzące się po dziuplach drzew.

**Pica Vieill.**

*caudata* Rey. Sroka. Bardzo liczna.

**Garrulinae.****Garrulus Briss.**

*glandarius* Vieill. Sójka. Jest jednym z najpospolitszych ptaków w lesie i po ogrodach.

**Emberizinae.****Emberiza L.**

*milliaria* L. Potrzyszcz. Licznie go można widzieć zawsze przesiadującego na drutach telegraficznych.

*citrinella* L. Trznadel. Bardzo pospolity.

**Plectrophanes Meyer.**

*nivalis* Meyer. Śnieguła. Tego przybiegunowego mieszkańca widziałem raz jeden tylko w zimie, siedzącego na śniegu.

**Fringillinae.****Coccothraustes Briss.**

*vulgaris* Briss. Grabolusk. Pojawia się w ogrodach w czasie, gdy dojrzewają wiśnie, których jądrami się żywi.

**Fringilla L.**

*coelebs* L. Zięba. Zamieszkuje licznie jodłowe lasy.

*montifringilla* L. Jer. Trafia się niekiedy wczesną wiosną.

**Chlorospiza Bp.**

*chloris* Bp. Dzwoniec. Należy do najpospolitszych ptaków.

**Linota** Bp.

*cannabina* Bp. Makolągwa. Rzadka.

**Acanthis** Keys. et Blas.

*linaria* Keys. et Blas. Czeczotka. Ma zalatywać w te okolice, sam jej jednak nie widziałem.

**Chryzomitris** Bp.

*spinus* Bp. Czyż. Trafia się często po ogrodach w czasie dojrzewania maku i wypija makówki.

**Carduelis** Steph.

*elegans* Steph. Szczygieł. Wszędzie pospolity.

**Loxiinae.****Loxia** L.

*curvirostra* L. Krzyżodziób świerkowy. Zamieszkuje lasy szpilkowe. Latem odwiedza codziennie w małych stadkach topole kanadyjskie, które są obsadzone zabudowania dworskie, i objada na nich narosłe wytworzone na ogonkach liści przez mszyce (*Pemphigus bursarius* L.).

**Pyrrhulinae.****Pyrrhula** Cuv.

*coccinea* Selys. Gil północny. Zalatuje niekiedy zimą. Jest tak nieostrożny, że na kilka kroków daje się do siebie zbliżyć.

**Plocepasserinae.****Passer** L.

*domesticus* L. Wróbel. Bardzo liczny.

*montanus* L. Mazurek. O wiele rzadszy od poprzedzającego.

**SCANSORES.****Cuculinae.****Cuculus** L.

*canorus* L. Kukułka. Dosyć liczna.

## PICIDAE.

## Picinae.

**Dryocopus** Boie.

*martius* Boie. Dzięcioł czarny. Rzadki po lasach.

**Picus** Koch.

*major* L. Dzięcioł. Dostyć częsty po lasach i ogrodach.

*medius* Koch. Dzięcioł średni. Tak liczny jak i poprzedni.

*minor* Koch. Dzięciołek. Nierzadki.

**Gecinus** Boie.

*viridis* Boie. Dzięcioł zielony. Dostyć rzadki.

*canus* Boie. Dzięcioł zielonosiwy. Pospolitszy od poprzedniego, po lasach liściastych i ogrodach.

## Junginae.

**Junx** L.

*torquilla* L. Krętogłów. Przebywa po lasach w pobliżu mrowisk. Łatwy do schwytania.

## GYRATORES.

## Columbinae.

**Columba** Bp.

*palumbus* L. Grzywacz. Gnieździ się licznie po lasach.

*oenas* Briss. Siniak. Mniej liczny, niż poprzedni.

**Turtur** Selby.

*aurita* Bp. Turkawka. Bardzo licznie gnieździ się po lasach.

## RASORES.

## Perdicinae.

**Perdix** Illig.

*cinerea* Lath. Kuropatwa. Dawniej bardzo nieliczna, przez kilkoletnią ochronę znowu się więcej rozmnożyła.

**Coturnix** Moehr.

*dactylisonans* Mey. Przepiórka. Tak tu, jak i w całym kraju staje się coraz rzadszą.

## GRALLATORES.

**Gruinae.****Grus** L.

*cinerea* Bechst. Żóraw. Zapada niekiedy na przelotach. W Galicyi spotkałem tylko raz gnieźdzące się na moczarach leśnych koło Rażniowa pod Brodami.

**Charadriinae.****Charadrius** L.

*pluvialis* L. Siewka. Pojawia się rzadko na przelotach.

**Hiaticula** Gray.

*minor* Taczan. Siewka rzeczna. Bardzo pospolita po żwirowatym wybrzeżu Strwiąża i po łąkach.

**Vanellinae.****Vanellus** L.

*cristatus* Meyer. Czajka. Gnieździ się licznie po łąkach.

**Totantinae.****Totanus** Bechst.

*glottis* L. Kwokacz. Trafia się nielicznie nad Strwiążem.

**Limosinae.****Limosa** Boie.

*melanura* Brehm. Rycyk. Zapada niekiedy na przelotach.

**Numeniinae.****Numenius** L.

*arquata* L. Kulig wielki. Bardzo częsty na przelotach.



**Scolopacinae.****Scolopax L.**

*rusticola* L. Słomka. Często w lasach z wiosny i w jesieni, a spotkałem ją nawet w grudniu.

**Gallinago Leach.**

*major* Leach. Dubelt. Pojawia się dwa razy w ciągu lata, raz w końcu lipca, drugi raz z końcem września.

*scolopacina* Bp. Kszyk. Jest pospolitym po łąkach aż do mrozów.

**Limnocyptes Kaup.**

*gallinula* Kaup. Ficlauz. Dostyć rzadki.

**Ciconiinae.****Ciconia L.**

*alba* L. Bocian. Tak liczny w tej okolicy, że na jednej łące można nieraz naliczyć po czterdzieści sztuk.

*nigra* L. Hajstra (Bocian czarny). Gatunek ten widziałem tylko raz jeden na łąkach.

**Ardeinae.****Ardea L.**

*cinerea* L. Czapla siwa. Pojawia się stale nad Strwiążem. Natomiast nigdy nie widziałem tutaj czapli purpurowej (*Ardea purpurea* L.), która tak licznie występuje na stawach koło Komarna.

**Botaurus Steph.**

*stellaris* Steph. Bąk. Pojawia się niekiedy na łąkach, podobnie jak:  
*minutus* Boie. Bączek.

**Rallinae.****Crex Bechst.**

*pratensis* Bechst. Chróściel. Najpospolitszy ptak błotny.

**Ortygometra** Keys. et Blas.

*porzana* Keys. et Blas. Kurka wodna. Równie pospolita, jak chrósciel.

**Fulicinae.****Fulica** L.

*atra* L. Łyska. Raz jeden tylko została zabita.

**NATATORES.****Larinae.****Chroicocephalus** Bruch.

*ridibundus* Bruch. Śmieszka. Ukazuje się niekiedy nad Strwiążem.

**Anserinae.****Anser** L.

*cinereus* Meyer. Gęś gęgawa. Zapada niekiedy na przelotach.

*erythropus* L. Gęś krótkodzioba. Przed kilku laty brat mój zabił jedną sztukę w październiku, na pastwisku pośród swojskich gęsi.

**Anatinae.****Anas** L.

*boschas* L. Krzyżówka. Gnieździ się po rowach wśród łąk.

*querquedula* L. Cyranka. Po rowach i łąkach zalanych.

**Podicipinae.****Podiceps** Lath.

*cristatus* Lath. Perkoz dwuczubny. Zjawia się niekiedy na Strwiążu.

Kończąc spis ptaków okolic Głębokiej, przy sposobności wspomnę o kilku rzadszych ptakach krajowych, które różnymi czasy miałem sposobność oglądać. Naprzód muszę wymienić Sępa kasztanowatego *Vultur cinereus* L., którego przed kilku laty zabił w Syniczowie pod Brodami ojciec mój ś. p. Hieronim Niezabitowski. Dalej wymienię parkę Syczków, *Ephialtes scops* Gmel., które przez jedno lato trzymały się w Przemyślu, w ogrodzie miejskim za Górą Zamkową. Czaplí białej, *Ardea egretta*, obserwowałem raz 11 sztuk na stawie w Rumnie koło Komarna.

Kormorana małego, *Phalacrocorax pygmaeus*, zabił przed dwoma laty P. Mang w Krasnej koło Strzyżowa. Okaz ten znajduje się obecnie w gabinecie zoologicznym Uniwersytetu Jagiel. w Krakowie. Na zakończenie wspomnę jeszcze o dwu ptakach, które widziałem w W. Ks. Poznańskim, to jest Ibis kasztanowatego, *Ibis falcinellus*, zabitego pod Pleszewem w Tursku i Dropia, *Otis tarda*, który dosyć licznie znajduje się na polach Kębłowa pod Miłosławiem. Młody okaz stamtąd pochodzący chowałem nawet przez jakiś czas.

## Reptilia.

### SAURIA.

#### Lacertidae.

##### Lacerta L.

*agilis* Wolf. Jaszczurka zwinka. Pospolita po brzegach lasów.  
*vivipara* Jacq. Jaszczurka szafranka. Częstsza od poprzedniej.

#### Scincoidea.

##### Anguis L.

*fragilis* L. Padalec. Należy do stworzeń bardzo rzadkich w tej okolicy.

### OPHIDIA.

#### Viperidae.

##### Pelias Merr.

*berus* Merr. Żmija. Bardzo liczna w tej okolicy.

#### Colubridae.

##### Tropidonotus Kuhl.

*natrix* Boie. Zaskroniec. Pospolity po lasach.

## Amphibia.

### ANURA.

#### Ranidae.

##### Rana L.

*esculenta* L. Żaba jadalna. Pospolita.

*fusca* Rösel. Żaba trawna. Pospolita.

*arvalis* Nilsson. Rzadsza od poprzedniej.

#### Bombinatoridae.

##### Bombinator Merr.

*igneus* Rösel. Brzdęk. Po wszystkich kałużach pospolity.

#### Bufonidae.

##### Bufo Laur.

*cinereus* Schn. Ropucha nereczkówka. Wszędzie pospolita.

*variabilis* Pall. Ropucha poplamica. Równie częsta, jak poprzednia.

Traszki (*Triton*) należą do tak rzadkich w tej okolicy, że sam nigdy żadnej nie widziałem. Słyszałem tylko o jednej, którą wyłowiono w studni.

## Pisces.

### ACANTHOPTERI.

#### Percidae.

##### Perca Art.

*fluviatilis* L. Okoń. Bardzo liczny po stawach.

##### Cottus Art.

*gobio* L. Głowacz. W Strwiążu.

## PHYSOSTOMI.

## Cyprinidae.

**Cyprinus** Nilss.

*carpio* L. Karp. W stawach.

**Carassius** Nilss.

*vulgaris* Nordm. Karaś. W stawach jak poprzedni.

**Barbus** Günth.

*fluviatilis* Cuv. Brzana. W Strwiążu pospolita.  
*Petenyi* Heck. Brzanka. W Strwiążu.

**Gobio** Cuv.

*fluviatilis* Flem. Kiełb. W Strwiążu.

**Leuciscus** Günth.

*rutilus* L. Płotka. Pospolita wszędzie.

**Scardinius** Bonap.

*erythrophthalmus* L. Czerwionka. W Strwiążu.

**Squalius** Bonap.

*leuciscus* L. Jelec. W Strwiążu liczny.

**Tinca** Cuv.

*vulgaris* Cuv. Lin. Jedna z rzadszych stawowych ryb.

**Alburnus** Heck.

*lucidus* Heck. Ukleja biała. W Strwiążu pospolita.  
*bipunctatus* Bl. Piekielnica. W Strwiążu.

## Acanthopsidae.

**Cobitis** Günth.

*fossilis* L. Piskorz. Pospolity.

**Esocidae.****Esox Cuv.**

*lucius* L. Szczupak. Bardzo pospolity wszędzie.

## CZEŚĆ DRUGA.

Spostrzeżenia nad kręgowcami w niewoli  
trzymanymi.

Nietoperz zwyczajny (*Vesperugo noctula* Keys. et Blas.). Nietoperza tego chowałem kilkakrotnie, raz nawet przez dłuższy przeciąg czasu, miałem więc sposobność bliżej go poznać. Oswaja on się bardzo łatwo i zaraz po schwytaniu bierze podawane mu owady i pije mleko. Z owadów przekłada chrząszcze nad inne. Najchętniej je chrabąszcze (*Melolontha*) i ogrodnice (*Phyllopertha*). Stonek (*Chrysomela*) nie tyka, a raz, gdy jedną zgryzł przez nieuwagę, natychmiast ją wypluł. Powodem tego jest prawdopodobnie ostra ciecz, jaką te chrząszczyki wydzielają. Cmy je bardzo niechętnie i tylko zgłodniały, kapustnika (*Pieris*) zaś nawet nie dotknie. Muchy domowe i karakony je tylko z głodu. Gdy mi brakło owadów, żywiłem go surowem mięsem i szynką, które jadł chętnie. Ulubionym jego przysmakiem była wędzona słonina i cukier. Ten ostatni jadł tak żarłocznie, że zdawało się, iż połamie sobie swe ostre ząbki. Za napój służyła mu woda i mleko. Gdy był głodny, wychodził z pudełka bez względu na porę dnia i głośno piszcząc, dopominał się pokarmu. Apetyt posiadał nie zły, gdyż naraz był w stanie zjeść 13 chrabąszczy lub 26 ogrodnic. Pokarm brał najchętniej z ręki. Porządek lubił bardzo. Kilka razy na dobę, zawieszając się raz na jednej, drugi raz na drugiej nodze, pozostała wyczesywał starannie swe futerko i wylizywał językiem błony. Wieczorem latał po pokoju bardzo niezgrabnie, obijając się o ściany jak ptak. Prawdopodobnie do lotu potrzebuje większej przestrzeni wolnej. Obcych ludzi umiał doskonale poznać i gdy nie ja, ale kto inny mu pokarm podał, to zamiast za pożywienie, chwycił go zębami za rękę, kalecząc nieraz do krwi.

Drugim nietoperzem, jakiego w domu trzymałem, jest Gacek (*Plecotus auritus*). Oswaja się daleko trudniej, niż po-

przedzający. Tak jak i tamten, je owady mu podawane i pije mleko, ale niechętnie i pozostaje zawsze płochym. Trzymany w klatce wspina się zgrabnie po jej ścianach i szuka wszędzie otworu, którymby mógł uciec.

Nietoperz śniadobrunatny (*Vesperugo serotinus* Schreb.) podobny do nietoperza zwyczajnego z postaci, podobnie się też zachowuje w niewoli. Je równie chętnie, jak tamten, mięso surowe i słoninę, pije mleko, jest jednak więcej płochym.

Co się tyczy kryjówek, jakie nietoperze sobie wyszukują na zimę, to począwszy od Biasiusa, czyta się we wszystkich podręcznikach zoologii, że są to miejsca ciepłe i suche.

Tymczasem już z teoretycznych względów, możnaby o słuszności tego twierdzenia powątpiewać. Wskutek niewidzialnego przeziwu skóry i przez oddychanie tracą zwierzęta znaczną ilość wody z organizmu, a stratę tę wynagradzają, pobierając pokarmy i napój. Przeziw ten jest tem większy, im suchsze i cieplejsze jest powietrze otaczające i im większy w tem miejscu panuje przewiew. Jest więc rzeczą prawdopodobną, że nietoperz, który w zimie nie bierze pokarmu, schroniwszy się w miejsce suche i ciepłe, w krótkim czasie utraciłby tyle wody, że musiałby niechybnie zginąć. W tem zapatrywaniu utwierdza mnie doświadczenie zrobione na nietoperzu śniadobrunatnym (*Vesperugo serotinus* Schreb.), przeniesionym w zimie z piwnicy do nieopalanego suchego pokoju. Po upływie niespełna trzech tygodni nietoperz zginął, a błony jego były kompletnie zeschnięte. Następnie do tego samego pokoju przeniosłem drugiego nietoperza tego samego gatunku, ale do klatki, w której się znajdował, wstawiłem naczynie z wodą. Drugi ten nietoperz utrzymał się przy życiu. Jest rzeczą możliwą, że pił wodę od czasu do czasu, gdyż przyniesiony do mieszkania pił chciwie podane mu mleko.

Słuszniej więc zapewne twierdzić można, że nietoperze na zimowe kryjówki wyszukują sobie zawsze miejsca wilgotne i chłodne, (o tyle jednak, by temperatura nie spadała niżej zera), jak piwnice, jaskinie i dziuple drzew, gdzie wilgoć niedopuszcza wyschnięcia ciała. Unikają zaś miejsc suchych, przewiewnych, jak strychy domów, wieże kościelne itd.

Słepuszonka aksamitna (*Sorex vulgaris* L.). Chwyta się często w pułapki i oswaja się łatwo. Trzymana w niewoli, je chętnie mięso surowe i gotowane, łowi muchy, pije mleko i wodę. Trzymałem ją w jednej klatce z koszatkami, z rozmaitymi gatunkami myszy, norników i młodym nietoperzem. Całe to towarzystwo żyło w przykładowej zgodzie, począt-

kowo tylko okazywała ślepuszonka wielką obawę przed nornikami i gdy tylko który z nory się pokazał, z przeraźliwym piskiem uciekała w jedną, a niemniej przerażony nornik w drugą stronę. Z czasem przyzwyczyły się do siebie i spały zgodnie w jednym pudełku. Gdy jednak pewnego razu nietoperz, który był postrzelony, zdechł, odgryzła mu ślepuszonka głowę. Jest to stworzonko bardzo żywe, chowane w klatce ugania przez cały dzień i wieczór, zaglądnając w każdy kąt. W pokoju łatwiej ją trzymać, niż następną, gdyż wydaje woń odrębną i nie tak silną.

**Ślepuszonka zwyczajna**, (*Crocidura araneus* Schreb.). Oswaja się łatwo, podobnie jak poprzedzająca. Ta, którą chowałem, była początkowo bardzo niedowierzająca. Gdy jej pokarm podawałem, chowała się szybko do dziury i stamtąd dopiero głowę wystawiwszy, jedzenie porywała. Jadła owady i mięso, a o jej żarłoczności można wnosić z tego, że w ciągu doby zjadła wróbla i sikorę, które jej zabiłem. Piła wodę i mleko. Wydawała z siebie woń piżmową tak silną, że nie podobna było jej trzymać w pokoju. Lubiła bardzo czystość. Często położywszy się na boku, czesała się równocześnie wszystkimi czterema łapkami, przeciwnie jak gryzonie, które uskuteczniają to tylko przednimi. W pułapki chwytła się rzadziej niż poprzednia.

**Jeż**, (*Erinaceus europaeus*). Oswaja się bardzo łatwo. Chowałem raz małego jeża, który tak był oswojony, że, gdy go wziąłem do rąk, zaraz wędrował do rękawa i tam do snu się układał. Kota, który mu mleko wypijał, chwycił raz zębami za koniec ogona i trzymał się silnie, pomimo, że kot wystraszony po całym pokoju z nim uganiał. Pomimo, że był trzymany w ciepłym pokoju, przesypiał większą część zimy, choć z przerwami.

**Koszatka**, (*Muscardinus avellanarius* Wagn.). Przed dwoma laty pierwszego sierpnia znalazłem w gniazdku dwie młode koszatki, które jeszcze jeść nie umiały same i mlekiem zostały wykarmione. Oswoiły się bardzo prędko i żyły w jednej klatce z myszami i młodymi nornikami. Pewnego razu wsadzono do tejże klatki świeżo schwytanego starego nornika i ten w nocy tak je pokaleczył, że obie zginęły. Koszatki te żywiły się, gdy podrosły, orzechami, które jednak trzeba było rozłupywać, gdyż same ich otworzyć jeszcze nie mogły; lubiły też i maliny. Piły wodę i mleko. Cały dzień spędzały w uspieniu i dopiero wieczorem wychodziły. Najadłszy się uganiały po ścianach klatki z nadzwyczajną zwinnością.

**Mysz wytokowa**, (*Mus sylvaticus* L.). Długie tylne odnóża, stojące uszka i wielkie czarne oczy, czynią ją podobną do



wiewiórki, której też w zgrabności nie ustępuje. Ogromnie płocha, nie da się prawie oswoić. Ta, którą chowałem, po kilku miesiącach, była tak dziką, jak po złapaniu. Gdy ktokolwiek do klatki się zbliżył, z błyskawiczną szybkością przeskakiwała z jednego końca klatki w drugi. Pewnego razu, gdy ktoś nieostrożnie otworzył klatkę stojącą na oknie, mysz ta wyskoczyła z drugiego piętra na bruk i uciekła.

**Mysz polna**, (*Mus agrarius* Pall.). Oswaja się łatwo, choć zawsze jest nieco płochą. Stworzonko to bardzo zgrabne, trzymane w klatce, biega zwinnie po ścianach a nawet po wierzchu. Je, jak wszystkie myszy ziarno, chleb i owoce, pije wodę i mleko. Jest to najslabsze ze znanych mi zwierząt, bo wystarczy, by się zabiła, gdy skoczy ze stołu na ziemię.

**Polnik zwyczajny**, (*Arvicola arvalis* Selys.). Młode oswajają się łatwo, ale stare pozostają zawsze dzikie i złe. Nawet wydobyte z tej samej nory osobniki gryzą się zaciekle, stanawszy jak niedźwiedzie na tylnych łapach. Ulubionym ich pokarmem w niewoli jest pszenica i owies, ale jedzą też chleb, mięso pieczone i muchy. W porównaniu z myszami są to zwierzątka niezgrabne i ociężałe; tak np. wydrapawszy się po ścianie klatki do góry, nie były w stanie zejść na dół, lecz spadały lub zeskakiwały. W przeciwieństwie do myszy są to zwierzęta prawie dzienne, gdyż przez cały dzień są w ruchu.

**Zając**, (*Lepus timidus*), jak wiadomo, wychowany od małego oswaja się bardzo łatwo. Chowałem go nieraz; ale nawet tak oswojone okazy, że chodziły po dworze, jak psy za nogą, dorósłszy, zawsze uciekały. Zupełnie podobnie się rzecz ma ze sarną.

**Dzik**, (*Sus scrofa*), dopóki młody, także do pewnego stopnia się oswaja. Widziałem koło Brodów stado rocznych dzików, złapanych w pułapkę, złożone z 24 sztuk, które dłuższy czas trzymane były w ogrodzeniu. Borowy, który im dawał jeść, chodził później spokojnie między nimi.

**Ptaków** chowałem i obserwowałem bardzo wiele gatunków, ale ponieważ są one już dobrze poznane pod względem swego życia w niewoli, więc o nich rozpisywać się nie będę. Wspomnę tylko rzadko chowane: **Kraskę**, *Coracias garrulus*, i **Chróściela**, *Crex pratensis*. Pierwsza z młodu chowana oswaja się bardzo łatwo, je mięso surowe i owady, a jest bardzo żarłoczną. Drugi oswaja się także bardzo dobrze. Wuj mój, B. Dąbrowski, posiadał tak oswojonego chróściela, który po pokoju za muchami uganiał. Pana swego, gdy spał, budził, ciągnąc za brodę.

Nakoniec wspomnieć muszę jedną z ryb, którą przez długi czas chowałem, to jest Piskorza, *Cobitis fossilis* L. Posiada on szczególniejszy dar przepowiadania niepogody. Na dobę naprzód, gdy się na deszcz ma zbierać, piskorz, który dotąd spokojnie siedział na dnie w namule, staje się niepokojnym, podpływa pod powierzchnię wody i maści ją tak, że go prawie wśród niej nie widać. Gdy się zbiera na burzę lub silny wiatr, wtedy piskorz zachowuje się podobnie, ale przytem wydaje jeszcze od czasu do czasu swój charakterystyczny głos piszczący lub niekiedy podobny do ćwierkania wróbla.



**MATERYAŁY**  
**do fizyografii krajowej.**

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**Część III.**

**Materyały zebrane przez Sekcyę rolniczą.**

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# ANALIZA SIANA ŁĄKOWEGO w okolicy Bobrka koło Oświęcima.

Napisał

Józef Góral.

Z polecenia Komisji fizyograficznej Akademii Umiejętności, przedsięwziętem w roku 1899. zbadanie łąk w dobrach bobreckich. Łączny obszar zbadanych przeze mnie łąk wynosi około 760 morgów, według informacyi łaskawie udzielonych mi przez W. Pana Ernesta Błaszczkiewicza, zarządcę dóbr bobreckich.

Uważam za miły obowiązek złożyć na tem miejscu podziękowanie J. O. księżnie Ogińskiej, W. P. Chrzaszczewskiemu, oraz WP. Błaszczkiewiczowi i Konopce za ułatwienie mi podjętego zadania.

## I.

Folwark Łęg. Obszar łąk wynosi około 150 morgów, w co wchodzi także łąki chłopskie. Obszar ten bywa od czasu do czasu zalewany Wisłą i stąd pochodzi jego dobroć.

1. Agropyrum sp. . . . .	0·74%
2. Agrostis sp. . . . .	3·18
3. Alopecurus pratensis . . . . .	2·97
4. Anthoxanthum odoratum . . . . .	0·31
5. Arrhenatherum elatius . . . . .	1·34
6. Dactylis glomerata . . . . .	2·14

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7. Festuca heterophylla . . . . .	2·64	
8. Festuca elatior . . . . .	20·11	
9. Poa pratensis . . . . .	15·18	
10. Różne trawy . . . . .	6·56	
Traw dobrych razem . . . . .		<b>55·17<sup>0</sup>/<sub>0</sub>.</b>
1. Aira caespitosa . . . . .	0·03 <sup>0</sup> / <sub>0</sub>	
Traw gorszych . . . . .		<b>0·03<sup>0</sup>/<sub>0</sub>.</b>
1. Trifolium pratense . . . . .	7·26 <sup>0</sup> / <sub>0</sub>	
2. Vicia sepium . . . . .	1·82	
3. Vicia villosa . . . . .	0·07	
Rodzina motylkowych . . . . .		<b>9·15<sup>0</sup>/<sub>0</sub>.</b>
1. Hieracium Pilosella . . . . .	0·18	
2. Leontodon hastilis . . . . .	6·62	
3. Taraxacum officinale . . . . .	8·93	
Rodzina złożonych . . . . .		<b>15·73.</b>
1. Ranunculus sp. . . . .	3·75	
Rodzina jaskrowatych . . . . .		<b>3·75.</b>
1. Carum Carvi . . . . .	3·31	
2. Heraclium Sphondylium . . . . .	1·90	
Rodzina baldaszkowych . . . . .		<b>5·21.</b>
Rodzina krzyżowych . . . . .		<b>0·50.</b>
1. Coronaria Flos cuculi . . . . .	0·20	
Rodzina lepnicowatych . . . . .		<b>0·20.</b>
1. Veronica sp. . . . .	0·15	
Rodzina trędownikowatych . . . . .		<b>0·15.</b>
1. Rumex sp. . . . .	0·51	
Rodzina rdestowatych . . . . .		<b>0·51.</b>
1. Plantago lanceolata . . . . .	2·94	
Rodzina babkowatych . . . . .		<b>2·94<sup>0</sup>/<sub>0</sub>.</b>
Inne dwuliścieniowe . . . . .		<b>3·01<sup>0</sup>/<sub>0</sub>.</b>
1. Equisetum arvense . . . . .	2·30	
Skrzypy . . . . .		<b>2·30<sup>0</sup>/<sub>0</sub>.</b>
Resztki . . . . .		<b>1·35.</b>

## II.

Bobrowniki Dolne: szereg łąk począwszy od Gromca, przeważnie chłopskich, typ prawie ten sam, co poprzedni. Obszar wynosi około 100 morgów.

1. Alopecurus pratensis . . . . .	3·94	
2. Anthoxanthum odoratum . . . . .	8·97	
3. Avena sp. . . . .	1·75	
4. Dactylis glomerata . . . . .	2·04	
5. Festuca elatior . . . . .	10·16	
6. Festuca heterophylla . . . . .	3·24	
7. Lolium sp. . . . .	12·48	
8. Phleum pratense . . . . .	1·13	
9. Poa pratensis . . . . .	15·27	
10. Różne trawy . . . . .	3·22	
Traw dobrych razem . . . . .		<b>62·20<sup>0</sup>/<sub>0</sub>.</b>
1. Aira caespitosa . . . . .	0·27	
Traw gorszych . . . . .		<b>0·27<sup>0</sup>/<sub>0</sub>.</b>
1. Luzula sp. . . . .	0·12	
Rodzina sitowatych . . . . .		<b>0·12.</b>
1. Trifolium pratense . . . . .	6·95	
Rodzina motylkowych . . . . .		<b>6·95<sup>0</sup>/<sub>0</sub>.</b>
1. Achillea Millefolium . . . . .	0·68	
2. Leontodon hastilis i Taraxacum off.	9·52	
3. Bellis perennis . . . . .	0·24	
4. Picris hieracioides . . . . .	3·39	
Rodzina złożonych . . . . .		<b>13·83.</b>
1. Ranunculus (gen.) . . . . .	1·20	
Rodzina jaskrowatych . . . . .		<b>1·20.</b>
1. Heracleum Sphondylium . . . . .	2·31	
Rodzina baldaszkowych . . . . .		<b>2·31.</b>
1. Cerastium (sp.) . . . . .	0·60	
Rodzina mokrzycowatych . . . . .		<b>0·60.</b>
1. Alchemilla vulgaris . . . . .	0·13	
Rodzina różowatych . . . . .		<b>0·13.</b>
1. Lysimachia Nummularia . . . . .	0·07	
Rodzina pierwiosnkowatych . . . . .		<b>0·07.</b>
1. Glechoma hederacea . . . . .	0·08	
2. Prunella vulgaris . . . . .	0·48	
Rodzina wargowych . . . . .		<b>0·56.</b>
1. Veronica Chamaedrys . . . . .	0·07	
Rodzina trędownikowatych . . . . .		<b>0·07.</b>
1. Rumex Acetosa . . . . .	1·53	
Rodzina rdestowatych . . . . .		<b>1·53.</b>

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1. <i>Plantago lanceolata</i> . . . . .	3·71	
Rodzina babrowatych . . . . .		<b>3·71.</b>
Inne dwuliścieniowe . . . . .		<b>5·34.</b>
Resztki . . . . .		<b>1·11.</b>

## III.

Bobrowniki Górne: obszar wynosi około 70 morgów, typ zbliżony do poprzednich.

1. <i>Anthoxanthum odoratum</i> . . . . .	0·04 <sup>0</sup> / <sub>0</sub>	
2. <i>Avena</i> sp. . . . .	0·09	
3. <i>Cynosurus cristatus</i> . . . . .	1·86	
4. <i>Dactylis glomerata</i> . . . . .	5·90	
5. <i>Festuca ovina</i> . . . . .	1·27	
6. <i>Poa</i> sp. . . . .	11·39	
7. Inne trawy . . . . .	13·61	
Traw dobrych razem . . . . .		<b>34·16<sup>0</sup>/<sub>0</sub>.</b>
1. <i>Aira caespitosa</i> . . . . .	0·23	
Traw gorszych . . . . .		<b>0·23.</b>
1. <i>Lathyrus pratensis</i> . . . . .	8·86	
2. <i>Trifolium</i> ( <i>repens</i> i <i>pratense</i> ) . . . . .	16·14	
Rodzina motylkowych . . . . .		<b>25·00.</b>
1. <i>Carex</i> sp. . . . .	0·61	
Turzyce . . . . .		<b>0·61.</b>
1. <i>Achillea Millefolium</i> . . . . .	0·88	
2. Inne złożone . . . . .	9·89	
Rodzina złożonych . . . . .		<b>10·77.</b>
1. Jaskrowate ( <i>Ranunculus</i> ) . . . . .		<b>13·24.</b>
1. <i>Carum Carvi</i> . . . . .	1·64	
Rodzina baldaszkowych . . . . .		<b>1·64.</b>
1. <i>Cardamine</i> sp. ? . . . . .	0·06	
Rodzina krzyżowych . . . . .		<b>0·06.</b>
1. <i>Coronaria Flos cuculi</i> . . . . .	0·64	
Rodzina lepnicowatych . . . . .		<b>0·64.</b>
1. <i>Galium palustre</i> . . . . .	0·01	
Rodzina marzannowatych . . . . .		<b>0·01.</b>
1. <i>Prunella vulgaris</i> . . . . .	1·02	
Rodzina wargowych . . . . .		<b>1·02.</b>



1. Veronica sp. . . . .	0·18	
Rodzina trędownikowatych . . . . .		0·18.
1. Myosotis sp. . . . .	0·13	
Rodzina szorstkolistnych . . . . .		0·13.
1. Rumex Acetosa . . . . .	1·32	
Rodzina rdestowatych . . . . .		1·32.
1. Plantago lanceolata . . . . .	3·32	
Rodzina babkowatych . . . . .		3·32.
Inne dwuliścieniowe . . . . .		7·13.
1. Equisetum sp. . . . .	0·04	
Skrzypy . . . . .		0·04.
Resztki . . . . .		0·50.

## IV.

Bobrek, park koło 120 morgów, gleba żelazista, torfowa częściami lepsza. Porost niejednostajny. 1. próbka.

1. Agrostis sp. . . . .	15·33	
2. Alopecurus pratensis . . . . .	1·04	
3. Anthoxanthum odoratum . . . . .	1·76	
4. Avena sp. . . . .	0·42	
5. Arrhenatherum elatius . . . . .	0·17	
6. Cynosurus cristatus . . . . .	1·34	
7. Dactylis glomerata . . . . .	5·46	
8. Festuca elatior . . . . .	4·68	
9. Festuca heterophylla . . . . .	4·13	
10. Holcus lanatus . . . . .	4·96	
11. Phleum pratense . . . . .	11·60	
12. Rozm. trawy z wyjątkiem Aira caesp. . . . .	13·43	
Traw dobrych razem . . . . .		64·32%.
1. Aira caespitosa . . . . .	14·22	
Traw gorszych . . . . .		14·22.
Turzyce . . . . .		11·67.
1. Juncus effusus . . . . .	0·42	
Sity . . . . .		0·42.
Motyłkowe . . . . .		0·43.
1. Achillea Millefolium . . . . .	0·17	
2. Cirsium sp. . . . .	0·56	
3. Inne złożone . . . . .	0·25	
Złożone . . . . .		0·98.

1. <i>Potentilla Tormentilla</i> . . . . .	0·64	
2. <i>Sanguisorba officinalis</i> . . . . .	2·37	
Różowate . . . . .		3·01.
Rodzina baldaszkowych . . . . .		0·71.
1. <i>Cerastium</i> sp. . . . .	0·21	
Rodzina mokrzycowatych . . . . .		0·21.
1. <i>Galium</i> sp. . . . .	0·11	
Marzannowate . . . . .		0·11.
1. <i>Euphrasia officinalis</i> . . . . .	0·04	
Rodzina trędownikowatych . . . . .		0·04.
1. <i>Lysimachia vulgaris</i> . . . . .	0·21	
Rodzina pierwiosnkowatych . . . . .		0·21.
1. <i>Polygala</i> sp. . . . .	0·05	
Rodzina krzyżownicowatych . . . . .		0·05.
1. <i>Plantago lanceolata</i> . . . . .	1·62	
Rodzina babkowatych . . . . .		1·62.
Inne dwuliścieniowe . . . . .		1·56.
Resztki . . . . .		0·37.
Mchy . . . . .		0·07.

## V.

Bobrek: łąka parkowa; 2. próbka.

1. <i>Agrostis vulgaris</i> . . . . .	4·35	
2. <i>Anthoxanthum odoratum</i> . . . . .	3·56	
3. <i>Festuca elatior</i> . . . . .	7·64	
4. <i>Holcus lanatus</i> . . . . .	46·46	
5. <i>Phleum pratense</i> . . . . .	6·09	
6. Inne trawy . . . . .	3·25	
Traw dobrych . . . . .		71·35.
1. <i>Aira caespitosa</i> . . . . .	10·63	
Traw gorszych . . . . .		10·63.
Turzyce . . . . .		5·70.
1. <i>Juncus effusus</i> . . . . .	0·90	
Sity . . . . .		0·90.

1. Lathyrus pratensis . . . . .	0·43	
2. Lotus corniculatus . . . . .	1·13	
3. Trifolium repens . . . . .	0·03	
Rodzina motylkowych . . . . .		<b>1·59<sup>0</sup>/<sub>0</sub>.</b>
Rodzina złożonych . . . . .		<b>0·19.</b>
1. Ranunculus repens . . . . .	0·13	
Rodzina jaskrowatych . . . . .		<b>0·13.</b>
1. Potentilla Tormentilla . . . . .	0·02	
Rodzina różowatych . . . . .		<b>0·02.</b>
Rodzina baldaszkowych . . . . .		<b>0·07.</b>
1. Glechoma hederacea . . . . .	0·19	
2. Prunella vulgaris . . . . .	1·22	
3. Inne wargowe . . . . .	0·47	
Rodzina wargowych . . . . .		<b>1·88.</b>
1. Cerastium sp. . . . .	1·33	
Rodzina mokrzycowatych (Alsineae)		<b>1·30.</b>
1 Coronaria Flos cuculi . . . . .	1·00	
Rodzina lepicowatych . . . . .		<b>1·00.</b>
1. Galium sp. . . . .	0·08	
Rodzina marzannowatych . . . . .		<b>0·08.</b>
1. Rumex Acetosa . . . . .	0·63	
Rodzina rdestowatych . . . . .		<b>0·63.</b>
1. Plantago lanceolata . . . . .	3·37	
Rodzina babkowatych . . . . .		<b>3·37.</b>
1. Inne dwuliścieniowe . . . . .		<b>1·30.</b>
Resztki . . . . .		<b>0·46.</b>

## VI.

Łąka na Szyjkach. Stawiska, koło 200 morgów. Grunt nieco torfiasty. Porost niejednostajny. 1. próbka.

1. Agrostis sp. . . . .	2·48	
2. Anthoxanthum odoratum . . . . .	3·52	
3. Festuca ovina . . . . .	2·78	
4. Holcus lanatus . . . . .	1·66	
5. Inne trawy . . . . .	3·58	
Traw dobrych . . . . .		<b>14·02.</b>

1. <i>Aira caespitosa</i> . . . . .	1·07	
Traw gorszych . . . . .		<b>1·07.</b>
Turzyce . . . . .		<b>42·70.</b>
1. <i>Juncus effusus</i> . . . . .	4·49	
Sity . . . . .		<b>4·49.</b>
1. <i>Lotus corniculatus</i> . . . . .	0·41	
2. <i>Trifolium repens</i> . . . . .	0·37	
3. <i>Vicia</i> sp. . . . .	0·71	
Rodzina motylkowych . . . . .		<b>1·49.</b>
1. <i>Cirsium</i> . . . . .	10·89	
2. Złożone . . . . .	0·49	
Rodzina złożonych . . . . .		<b>11·38.</b>
1. <i>Caltha palustris</i> . . . . .	1·22	
2. <i>Ranunculus cassubicus</i> . . . . .	0·59	
3. <i>Ranunculus Flammula</i> . . . . .	0·59	
4. Inne jaskrowate . . . . .	2·91	
Rodzina jaskrowatych . . . . .		<b>5·31.</b>
1. <i>Alchemilla vulgaris</i> . . . . .	0·04	
2. <i>Sanguisorba officinalis</i> . . . . .	9·88	
3. <i>Spiraea Ulmaria</i> . . . . .	0·98	
Rodzina różowatych . . . . .		<b>10·90.</b>
1. <i>Prunella vulgaris</i> . . . . .	3·33	
2. Inne wargowe . . . . .	0·57	
Rodzina wargowych . . . . .		<b>3·90.</b>
1. <i>Carum Carvi</i> . . . . .	0·03	
Rodzina baldaszkowych . . . . .		<b>0·03.</b>
1. <i>Coronaria flos cuculi</i> . . . . .	0·24	
Rodzina lepnicowatych . . . . .		<b>0·24.</b>
1. <i>Galium boreale</i> . . . . .	0·37	
2. <i>Galium palustre</i> . . . . .	0·32	
Rodzina marzannowatych . . . . .		<b>0·69.</b>
1. <i>Myosotis</i> sp. . . . .	0·45	
Rodzina szorstkolistnych . . . . .		<b>0·45.</b>
1. <i>Plantago lanceolata</i> . . . . .	0·26	
Rodzina babkowatych . . . . .		<b>0·26.</b>
Inne dwuliścieniowe . . . . .		<b>2·40.</b>
Mchy . . . . .		<b>0·06.</b>

## VII.

## Łąka na Szyjkach, Stawiska, 2. typ.

1. Agrostis sp. . . . .	13·95%	
2. Anthoxanthum odoratum . . . . .	1·40	
3. Festuca sp. . . . .	0·50	
4. Festuca ovina . . . . .	0·47	
5. Holcus sp. . . . .	0·08	
6. Rozmaite trawy . . . . .	0·67	
Traw dobrych . . . . .		17·07.
1. Aira caespitosa . . . . .	9·64	
2. Molinia coerulea . . . . .	0·31	
Traw gorszych . . . . .		9·95.
Turzyce . . . . .		64·13.
1. Juncus lamprocarpus . . . . .	0·11	
Sity . . . . .		0·11.
1. Caltha palustris . . . . .	0·41	
2. Ranunculus Flammula . . . . .	2·92	
3. Ranunculus sp. . . . .	0·25	
Rodzina jaskrowatych . . . . .		3·58.
1. Potentilla Tormentilla . . . . .	0·09	
2. Spiraea Ulmaria . . . . .	0·12	
Rodzina różowatych . . . . .		0·21.
1. Prunella vulgaris . . . . .	0·75	
2. Pulegium vulgare . . . . .	0·71	
Rodzina wargowych . . . . .		1·46.
1. Galium palustre . . . . .	1·41	
Rodzina marzannowatych . . . . .		1·41.
1. Plantago lanceolata . . . . .	0·07	
Rodzina babkowatych . . . . .		0·07.
Inne dwuliścieniowe . . . . .		1·12.
1. Equisetum sp. . . . .	0·08	
Skrzypy . . . . .		0·08.
Mchy . . . . .		0·05.
Resztki . . . . .		0·27.

## VIII.

Odrzykoń, łąka jednorazowa; grunt mokry; porost skąpy, dość jednostajny. Obszar koło 60 morgów.

1. <i>Agrostis vulgaris</i> . . . . .	3·34	
2. <i>Anthoxanthum odoratum</i> . . . . .	0·57	
3. <i>Briza media</i> . . . . .	0·44	
4. <i>Festuca ovina</i> . . . . .	2·00	
5. <i>Glyceria</i> sp. . . . .	0·17	
6. <i>Holcus lanatus</i> . . . . .	1·71	
7. Inne trawy . . . . .	6·60	
Traw dobrych . . . . .		<b>14·83.</b>
1. <i>Aira caespitosa</i> . . . . .	0·73	
2. <i>Triodia decumbens</i> . . . . .	0·10	
Traw gorszych . . . . .		<b>0·83.</b>
Turzyce . . . . .		<b>65·19.</b>
Sity . . . . .		<b>3·43.</b>
Resztki jednoliściennych . . . . .		<b>0·03.</b>
1. <i>Lotus corniculatus</i> . . . . .	0·72	
2. <i>Trifolium</i> sp. . . . .	0·07	
Rodzina motylkowych . . . . .		<b>0·79.</b>
1. <i>Cirsium</i> sp. . . . .	2·90	
2. <i>Leontodon</i> sp. . . . .	0·18	
Rodzina złożonych . . . . .		<b>3·08.</b>
1. <i>Caltha palustris</i> . . . . .	0·25	
2. <i>Ranunculus Flammula</i> . . . . .	0·43	
3. <i>Ranunculus</i> sp. . . . .	0·64	
Rodzina jaskrowatych . . . . .		<b>1·32.</b>
1. <i>Potentilla Tormentilla</i> . . . . .	0·58	
2. <i>Spiraea Ulmaria</i> . . . . .	0·23	
Rodzina różowatych . . . . .		<b>0·81.</b>
1. <i>Lysimachia thyrsiflora</i> . . . . .	2·36	
Rodzina pierwiosnkowatych . . . . .		<b>2·36.</b>
1. <i>Linum catharticum</i> . . . . .	0·15	
Rodzina lnowatych . . . . .		<b>0·15.</b>
1. <i>Rhinanthus</i> sp. . . . .	0·08	
Trędownikowate . . . . .		<b>0·08.</b>

1. Galium palustre . . . . .	0·61	
Marzannowate . . . . .		0·61.
1. Plantago lanceolata . . . . .	2·14	
Babkowate . . . . .		2·14.
Inne dwuliścieniowe . . . . .		2·13.
Skrzypy . . . . .		0·85.
Mchy . . . . .		0·22.
Resztki . . . . .		0·75.

## IX.

Rzepka, łąka jednorazowa. Obszar koło 60 morgów; gleba torfowa; porost bardzo skąpy i niejednostajny. Częściami przeważa Nardus, częściami turzyce. Wyższe miejsca pokrywają wrzosowiska.

1. Anthoxanthum odoratum . . . . .	0·13	
2. Briza media . . . . .	0·38	
3. Cynosurus cristatus . . . . .	0·56	
4. Festuca heterophylla . . . . .	0·74	
5. Holcus lanatus . . . . .	3·37	
6. Poa sp. . . . .	0·14	
7. Inne trawy . . . . .	12·78	
Traw dobrych razem . . . . .		18·10.
1. Aira caespitosa . . . . .	0·19	
2. Nardus stricta . . . . .	26·14	
3. Triodia decumbens . . . . .	0·13	
Traw gorszych . . . . .		26·46.
Turzyce . . . . .		30·46.
1. Luzula sp. . . . .		0·13.
Motylkowe . . . . .		0·48.
1. Centaurea Jacea . . . . .	4·69	
2. Cirsium . . . . .	1·75	
3. Leontodon . . . . .	1·63	
Złożone . . . . .		8·07.
Jaskrowate . . . . .		0·84.
1. Potentilla Tormentilla . . . . .	5·14	
Różowate . . . . .		5·14.

1. <i>Lysimachia vulgaris</i>	0·19	
Pierwiosnkowate		0·19.
1. <i>Linum catharticum</i>	1·89	
Lnowate		1·89.
1. <i>Pulegium vulgare</i>	0·12	
Wargowe		0·12.
1. <i>Galium</i>		0·16.
1. <i>Calluna vulgaris</i>	1·04	
Wrzosowate		1·04.
Euphorbiaceae		0·17.
1. <i>Plantago lanceolata</i>	1·40	
Babkowate		1·40.
Inne dwuliścieniowe		3·40.
Skrzypy		0·11.
Mchy		0·12.
Resztki		1·41.

## Zestawienie rezultatów.

	Trawy dobre	Trawy złe	Turzyce	Groszkowe	Złożone	Inne liściaste	Skrzypy	Mchy
Łęg	55·17%	0·03%	0%	9·15%	15·73%	16·27%	2·30%	0%
Bobrek Dol.	62·20%	0·27%	0·12%	6·95%	13·83%	16·63%	0%	0%
Bobrek Gór.	34·16%	0·23%	0%	25%	10·77%	29·19%	0·04%	0%
I. Park	64·32%	14·22%	12·09%	0·43%	0·98%	7·89%	0%	0·07%
II. Park	71·35%	10·63%	6·60%	1·59%	0·19%	10·24%	0%	0%
I. Stawiska	14·02%	1·07%	47·19%	1·49%	11·38%	24·15%	0%	0·06%
II. Stawiska	17·07%	9·95%	64·24%	0%	0%	7·85%	0·08%	0·06%
Odrzykoń	14·83%	0·83%	68·62%	0·79%	3·08%	9·65%	0·85%	0·22%
Rzepka	18·10%	26·46%	30·59%	0·48%	8·07%	14·35%	0·11%	0·12%





# WYDATNOŚĆ DRZEWOSTANÓW

w naszych lasach w chwili ich sprzętu.

Zestawił

Aleksander Nowicki.

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## II.

W związku z ogłoszonym w roku przeszłym szeregiem dochodzeń wydatności, dokonanych przez pana Franciszka Pauera na północno-zachodnim niżu piaszczystym powiatu pilzeńskiego, ogłaszamy w dalszym ciągu daty zebrane nieco dalej na zachód w powiecie tarnowskim.

Są to wogóle typowe siedliska podmokłych borów sosnowych, w których żywocące inne rodzaje drzew podrzędne tylko mają znaczenie. Świerk wciska się tu od dawna wszędzie; tu i owdzie udało mu się nawet na mniejszych obszarach zająć stanowisko niemal współrzędne z sosną, lecz rzadko gdzie zdołał on się utrzymać w stanie zdrowym do późnego wieku. Zwykle wcześniej zapada na murs czerwony, a ponieważ tu na piaszczystym gruncie o wiele łatwiej niż gdziekolwiek bywa ochwiany w korzeniach, co wystarcza do zwabienia owadu kornika drukarza, przeto narażony on jest na zniszczenie z tej strony niemal nieustannie.

Jodła, której istnienia niktby się nie spodziewał w tej zapadłej krainie sosny, pojawia się jednak tu i owdzie w pojedynczych osobnikach przetykających panujący drzewostan, a wy-

jątkowo, jak np. na lekkim wzniesieniu w Żdźarach, dochodzi do współrzednego znaczenia.

Z liściastych rodzajów zasługuje na uwagę w pierwszym rzędzie dąb szypułkowy, który występuje tu dość często w pojedynczych osobnikach wśród sosniny, a miejscami także w grupach, tu i owdzie nawet w całych pasmach przeplatających bór sosnowy. Trzyma się wtedy obrzednio, nie dochodzi do wielkich rozmiarów, lecz mimo to, nawet przy nieosobliwej budowie pnia, podnosi wielce wartość drzewostanu, gdy się go tylko przy wyróbce na zrębie dokładnie wyzyskało.

W zagajnikach osiedla się tłumnie brzoza z nalotu; mimoto w starszych drzewostanach mało jej się zwykle znachodzi. Nie tylko bowiem usuwają ją z młodzieży, ale nie wytrzymuje też na pniu tak długiego wieku, jaki tu sosnie do rębności naznaczają, i wcześniej ustępuje.

Grab żywoci tu również miejscami w pojedynczych osobnikach wśród sosnowego boru, a wtedy w przerzedzonym tworzy też chętnie podszyty, utrzymujące się długo.

Ogólną cechą charakterystyczną borów sosnowych tej okolicy, jest mocne przerzedzanie się w wieku późniejszym. Im większy nadmiar wilgoci w glebie, tem wcześniej rozpoczyna się obumieranie drzew i w tym większym postępuje stopniu. Podczas gdy drzewostany stojące na gruncie suchszym okazują w wieku 80—100 lat i wyżej jeszcze 0·7 do 0·8 normalnego czyli pełnego zwarcia, to w drzewostanach litych, stojących na gruncie więcej poimokłym, po przekroczeniu wieku lat 60, zwarcie spada na 0·6 aż do 0·4 normalnego stanu.

Nadmiar wilgoci jest również pośrednią przyczyną szerzenia się huba sosnowego.

Z lesistego pasma pagórków przerywających W. Księstwo Krakowskie od wchodu ku zachodowi, ogłosiliśmy w tablicach roku przeszłego wyniki dochodzeń dokonanych przez pana Stanisława Remina na dwóch zrębach. Obecnie ogłaszamy wyniki z dalszych czterech zrębów. Rozmaitość gleby, jaką się odznacza cała ta okolica, zwłaszcza też dzisiejszy powiat chrzanowski, już się w tych miejscowościach (Kopce, Zalas, Chrosna, Frywałd), tworzących łączny obszar, przejawiać zaczyna, jak to zobaczymy w tablicach.

Żyzna gleba gliniasta, głęboki grunt piaszczysty suchy, piasek użyźniony pruchnicą świeżą, gleba torfiasto piaszczysta, piasek z małą przymieszką gliny i gulami krzemiennymi, oto charakterystyczniejsze różnice występujące naprzemian na małych stosunkowo obszarach. W podglebiu występują wapienie, gruby piasek żwirowaty, a częścią ily nieprzepuszczalne.

Panującym rodzajem drzew jest tu sosna, którą tak w litych drzewostanach jak i w mieszanych napotyka się na znacznych obszarach w wieku sięgającym 100 lat i wyżej. Pod względem dorodności sosna tutejsza nie dorówna sośnie z suchszych partyj niżu w okolicy Tarnowa i Pilzna. Krętą budowę strzały napotyka się dość często; mimo to drewno przeważnie zdrowe.

Następne miejsce po sośnie zajmuje tu świerk, który występuje również już od dawna w przymieszaniu różnego stopnia w sośninach. Drewno wydaje przeciętnie zdrowe; pod względem jego trwałości i innych przymiotów byłyby pożądane doświadczenia ściśle.

Buk ustąpił już niemal z tych lasów; tylko tu i owdzie żywoci jeszcze w pojedynczych osobnikach, wpośród panującego drzewostanu.

Olcha czarna ograniczona do małych obszarów porzeczyn. Brzoza rzadką jest bardzo wpośród starszego drzewostanu.

Modrzew wprowadzony sztucznie do zagajen na tem pasmie pagórków, nie doszedł do większego rozszerzenia. Tu i owdzie znajdują się osobniki starsze; w tablicach zeszłorocznych daty z miejscowości Chrosna odnoszą się do modrzewnika zaledwo 26-letniego, nawiedzonego już mursem w korzeniach.

Z gór zachodniego Beskidu ogłaszamy dalsze wyniki dochodzeń dokonanych przez pana Stanisława Bossowskiego, w związku z ogłoszonymi w roku przeszłym.

Jodła, która tu panowała od wieków w drzewostanach litych, oraz wspólnie z bukiem, utrzymała się jeszcze dotąd na tem stanowisku, zwłaszcza w dzielnicach odleglejszych i trudniej dostępnych, gdzie też dosięgła wysokiego wieku w stanie zdrowym tak dalece, że dopiero, jak to wykazują zapiski w tablicach, w drzewostanach od 150 do 180-letnich znajdowano znaczniejszy procent drewna nawiedzonego mursem. Mimo kamienistego gruntu, dzięki głęboko sięgającemu rozluźowaniu i zwietrzeniu piaskowców, może jodła głęboko zapuszczać swój korzeń główny. Dlatego też przy żyznej zwietrzałości gruboziarnistych piaskowców zawierających mikę idzie wysoko w górę i dochodzi do okazałych wymiarów przy pełnej budowie strzały i długo utrzymuje się w zwarciu. Można napotkać jodłowniki, które w wieku 150 do 180 lat wykazują 0·7 zwarcia normalnego, jak tego dowodzą tablice tak z ubiegłego jak i bieżącego roku. Wykazują one przy wzniesieniu absolutnem 846 m. jodłę jeszcze jako panującą, a jeszcze i wyżej znaleźć ją można.

Płytsze obszary stoków, chociażby i niżej położone, objął oddawna świerk w posiadanie i na nich się utrzymuje. Przerzedza

się jednak nierównie mocniej i wcześniej. W drugiej połowie kończącego się stulecia poczęto go, podobnie jak wszędzie, wprowadzać do zagajen sztucznie na siedliska jodły. Nie ma on jednak takiej siły odpornej, jak jodła w razach klęsk elementarnych i uszkodzeń przez owady. Przed kilkoma laty grasował też w tych górach grzyb podpieńnik (*Agaricus melleus*), który tak w zagajnikach jak i żerdzinach, a nawet i starszych drzewostanach świerkowych szerzył spustoszenia przez murs czerwony w korzeniach.

Mimo że w formacyi tych gór brak ogniwa wapieni, to jednak żywocił tu od dawna buk, tak w dorodnych drzewostanach litych, jakoteż i wpośród jodłowników, w różnym stopniu przymieszania. Przypisać to może trzeba temu, że piaskowce tych gór zawierają na znacznych obszarach kalcyty. Buk utrzymał się tu jeszcze dotąd w przymieszaniu wpośród jodłowych drzewostanów, wspólnie z jodłą, a miejscami jako panujące drzewo. Dorodne buczniki jeszcze się tu znachodzą, a zapiski tablic wykazują jeszcze przy wzniesieniu 929 m. ich silny rozwój. Opuściwszy jodłę, wspina się tu buk aż do wysokości 1109 m. n. p. m., gdzie już jednak karłowacieje.

Godzi się tu wspomnieć jawora, który ustępując trwale, jest tu już dziś rzadki. Strata to dotkliwa dla okolicznej ludności, dla której przez wieki stanowił cenny materiał w drobnym przemyśle domowym.

Olchy obydwu gatunki, ograniczone do porzeczyn potoków, nie dochodzą do wielkiego rozszerzenia. Biała pnie się do znacznej wysokości na stoki, chroniąc wypustoszone kamieńce od zupełnego zniszczenia.

Brzoza nalatująca do zagajników szpilkowych, nie owładnęła dotąd większym obszarem stoków.

O wartości modrzewia wprowadzonego tu w nowszych czasach sztucznie do zagajen świerkowych w przetknięciu, niemasz dotąd pewniejszych doświadczeń.

W tegorocznych tablicach ogłaszamy też wyniki dochodzeń wydajności, których dokonał pan W. Niemiec w Skomorochach koło Sokala. Zapiski odnoszą się do drzewostanu z lasów prawego zabrzeża Bugu.

Na głębokich glinach piaszczystych spoczywających na podłożu z margłów kredowych, rozpościerały się tu lasy przeważnie dębowe. Z biegiem czasu dąb ustępować zaczął przybyszom wciśkającym się zwolna w jego przerzedzane z wiekiem ostępy, drogą nalotu ich lekkich nasion. I przyszło do tego, że dąb wypierany coraz mocniej, zajmuje dziś już przeciętnię zaledwo piątą część

drzewostanu. Resztą owładnęły: sosna, brzoza i osika, jak to wykazują cyfry w tablicy.

Podobny proces rugowania dęba szypułkowego z jego przyrodzonych siedlisk odbywa się od dawna i w innych lasach tej okolicy. Przybysze rozwijają się tu zwykle w młodości bujnie, lecz wydają drewno poorestniej jakości i nie wytrzymują na pniu długo w stanie zdrowym.

Autor: Franciszek Pauer.

Nazwa powiatu administracyjnego	Nazwa miejscowości	Treściwy opis siedliska leśnego	Opis drzewostanu	Stopień zwarcia oznaczony liczbą	Wiek w chwili sprzętu	Masa drzewna w metr. sześcienn. z hektara
Tarnów	Wierzchosławice, ostęp: „Morgi“, dzielnica lasu 3.	<p>Niż piaszczysty, 190 do 210 metrów nad poziomem morza. Podmokłe równiny z małym nachyleniem ku północy (1 m. na kilometr).</p> <p>Płytką warstwą piasku z domieszką żwiru, który na wzniesieniach przechodzi w podglebie jako szczyry żwir.</p> <p>Zabarwienie wodorotlenkiem żelaza żółtawe lub rudawe.</p> <p>W nizinach stanowi podglebie żółty lub siwy il, lub też ruda bagienna. Wkłęśności wykazują do 75 cm. grubą warstwę torfu leżącą na czystym piasku. Pod żwirem często napotyka się kurzawkę.</p> <p>W tej okolicy nie znajdują się wcale głązy narzutowe.</p> <p>Zachodnia część lasu ma głębszą warstwę piasku, dzięki czemu korzeń główny silnie rozwinięty a strzały drzewne dłuższe.</p>	<p>Drzewostan sosnowy, przetknięty tu i owdzie dębem. Przyrost grubościowy w ostatnim dziesięcioleciu 20 mm. Wysokość drzew 21 m.</p> <p>Na 1 ha. znajduje się 462 sztuk drzew.</p>	0.6	90	347

Przyrost przeciętny na hektar w metr. sześcienn.	Jakość drewna	Krótki opis runa leśnego	Wydarzenia zaszłe w ciągu rozwoju drzewostanu np. zna- czniejsze kłęski el- mentarne, uszkodze- nia przez owady, trz bieżę itp.)	U w a g i
3·8	<p>W nizinach zna- czna część drzewa mursowata. Wielka ilość drzew krzywych. Procent drewna użytkowego 48.</p>	<p>W położeniu wyższem mała warstwa pruchni- cy. Rzadkie pod- szycie leszczyny i borówka. W nizinach grube poduchy mchów, kępami bagnu pospolite, czyli rozmaryn dziki (<i>Ledum pa- lustre</i>).</p>	<p>Z powodu sta- gnującej wody, trudnej do zupeł- nego spuszczenia, w drzewostanie pojawiało się wie- le suszyc, co też spowodowało jego rychlejszy sprzęt w celu odnowie- nia.</p>	<p>Obszar wyřębu 1.203 ha.</p>

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Tarnów	Wierzchosławice, ostęp: „Nowy las”, działnica 10.	<p>Gleba piaszczysta na podglebiu nieprzepuszczalnym z iłu i żwiru.</p> <p>Niższe części działnicy zabagnione przez wodę gruntową; miejscami bagna z wodą stojącą.</p>	<p>Drzewostan sosnowy najgorszej jakości. Zadrzewienie rzadkie, wykazuje 490 pni na hektarze.</p> <p>Strzały krótkie z przeciętną wysokością 17 m., przytem zbieżyste, po części o kilku wierzchołkach tworzących koronę rosochata.</p> <p>Przyrost średnicy na grubość w ostatnim dziesięcioleciu 24 mm.</p> <p>Drzewostan nie rokujący wogóle przyszłości i dlatego też mimo młodego wieku uprzętnięty i odnowiony.</p>	0·5 0·5	42 48	163 198
		Brzesko	Wierzchosławice, ostęp: „Rudecki las”, działnica 1.	<p>Położenie to samo, jak w działnicy 3.</p> <p>Teren falisty, przerywany smugami bagnistymi. W wyższym położeniu 0·5 m pod powierzchnią znajduje się już czysty gruby żwir.</p> <p>W nizinach piasek z podglebiem iłu nieprzepuszczalnego.</p>	<p>Drzewostan lity sosnowy, nawiedzony przez hub sosnowy. (<i>Trametes pini</i>).</p> <p>W ostatnim dziesięcioleciu przyrost grubościowy 12 mm.</p> <p>Na 1 ha. stoi 440 drzew.</p> <p>Formacja strzał zbieżysta, krzywa, spiralna. Przeciętna wysokość 21 m.</p>	0·5 do 0·6



Przyrost przeciętny na hektar w met. sześcienn.	Jakość drewna	Krótki opis runa leśnego	Wydarzenia zasze w ciągu rozwoju drzewostanu (np. zna- czniejsze kłęski ele- mentarne, uszkodze- nia przez owady, trzębieże itp.)	U w a g i
3-9 4-1	<p>Drewno krzywe, kręte i sękate, w wielkiej części nawiedzone przez hub sosnowy.</p> <p>Wyrobiono za- ledwo 10% dre- wna materiało- go, głównie na podkłady kolejo- we.</p>	<p>Podszycie sta- nowi tylko gdzie- niegdzie jałowiec.</p> <p>Pokrywę stano- wią grube podu- chy mchów, a czę- ścią borówka.</p>	<p>Drzewostan cierpiał widocznie w młodszym wie- ku wiele od okiści, na co wskazuje skarłowacana for- macya drzew.</p> <p>Powstał on ze sztucznego zale- sienia gruntu wcielonego do la- su. Prawdopodo- bnie zagajnik u- szkadzany był przez bydło z przy- ległego pastwiska, co stanowi główną przyczynę tępego wzrostu.</p>	
2-5 3-0 2-9 3-2 3-2 3-3 3-7 3-6 3-4	<p>Drewno mier- nej jakości, w znacznej części kręte i krzywe.</p> <p>Znaczna część drewna zbutwia- łego.</p> <p>Wogóle uzyska- no 82% drewna materiałowego, a 18% opałowego. Najniższy procent materiału na po- jedynczych zrę- bach wynosił 61 zaś najwyższy 98.</p>	<p>Brak podszycia. Na wzniesieniach borówka, na nizi- nach grube mchy i bagno pospolite czyli rozmaryn dziki (<i>Ledum pa- lustre</i>).</p>	<p>Drzewostan na- wiedzany przez hub sosnowy (<i>Tru- metes pini</i>) i sku- tkiem tego prze- rzedzony mocno, uszkodzony był często przez wia- try; do czego przy- czyniało się i sła- be zakorzenienie drzew w żwirze i bagnie.</p>	<p>Zręby te zajęły ogółem 19.050 ha i wydały drewna materiałowego 4.182 m<sup>3</sup>, a opałowego 969 m<sup>3</sup>, za- tem razem 5.151 m<sup>3</sup>, tj. przeciętnie z 1 ha = 270 m<sup>3</sup>.</p> <p>Wysoki procent drewna materia- łowego, przy tak miernej jakości drzewostanu, tłu- maczy się czę- stkową sprzedażą na pniu.</p> <p>Masa drewna rozumie się tak tu jak i przy nastę- pnych pozycjach, bez gałęzi i pnia- ków.</p>



Przyrost przeciętny na hektar w metr. sześcienn.	Jakość drewna	Krótki opis runa leśnego	Wydarzenia zasze w ciągu rozwoju drzewostanu (np. znaczniejsze kłęski elementarne, uszkodzenia przez owady, trzebieże itp.)	U w a g i
3-0	<p>Jak w dzielnicy 10.</p> <p>Materyału wyrobiono głównie na progi kolejowe 14<sup>0</sup>/<sub>0</sub>.</p>	<p>Jak w dzielnicy 10.</p>	<p>Jak w dzielnicy 10.</p>	
<p>2-1 1-6 2-1 2-7 2-6 2-4 2-5 2-5 2-7 2-7 2-4 2-3 2-7 2-4 2-6</p>	<p>Drewno częściowo krzywe i sękate. Wogóle mały procent tramów. Najmniejszy procent materyału na pojedynczych zrębach wynosił 45, największy zaś 82. Przeciętnie na wszystkich razem zrębach tego ostępu czyli porządku rębowego uzyskano 66<sup>0</sup>/<sub>0</sub> materyału, a 34<sup>0</sup>/<sub>0</sub> opału.</p>	<p>Tylko tu i owdzie podszycie z kruszyny i dębiny. W miejscach suchszych borówka, wreszcie bagno pospolite (<i>L. dum p.</i>) i grube poduchy mchu.</p>	<p>Z powodu zabagnienia częste wywroty i drzewo zmurszałe. Suszyce pojawiały się często i w wielkiej ilości. Wielki też procent drzew zginął przez huba sosnowego (<i>Trametes pini</i>).</p>	<p>Wogóle wycięto w tym ostępie dotąd (w ciągu 15 lat) 15.361 m<sup>3</sup>, z tego 10.119 m<sup>3</sup> drewna materyałowego, a 5.242 m<sup>3</sup> opałowego, oprócz gałęzi i pniaków. Ten wysoki procent drewna materyałowego zawdzięcza się jedynie częściowej sprzedaży na pniu. Na hektarze jest 240 m<sup>3</sup> przeciętnie grubego drzewa.</p>
<p>2-6 2-6 2-2 2-2 2-2 2-3 3-3 3-0 2-9 2-6 3-1 2-7 2-7</p>	<p>Drewno dębowe krzywe i sękate, lecz zdrowe. Sośnina wogóle gładza aniżeli w poprzednim ostępie; trafia się jednak i tu często murs. Drewna materyałowego uzyskano od 50 do 76<sup>0</sup>/<sub>0</sub>, przeciętnie 56<sup>0</sup>/<sub>0</sub>, a opałowego 44<sup>0</sup>/<sub>0</sub>.</p>	<p>W drzewostanie przeważnie dębowym podszycie z jałowca, ziemię zaś pokrywa trawa, paprocie i mchy. Na wyższych położeniach podrost dębowy rzadki, zaś ziemia pokryta borówką.</p>	<p>Wywroty pojawiają się tu często. Hub rzadziej tu występuje niż w poprzednim ostępie.</p>	<p>Zręby zajęły dotąd w tym ostępie obszar 45.401 ha. w przeciągu 14 lat. Uzyskano 12.991 m<sup>3</sup> masy drzewnej, oprócz gałęzi i pniaków. Z tego 7.257 m<sup>3</sup> drewna materyałowego, a 5.734 m<sup>3</sup> opałowego. Na 1 ha. było przeciętnie 286 m<sup>3</sup>.</p>

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Nazwa powiatu administracyjnego	Nazwa miejscowości	Treściwy opis siedliska leśnego	Opis drzewostanu	Stopień zwarcia oznaczony liczbą	Wiek w chwili sprzętu	Masa drzewna w metr. sześcienn. z hektara
Tarnów	Wierzchosławice, ostep: „Różnice“, działnica 44.	Położenie zupełnie niskie, podglebie nieprzepuszczalne. Teren zabagniony.	Sośnina rzadko przeknięta brzozą. Z powodu opadnięcia bagien, drzewa stoją jakby na kopczykach. Strzały białe i kręte; przeciętna wysokość 18—20 m.	0·4	76	193
Tarnów	Wierzchosławice, ostep: „Grądzik“, działnica 46, 47.	Grunt zupełnie żwirowaty. Podglebie szczery szuter. Położenie przeważnie suche.	Sośnina, gdzieś dąb karłowaty. Strzały krótkie, lecz walcowate, z koroną rozłożystą. Przeciętna wysokość 18 m.	0·6	95	236
Tarnów	Wierzchosławice, ostep: „Stradowskie“, działnica 62, 63, 64.	Położenie cokolwiek wzniesione, chociaż i tu zabagnione miejsca się trafiają. Piasek dość głęboki bez żwiru i więcej spoisty, aniżeli w poprzednio opisanych ostepach, zdradza słabą przymieszkę gliny. W nizinach ruda bagienna, lecz w tych miejscach zwykle są łączki, lub karłowato rosnące dęby.	Panuje sosna, lecz dąb często przetyka sośninę. Stosunek tych rodzajów można oznaczyć cyfrą: Sosna 0·8 Dąb 0·2 Są to najlepsze i najstarsze drzewostany, jakie ten wydział posiada. Drzewostany te są wprawdzie przestarzałe, lecz z powodu wielkiego ich obszaru i innych okoliczności nie mogły wcześniej być wycięte. Wysokość dochodzi ponad 30 metrów. Przeciętna wysokość 26 m. Na 1 ha. znajduje się przeciętnie 380 sztuk drzew. Strzała sosnowa pełna i gładka. Dębowa nie zupełnie prosta i gładka.	0·7	110 111 112 113 114 115 116 117 118 119 120	326 299 364 339 348 316 297 376 436 441 397

Przyrost przeciętny na hektar w metr. sześcienn.	Jakość drewna	Krótki opis runa leśnego	Wydarzenia zasze w ciągu rozwoju drzewostanu (np. znaczniejsze kłęski elementarne, uszkodzenia prz. z owady, trzebieże itp.)	U w a g i
2·5	Drewno kręte i często zepsute przez grzyba zwanego hubem sosnowym ( <i>Trametes pini</i> ). Materiałowego drewna uzyskano 34 <sup>o</sup> / <sub>o</sub> .	Przeważnie mchy i bagno pospolite, a miejscami borówka czernica. Po osuszeniu pojawia się wrzos, a miejscami i borówka brzusznic, czyli kamioneczka ( <i>Vac. vitis idaea</i> )	Drzewostan ucierpiał z powodu zabagnienia, co powodowało częste wywroty. Również i grzyb częściej pojawia się na bagnach.	
2·5	Drewno zdrowe i w wielkiej części na tramy użyte. Materiału uzyskano 46 <sup>o</sup> / <sub>o</sub> .	Borówka czernica, kępami kruższyna.		
3·0 2·7 3·2 3·0 3·0 2·8 2·6 3·2 3·7 3·7 3·3	Znaczny procent drewna tramowego, mimo to wiele drewna murkowego (hub sosn.), dla tego procent drewna materiałowego mniejszy, niżby się z wyglądu tych drzewostanów spodziewać można. Dębina stosunkowo dość dobra, pozwalająca przy umiejętnej wyróbce uzyskać wyżej 80 <sup>o</sup> / <sub>o</sub> materiału. Wogóle uzyskano 62 <sup>o</sup> / <sub>o</sub> materiału, 48 <sup>o</sup> / <sub>o</sub> opału.	Podrost dębowy dość gęsty, miejscami podszyt grabowy i leszczynowy. Ziemia pokryta borówką czernicą.	Częstymi są wywroty, złomy i suszyce. Powodem jest obrzedni stan drzew, często napotykanym grzyb sosnowy, a nareszcie wysoki wiek drzewostanu.	Wogóle w tym ostępie od r. 1884. do 1894, więc w jednym dziesięcioleciu wycięto 62.335 ha. i uzyskano z tej przestrzeni razem 22.307 m <sup>3</sup> , z czego 13.791 m <sup>3</sup> przypada na drewno materiałowe, a 8.516 m <sup>3</sup> na opału. Zatem przeciętnie z jednego hektara 358 m <sup>3</sup> drewna ciałowego, tj. oprócz gałęzi i pniaków.

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Nazwa powiatu administracyjnego	Nazwa miejscowości	Treściwy opis siedliska leśnego	Opis drzewostanu	Stopień zwarcia oznaczony liczbą	Wiek w chwili sprzętu	Masa drzewna w metr. sześcienn. z hektara
Tarnów	Wierzchosławice, dzielnica lasu 67, 68, 69 (Maruszka)	<p>Położenie wzniesione, przerwane jednak miejscami wklęsłościami zabagnionemi.</p> <p>Glebę stanowi dość głęboki pokład piasku więcej spoistego, bez żwiru, z nieznaną przymieszką gliny. Na ługach wklęsłych pojawia się rudabagienna.</p>	<p>Dąb z sosną mieszane nieregularnie grupami, lub nawet całemi partjami. Tu i owdzie grab.</p> <p>W ogólnym ilościowym stosunku zmieszania, można przyjąć dla dęba połowę.</p> <p>Przeciętna wysokość sosny 30 m. (dochodzi do 33 m.), dęba 25 m.</p> <p>Na 1 ha. 380 do 410 sztuk drzew.</p> <p>Gdzie więcej dębiny, tam mniej masy drzewnej i odwrotnie; dęby bowiem wykazują mniejszą miąższość, a nadto stoją one zawsze obrzędniej.</p>	0·7	<p>116</p> <p>117</p> <p>118</p> <p>121</p> <p>122</p> <p>123</p> <p>124</p> <p>125</p> <p>126</p> <p>128</p> <p>129</p> <p>130</p>	<p>240</p> <p>300</p> <p>300</p> <p>328</p> <p>414</p> <p>386</p> <p>355</p> <p>353</p> <p>359</p> <p>407</p> <p>333</p> <p>325</p>
Tarnów	Wierzchosławice, dzielnica lasu 72, 73. (Krzywoleża).	<p>Położenie i gleba jak w dzielnicach pod nazwą Maruszka.</p>	<p>Drzewostan mieszany taksamo, jak w Maruszcze.</p> <p>Wysokość drzewostanu znacznie mniejsza; przeciętnie 22 m.</p> <p>Zwarcie również mniejsze; na 1 ha. znajduje się tylko 312 drzew. Szczególnie dąb stoi obrzędniej.</p>	0·6	<p>123</p> <p>124</p> <p>125</p> <p>126</p> <p>127</p> <p>128</p> <p>129</p> <p>130</p>	<p>336</p> <p>323</p> <p>260</p> <p>247</p> <p>373</p> <p>355</p> <p>274</p> <p>306</p>

Przyrost przeciętny na hektar. w metr. sześcien.	Jakość drewna	Krótki opis runa leśnego	Wydarzenia zasze w ciągu rozwoju drzewostanu (np. znaczniejsze kłeski elementarne, uszkodzenia przez owady, trzebieże itp..)	Uwagi
<p>2·1 2·6 2·5 2·7 3·4 3·1 2·9 2·8 2·8 3·2 2·6 2·5</p>	<p>Drewno czę- ściowo nawiedzo- ne przez hub so- snowy. Procent mate- ryałowego drewna wynoszący w po- czątkowych la- tach 41 do 59, pod- nosił się w na- stępnych latach, wskutek dokład- niejszej wyróbki dębiny, stopniowo na 61 aż do 79.</p>	<p>Pokrywa z opa- dłych liści i szpi- lek (ściola) uro- zmaiconą tu i ow- dzie borówką. Miejscami dość gęsty podszyt gra- bowy.</p>	<p>Z drzewosta- nów tych wybie- ranodawniej prze- trzymane tam na- sienniki, dlatego zwarcie jest mo- cno przerwane. Ten stan zwar- cia i halizny, u- łatwiają przystęp wiatrom szkodli- wym. Wywroty i złamiska pojawia- ją się tu często.</p>	<p>Wogóle wycięto w tych 12 bieżą- cych zrębach ro- cznych, tj. od roku 1880. aż do roku 1882. wł., nastę- pnie od r. 1885 aż do r. 1894. wł. 59.068 ha. i uzy- skano 12.450 m<sup>3</sup> drewna użytkowe- go, a 7.206 m<sup>3</sup> opa- łowego. Ogółem 19.656 m<sup>3</sup> drewna ciałowego, to jest oprócz gałęzi i pniaków. Drzewo- stany te dosięgły tak wysokiego wieku wskutek ich jednostajności w tej mierze na wielkich obsza- rach. Przeciętna wydatność z je- dnego hektara w tym ostępie re- bowym wynosi 333 m<sup>3</sup> masy drzewnej, bez koron i pnia- ków.</p>
<p>2·7 2·6 2·1 2·0 2·9 2·8 2·1 2·4</p>	<p>Przeciętnie 64% drewna ma- teryałowego, a 36% opałowego. Ostatnimi czasy podniósł się pro- cent drewna ma- teryałowego do 70% wskutek do- kładniejszej wy- róbki. Dębina stoi bar- dzo obrzednio. Strzała krótka, korona osadzona nisko. Drewno zdrowe.</p>	<p>Głównie ściola; tu i owdzie bo- rówka i rzadki podszyt grabowy.</p>	<p>Analogicznie z ostępem Maru- szka.</p>	<p>Wogóle wycięto w tym ostępie do r. 1894/5. 7.137 ha. i uzyskano 1.417 m<sup>3</sup> drewna mate- ryałowego, a 801 m<sup>3</sup> drewna opa- łowego, razem 2.218 m<sup>3</sup>. Przecie- tnie na 1 ha 311 m<sup>3</sup> masy, oprócz gałęzi i pniaków.</p>

Antor: Stanisław Remin.

Nazwa powiatu administracyjnego	Nazwa miejscowości	Treściwy opis siedliska leśnego	Opis drzewostanu	Stopień zwarcia oznaczony liczbą	Wiek w chwili sprzętu	Masa drzewna w metr. sześcienn. z hektara
Chrzanów	Kopce (Ratkówki)	<p>Położenie pagórkowate z lekkim nachyleniem ku północy i południowemu zachodowi.</p> <p>Gleba piaszczysta, sucha, głęboka.</p>	<p>Drzewostan lity sosnowy.</p> <p>Strzały drzewne nieco przysadkowate, znaczny procent krętych, nawiedzonych przez hub sosnowy (<i>Trametes pini</i>).</p>	0.6	100	269
Chrzanów	Kopce (Ratkówki)	<p>Płaskowyżyna terasowata, nachylona zrazu lekko ku północnemu zachodowi, następnie spadająca nagle w nizinę.</p> <p>Gleba wogóle piaszczysta, na wyżynie sucha, w nizinie świeża urodzajna, zwilżana strumykiem.</p> <p>Podglebie przepuszczalne z piasku żwirowatego.</p>	<p>Drzewostan lity sosnowy z kępą przymieszanego świerka i olszą w nizinie.</p> <p>Ogólny stosunek zmieszania:</p> <p>sosna 85<sup>0</sup>/<sub>0</sub>  świerk 12.6<sup>0</sup>/<sub>0</sub>  olsza 2.4<sup>0</sup>/<sub>0</sub>.</p> <p>Drzewostan przeciętnie dość dorodny; strzały gonne i walcowate.</p>	0.6	100	215



Przyrost przeciętny na hektar w metr. sześcienn.	Jakość drewna	Krótki opis runa leśnego	Wydarzenia zaszły w ciągu rozwoju drzewostanu (np. zna- czniejsze kłęski ele- mentarne, uszkodze- nia przez owady, trzebieże itp.)	U w a g i
2·69	<p>Przy wyróbce uzyskano:</p> <p>76·30% materiału okorowanego, 7·62% odpadło na korę, 9·84% opału łupanego, 1·18% opału obl. grub., 5·06% opału gałęzowego, zatem 83·92% materiału. 16·08% opału.</p> <p>Na każde 100 m<sup>3</sup> drewna ciałowego przypada 5·31 m<sup>3</sup> gałęzi, a 1·1 m<sup>3</sup> prz. choiny.</p>	Ściola, borówka czernica i wrzos.		<p>Wykazuje się cała nadziemna masa drewna.</p> <p>Do drewna gałęzowego wliczają się wyrobione konary i gałęzie od 3 cm. grubości do 6 cm. i wyżej, jeżeli tylko z korony pochodzą.</p>
2·15	<p>Uzyskano z iglastego:</p> <p>78·42% materiału okorowanego, 7·84% odpadło na korę, 11·68% opału łupanego, 0·37% opału obl. grub., 1·69% opału gałęzowego, czyli: 86·26% mater., 13·74% opału.</p> <p>Na każde 100 m<sup>3</sup> drewna ciałowego przypada 1·73 m<sup>3</sup> gałęzi, a 0·7 m<sup>3</sup> prz. choiny.</p>			<p>Mały procent gałęzowego drewna tłumaczy się tem, że drzewostan ten leży na kraju lasu przy wsi, a temsamem i gałęzie zabierane są podczas wyróbki przez szkodników.</p>

Autor: Stanisław Remin.

Nazwa powiatu administracyjnego	Nazwa miejscowości	Treściwy opis siedliska leśnego	Opis drzewostanu	Stożek zwarcia oznaczony liczbą	Wiek w chwili sprzętu	Masa drzewna w metr. sześciolen. z hektara
Chrzanów	Kopce, „Wilezak”, oddz. 31 <sup>o</sup> .	<p>Położenie pagórkowate, pochyłości nierówne, południowe i południowo-zachodnie.</p> <p>Gleba piaszczysta żyzna, świeża i głęboka. Podglebie skaliste z wapienia, który tylko w górnej części drzewostanu leży płycej i miejscami wylania się na powierzchnię.</p>	<p>Drzewostan nierównego wieku, mieszany nieregularnie</p> <p>Ogólny stosunek zmieszania:</p> <p>    sosna 0·9,     świerk 0·1.</p> <p>Tu i owdzie pojedynczy buk bez znaczenia.</p> <p>Strzały gonne, walcowate.</p>	0·70	70	339·0
Chrzanów	Zalas, Torfy, oddz. 40 <sup>c</sup>	<p>Położenie równe. Gleba w części torfiasta, w mniejszej części lepsza, piaszczysta, świeża, zasobna w pruchnicę.</p> <p>Podglebie nieprzepuszczalne, ilowate, leżące częścią płycej, częścią głębiej.</p>	<p>Na torfiastym gruncie panuje sosna o wzroście częścią mierzonym, częścią tęnym, o strzale krótkiej, sekatowej.</p> <p>Spodem skarłowaciały podrost sosnowy i przytłumiona żerdzina świerkowa.</p> <p>Na mniejszej części obszaru z lepszą glebą panuje świerk, w dość dobrym wzroście.</p> <p>Ogólny stosunek zmieszania:</p> <p>    sosny 0·65,     świerka 0·35.</p>	0·65	46	129·8

Przyrost przeciętny na hektar w metr sześcienn.	Jakość drewna	Krótki opis runa leśnego	Wydarzenia zasze w ciągu rozwoju drzewostanu (np. znaczniejsze kłęski elementarne, uszkodzenia przez owady, trzebieże itp.)	U w a g i
4·84	<p>Drzewo zdrowe. Przy wyróbce uzyskano:</p> <p>79·66% materiału okorowanego, 7·61% odpadło na korę.</p> <p>6·44% opału łupanego, 2·33% opału obl. grub., 1·05% opału obl. cienk., 2·91% opału gałązkowego, zatem 87·27% materiału, 12·73% opału.</p> <p>Na 100 m<sup>3</sup> drewna ciałowego wypada 2·99% drewna gałązkowego.</p>	<p>Mech i ściola, oraz miejscami borówka czernica i podszyt świerkowy.</p>	<p>Drzewostan ten nie doznał żadnych kłesk elementarnych.</p> <p>Niema też w nim śladów systematycznych trzebieży.</p>	<p>Liczne próby w okolicy wykazały, że na korę przez olagowanie drzewa odpada: przy drzewie sosnowem grubem 10%, sosnowem i świerkowem cienkiem 5%, a przy starszych świerkach i jodłach 6%.</p> <p>Z pomieszki sosny, świerka i drzewa cienkiego, z pośredniego drzewostanu, wypadło na korę 7·61%.</p>
2·8	<p>W większej części drewno sękatę. Uzyskano: 64·8% materiału okorowanego, 6·2% na korę odpadło, razem 71·0% materiału z korą.</p> <p>29% opału, a w tem: 6·2% łupanego, 12·1% obłakowego grubego, 3·7% obłakowego cienkiego, 7% gałązkowego.</p>	<p>Wysoki mech, kopce darniowe, gdzieniegdzie borówka czernica.</p>		<p>Na 100 m<sup>3</sup> drewna ciałowego przypada 7·4% drewna gałązkowego, a 3·3% choiny w metrach przestrzennych.</p>

Autor: Stanisław Bossowski.

Nazwa powiatu administracyjnego	Nazwa miejscowości	Treściwy opis siedliska leśnego	Opis drzewostanu	Stożek zwarcia oznaczony liczbą	Wiek w chwili sprzętu	Masa drzewna w metr. sześcienn. z hektara
Żywiec	Sucha „Spalenica“	Położenie górzyste. Wzniesienie 689 m. n. p. m. Stok zachodni, bardzo stromy. Gleba piaszczysta glinaka, kamienista, głęboko urodzajna.	Drzewostan jodłowy, powstały z naturalnego obsiewu. Wzrost równomierny, budowa strzał normalna.	0·6	140	566
Żywiec	Stryszawa „Równie“	Wzniesienie 600 m. n. p. m. Stok zachodni, upad — położenie równe. Gleba piaszczysta glinaka, świeża, podglebie ilaste, miejscami moczary.	Drzewostan jodłowy z nieznaczną przymieszką karłowatej buczyny. Osobniki jodły silnie rozwinięte.	0·6	150	593
Żywiec	Stryszawa „Czerniawa“	Wzniesienie 929 m. n. p. m. Stok północny stromy. Gleba piaszczysta glinaka, kamienista, zasobna w próchnicę, głęboko urodzajna.	Drzewostan bukowy, do wysokości 660 m. n. p. m. przetknięty jedliną, powyżej lity. Osobniki buka silnie rozwinięte.	0·5	220	407
Żywiec	Stryszawa „Hucisko“	Wzniesienie 680 m. n. p. m. Stok południowy stromy. Gleba piaszczysta glinaka, kamienista, podłoże skaliste piaszkowca, występujące miejscami na powierzchni; zresztą gleba głęboko urodzajna.	Drzewostan jodłowy, powstały z samoobsiewu. Wzrost regularny.	0·7	135	600
Żywiec	Ślemień „Rozcięta“	Wzniesienie 583 m. n. p. m. Stok południowy ze zboczami — wschodem i zachodem, nachylenie łagodne. Gleba glinaka z bardzo małą przymieszką piasku. Podglebie ilaste, miejscami moczary.	Drzewostan mieszany, składający się z jodły, ze znaczną przymieszką sosny, brzozy i osiki. Wzrost nieregularny, u sosny i brzozy karłowaty.	0·6	110	242

Przyrost przeciętny na hektar w metr. sześcienn.	Jakość drewna	Krótki opis runa leśnego	Wydarzenia zaszły w ciągu rozwoju drzewostanu (np. znaczniejsze kłęski elementarne, uszkodzenia przez owady, trzebieże itp.)	U w a g i
4·04	Materiału 85 <sup>0</sup> / <sub>0</sub> , Opału 15 <sup>0</sup> / <sub>0</sub> .	Cienka warstwa ścióły szpilkowej.	Wybiegłe osobniki ulegają corocznie uszkodzeniom przez wiatry.	Do rachunku wzięta cała nadziemna masa drzewna, tak' tu, jak i w następnych pozycjach.
3·95	Znaczny procent drzewa w rdzeniu nadgniętego. Uzyskano: Materiału 70 <sup>0</sup> / <sub>0</sub> , Opału 30 <sup>0</sup> / <sub>0</sub> .	Gruba warstwa próchnicy, na moczarach torf.		
1·85	Materiału 25 <sup>0</sup> / <sub>0</sub> , Opału 75 <sup>0</sup> / <sub>0</sub> .	Bujna roślinność paproci.	Dziewięcizy stan lasu.	
4·41	Materiału 95 <sup>0</sup> / <sub>0</sub> , Opału 5 <sup>0</sup> / <sub>0</sub> .	Cienka warstwa ścióły.	Corocznie powstaje znaczna ilość suszyc.	
2·20	Materiału 70 <sup>0</sup> / <sub>0</sub> , Opału 30 <sup>0</sup> / <sub>0</sub> .	Bujny podrost bukowy.	Przymieszka sosny i brzozy nastąpiła znacznie później, z nalotu.	

Autor: Stanisław Bossowski.

Nazwa powiatu administracyjnego	Nazwa miejscowości	Treściwy opis siedliska leśnego	Opis drzewostanu	Stopień zwarcia oznaczony liczbą	Wiek w chwili sprzętu	Masa drzewna w metr. sześcienn. z hektara
Żywiec	Krzeszów „Beskid“	Wzniesienie 846 m. n. p. m. Stok południowy ze zboczami — wschodniem i zachodniem, nachylenie — na zboczu zachodniem bardzo strome. Gleba piaszczysta glina głęboko urodzajna.	Drzewostan mieszany z jodły i buka, we wzroście i wieku bardzo nieregularny.	0·6	180	520
Żywiec	Las „Smrekowica“	Wzniesienie 887 m. n. p. m. Stok południowy, nachylenie strome. Gleba piaszczysta, gruba, zawierająca gruz kwarcu mleczonego; podłoże skaliste piaskowca, występujące miejscami — w całości skał — nad powierzchnię.	Drzewostan mieszany z jodły i świerka. Wzrost regularny.	0·6	160	320
Wadowice	Tarnawa, „Tarnawki“	Wzniesienie 570 m. n. p. m. Stok południowy, zbocze zachodnie bardzo strome. Gleba piaszczysta glina, kamienista, głęboko urodzajna.	Drzewostan jodłowy, nieznacznie buczyną przetknięty. Wzrost regularny.	0·7	150	661

Przyrost przeciętny na hektar w metr. sześcienn.	Jakość drewna	Krótki opis runa leśnego	Wydarzenia zasze w ciągu rozwoju drzewostanu (np. zna- czniejsze kłęski ele- mentarne, uszkodze- nia przez owady, trzebieże itp.)	U w a g i
2-88	Do 30% drzewa od pnia nagnię- go, uzyskano: materiału 60%, opału 40%.	Na zboczu wschodniem buj- ny podrost buko- wy.	W drzewostanie znajdują się do 400-letnie osobni- ki jodły, a z tych niektóre zupełnie zdrowe.	
2-00	Materiału 80%, opału 20%.	Bujna roślin- ność borówki czar- nicy.	Świerki obumierają coroc- znie w wielkiej ilości.	
4-40	Materiału 90%, opału 10%.	Gruba warstwa ścioly. W miej- scach prześwie- światlonych sa- mosiew jodłowy.		

Autor: Waleryan Niemiec.

Nazwa powiatu administracyjnego	Nazwa miejscowości	Treściwy opis siedliska leśnego	Opis drzewostanu	Stopień zwarcia oznaczony liczbą	Wiek w chwili sprzętu	Masa drzewna w metr. sześcienn. z hektara
Sokal	Skomorochy-Romusz, Sekcja XIII.	<p>Położenie równe, przerwane tylko miejscami lejkwatemi zagłębieniami, nieco nachylone ku północnemu wschodowi, od zachodu i południa zasłonięte lasami.</p> <p>Również i północna strona była dawniej osłoniętą lasem, z którego pozostało dziś jeszcze pasmo szerokie na kilkanaście metrów.</p> <p>Glebę stanowi glina piaszczysta, zawierająca wapno, zasobna w próchnicę, bardzo głęboka.</p> <p>Dopiero w głębokości 1.80 m. leży podłoże z marglu zbitego.</p>	<p>Drzewostan powstały z samosiewu, mieszany nieregularnie. Ogólny stosunek zmieszania następujący:</p> <p style="padding-left: 40px;">sosny 0.38, dęba 0.22, brzozy 0.31, osiki 0.09.</p> <p>Wzrost brzozy i osiki bujny, sosny mierzny, a dęba słaby.</p> <p>Osika nawiedzona przeważnie przez hub, a sosna w czwartej części przez mursz czerwony.</p> <p>Dąb i brzoza były całkiem zdrowe; gonność średnia.</p>	0.8	90	<p>sosny 139.80 brzozy 114.08 dęba 80.96 osiki 33.12 razem 368.00</p>



Przyrost przeciętny na hektar w metr. sześcienn.	Jakość drewna	Krótki opis runa leśnego	Wydarzenia zasze w ciągu rozwoju drzewostanu (np. zna- czniejsze kłeski ele- mentarne, uszkodze- nia przez owady, trzebienie itp.)	U w a g i
4·088	Drewno dębo- we i brzozowe bardzo dobre. So- snowe drewno li- che, odznaczające się małą ilością twardzieli smol- nej. Osikowe dre- wno przeważnie strawione grzy- bem.	Częściowo pod- szyt leszczynowy. Oprócz ścioly i mchu pojawiają się także turzyce.	Uprzątno tyl- ko pojawiające się wywroty i złami- ska, a to prze- ważnie osik, oraz i sosen nawiedzo- nych mursem.	Liczona cała masa nadziemna.

# Łąki w okolicach Liszek i Mnikowa

przez

Seweryna Krzemieniowskiego.

## I.

Teren łąkowy zajmuje dolinę rzeki Sanki i ciągnie się wązkim pasem od Mnikowa na południe, następnie zwraca się ku wschodowi i dosięga największej szerokości między Cholerzynem a Liszkami, które łączy droga, przecinająca łąki wpoprzek. W tym miejscu szerokość terenu wynosi 3 km. Dalej ku wschodowi północna granica łąk zwraca się na południe w kierunku Budzynia i Kryspinowa, gdzie znów tylko wązki pas łąk przecina droga bita, idąca do Liszek. Cały więc teren znajduje się między wsiami: Liszki od południa, Cholerzyn od północy, na zachód Mników a od wschodu Budzyń i Kryspinów. Do tego obszaru głównego dochodzą jeszcze małe łąki — jedna od Kaszowa, druga — od Morawicy. Ogółem wszystkie łąki mają zajmować przestrzeń około 1000 morgów.

W roku 1899 przystępując do zbadania tych łąk pod względem botanicznym, starałem się przedewszystkiem poznać cały teren i w myśl instrukcyi Sekcyi rolniczej Komisji Fizyograficznej zaznaczyć punkty, skąd należałoby wziąć próbki siana do analizy. Zacząłem obserwacye od Kryspinowa i posuwając się na zachód, wzdłuż prawego brzegu Sanki, doszedłem do Mnikowa, skąd zawróciłem i północną częścią całego obszaru wróciłem do Budzynia.

Poczynając od Kryspinowa, łąki są przeważnie bardzo mokre, z wyjątkiem niewielkiej przestrzeni poza parkiem w Kryspinowie i wzdłuż drogi bitej do Liszek. Pośród traw turzyce zaj-

mują poczesne miejsce; podszycie z mchów. Z traw dobrych wymienić należy *Festuca elatior* i *Alopecurus pratensis*. Co do ilości siana, łąki te są bardzo ubogie. Na północ od Liszek, a więc nieco dalej od Kryspinowa charakter flory zmienia się. W znaczniejszej ilości występuje tutaj *Cynosurus cristatus*. Ilość turzyc i skrzypów nieco się zmniejsza. Lecz ogólny charakter pod względem ilości trawy przedstawia się bardzo niejednostajnie. Przyczyny tych różnic upatrywać należy w tem, że są to łąki włościańskie (z Liszek, Chrosna, Czulowa i t. d.), podzielone na małe działki. Niektórzy właściciele działek, celem podniesienia wydajności łąk, starają się je użyźniać przez nawożenie odchodami ze szlachtuzów. Odbywa się to niejednostajnie i nie na całej przestrzeni. Stąd też i analizy siana z tych łąk nie mogłyby dać należytych podstaw do wnioskowania o ich wartości ani też o charakterze gleby. Z roślin nie posiadających żadnej wartości, spotykałem tutaj oprócz skrzypów *Phragmites communis* ponad brzegami rzeczki, z roślin szkodliwych *Pedicularis palustris*. Ta ostatnia występuje tutaj dosyć często, tworząc masowe skupienia, zajmujące niekiedy po kilkanaście sążni przestrzeni. W miarę posuwania się ku Mnikowu spotykamy łąki coraz lepsze. Trawa obfitsza, turzyc ilość się zmniejsza, podszycie mchu nie zawiera, skrzypy występują z rzadka, a w trawie przeważa *Bromus*, który dotąd spotykał się tylko w bardzo nieznacznych ilościach. Tutaj zaznaczyłem dwa punkty na łąkach należących do XX. Kamedułów na Bielanach. Ogólna przestrzeń tych łąk wynosi 55 morgów. Jeszcze lepsze łąki znajdują się na północ od łąk poprzednich i należą do Morawicy. Na jednej z nich przeważa *Holcus lanatus*, na drugiej zaś *Poa sp.* Powierzchnia ich obejmuje przeszło 80 morgów. Tak przedstawia się południowa część obszaru. Na stronie północnej stosunek się odmiennie zupełnie. Blżej Mnikowa leżą łąki gorsze — lepsze zaś są po stronie wschodniej. Tuż pod Mnikowem znaczną część terenu zajmują pastwiska, dalej zaś ciągną się łąki, na których spotykają się niewielkie kawałki uprawne, zasiane żytem lub owsem. Dalej ku wschodowi, gdzie do terenu dotykają zarosła z drobnej brzeziny, łąki są bardzo ubogie. Są tu wrzosowiska, mnóstwo skrzypów (*Equisetum silvaticum*), kępy sitów i mchy torfowce, a na nich *Drosera*. Wśród traw pierwszy raz występuje w znaczniejszej ilości *Briza media*, *Anthoxanthum*. Na południe od Cholerzyna łąka nie lepsza od poprzedniej: podszycie z mchów, turzycy, *Briza*, *Eriophorum*, *Rhinanthus* i dużo skrzypów.

Za najlepszą część tych łąk możnaby uważać sam środek, po obu stronach drogi przecinającej cały teren od południa ku północy, a prowadzącej z Liszek do Morawicy i Cholerzyna. Tutaj występuje w znacznej ilości *Dactylis glomerata* i *Bromus*. Dalej na południe mamy znów dużo *Cynosurus* i pierwszy raz w więk-

szej ilości *Alopecurus*. Łąki te więc na północ od Sanki w okolicach Budzyna są już stosunkowo bardzo dobre. Wszystkie wszakże one na całym terenie są 2, a bardzo często 1 kośne. Najlepsza łąka znajduje się pod Kaszowem, własność dworu Kryspinów, którą kosi się trzy razy. Gorsze części leżą na południowym brzegu Sanki między Liszkami a Mnikowem, a na północnym około Cholerzyna. Łąki pod Morawicą nie zbadałem jeszcze.

Jeżeli teraz rzucimy okiem na mapę geologiczną całej tej miejscowości, to zmiany i różnice w wartości łąk będą zupełnie zrozumiałe. Teren nachylony na wschód. Dopływy rzeczne idą od Kaszowa, Mnikowa i Morawicy. W tych miejscach mamy łąki znacznie lepsze niż na środku niziny całej, spoczywającej na trzeciorzędnych iłach. Cały środek zajmują łąki podmokłe. Na wydatność łąk kaszowskich niewątpliwie wpływają występujące tam iły i gipsy trzeciorzędne. Północną stronę niziny okalają piaski dyluwialne, które na polepszenie łąki nie wpływają.

Na całej tej przestrzeni wyznaczyłem 18 punktów, skąd należy wziąć próbki siana. Jednak wylewy zeszłoroczne i stąd opóźnione koszenie nie pozwoliły opracować całego terenu. Próbki wzięłem ze strony południowej całego obszaru, zajmującej około 500 morgów. Wybrałem łąki na ogólną sumę 200 morgów. Na każdą próbkę ważyłem 50 gr. siana. Celem zaś przekonania się, o ile z takich próbek można wnioskować o całości łąki, wykonałem trzy rozbiory kontrolne do próbek I, II i V. Jakkolwiek w rezultatach wahania wypadły wogóle nieznaczne, to jednak 50 gr. próbki wydaje się być nieco za mało. Dokładne wymieszanie siana, z którego bierze się próbkę, jest tu jedynie wskazanem, lecz z drugiej strony pociąga ono za sobą większy procent resztek, których oznaczyć nie można. Przy rozbieraniu nie oddzielałem turzyc na gatunki i dołączyłem do nich sity, których wogóle bardzo mało. Z traw najgorszych spotkałem w próbkach tylko *Aira caespitosa*. Gdzie było możliwem, z części traw nieoznaczonych wydzieliłem trawy gorsze. Do zestawienia rezultatów analiz oprócz instrukcyi Sekcyi rolniczej, posługiwałem się układem, jaki jest podany w wydawnictwie pruskiego ministerstwa wojny, p. t. „Anleitung zur Beurtheilung des Pferdeheues“.

## II.

## Analiza siana.

## Próbka I (Dwie analizy).

25 morgów łąki za Liszkami; koszona 17. czerwca 1899 r.

	%	%	% średnio	%	%	średnia
<i>Alopecurus pratensis</i> . . . . .	8·605	10·439	9·522			
<i>Festuca elatior</i> . . . . .	14·615	13·585	14·100			
<i>Lolium perenne</i> . . . . .	0·659	1·074	0·866			
<i>Poa pratensis</i> i <i>trivialis</i> . . . . .	10·032	9·305	9·668			
<i>Agrostis alba</i> . . . . .	1·632	4·773	3·202			
<i>Glyceria fluitans</i> . . . . .	0·449	2·166	1·308			
<i>Cynosurus cristatus</i> . . . . .	7·274	5·654	6·464			
<i>Festuca ovina</i> . . . . .	0·944	1·368	1·156			
<i>Holcus lanatus</i> . . . . .	0·258	—	0·129			
<i>Anthoxanthum odoratum</i> . . . . .	8·235	6·750	7·493			
<i>Aira caespitosa</i> . . . . .	3·011	2·302	2·656			
Nieoznaczone . . . . .	2·726	3·486	3·106			
<b>I Trawy (Gramineae)</b> . . . . .				58·440	60·902	59·671
Turzyce i sity . . . . .	16·435	10·583	13·504			
<b>II Turzyce i sity</b> . . . . .				16·435	10·583	13·509
<i>Trifolium pratense</i> . . . . .	2·507	2·628	2·567			
<i>Lotus corniculatus</i> . . . . .	0·180	0·152	0·166			
<b>III Motylkowe (Papilionaceae)</b> . . . . .				2·687	2·780	2·733
<i>Centaurea Jacea</i> . . . . .	2·675	0·892	1·783			
<i>Achillea millefolium</i> . . . . .	0·181	0·078	0·129			
<i>Leontodon taraxacum</i> . . . . .	0·139	0·833	0·486			
<i>Cirsium palustre</i> . . . . .	3·133	2·912	3·023			
Nieoznaczone . . . . .	0·229	0·203	0·216			
<b>IV Złożone (Compositae)</b> . . . . .				6·357	4·918	5·637
<i>Rumex acetosa</i> . . . . .	2·637	1·340	1·988			
<i>Plantago lanceolata</i> . . . . .	1·304	0·931	1·117			
<i>Galium palustre</i> . . . . .	0·070	0·112	0·091			
<i>Heracleum sphondylium</i> . . . . .	0·292	0·587	0·439			
<i>Lychnis flos cuculi</i> . . . . .	0·302	0·824	0·563			
<i>Cardamine pratensis</i> . . . . .	—	0·078	0·039			
<i>Lysimachia nummularia</i> . . . . .	0·269	0·427	0·348			
<i>Prunella vulgaris</i> . . . . .	0·683	0·351	0·517			
<i>Glechoma hederacea</i> . . . . .	0·114	—	0·057			
<i>Cerastium arvense</i> . . . . .	1·680	1·080	1·380			
<i>Myosotis palustris</i> . . . . .	0·293	0·474	0·383			
<i>Ranunculus</i> sp. . . . .	3·712	8·954	6·333			
Nieoznaczone . . . . .	1·806	2·488	2·147			
<b>V Inne liściaste</b> . . . . .				13·162	17·646	15·404

	%	%	% średnio	%	%	średnio
Skrzypy (Equisetaeae) . . . . .	2·877	3·105	2·991			
Mchy (Musci) . . . . .	0·043	0·066	0·054			
<b>VI Skrzypy i mchy . . . . .</b>				2·920	3·171	3·045

### Próbka II (Dwie analizy).

20 morgów z pośród łąk włościańskich, między Mnikowem a Liszkami, na południe od Sanki, 21. czerwca 1899.

Phleum pratense . . . . .	—	0·957	0·479			
Festuca elatior . . . . .	12·094	9·728	10·911			
Lolium perenne . . . . .	3·462	1·222	2·342			
Poa sp. . . . .	3·371	4·990	4·1805			
Agrostis alba . . . . .	3·196	4·313	3·7545			
Glyceria fluitans . . . . .	8·178	1·425	4·8015			
Cynosurus cristatus . . . . .	20·884	28·350	24·617			
Festuca ovina . . . . .	2·056	2·660	2·358			
Bromus mollis . . . . .	0·937	1·421	1·179			
Briza media . . . . .	0·265	0·193	0·229			
Anthoxanthum odoratum . . . . .	3·951	4·059	4·005			
Nieoznaczone . . . . .	5·154	5·952	5·553			
Aira caespitosa . . . . .	2·130	1·250	1·690			
Trawy nieoznaczone złe . . . . .	—	0·477	0·238			
<b>I Trawy (Gramineae) . . . . .</b>				65·678	66·997	66·337
<b>II Turzyce i Sity . . . . .</b>				9·118	7·256	8·187
Trifolium sp. . . . .	4·557	5·201	4·879			
Lotus corniculatus . . . . .	0·086	—	0·043			
Lathyrus pratensis . . . . .	—	0·281	0·140			
<b>III Motylkowe (Papilionaceae) . . . . .</b>				4·643	5·482	5·062
Centaurea Jacea . . . . .	1·473	0·399	0·936			
Achillea millefolium . . . . .	—	0·082	0·041			
Leontodon taraxacum . . . . .	1·259	0·491	0·875			
<b>IV Złożone (Compositae) . . . . .</b>				2·732	0·972	1·852
Rumex acetosa . . . . .	2·197	0·319	1·258			
Plantago lanceolata . . . . .	1·271	0·673	0·972			
Carum carvi . . . . .	—	4·158	2·079			
Galium palustre . . . . .	0·071	0·116	0·093			
Lychnis flos cuculi . . . . .	1·972	4·125	3·048			
Lysimachia nummularia . . . . .	0·197	—	0·099			
Prunella vulgaris . . . . .	1·823	0·045	0·934			
Cerastium arvense . . . . .	1·225	1·085	1·155			
Myosotis palustris . . . . .	2·840	1·162	2·001			
Linum catharticum . . . . .	0·029	—	0·015			
Rhinanthus maior . . . . .	0·391	—	0·195			

	%	%	% średnio	%	%	średnio
Ranunculus sp. . . . .	3·245	3·818	3·531			
Nieoznaczone . . . . .	1·724	1·715	1·720			
<b>V Inne liściaste . . . . .</b>				16·985	17·216	17·100
Skrzypy . . . . .	0·811	1·962	1·386			
Mchy . . . . .	0·033	0·114	0·074			
<b>VI Skrzypy i mchy . . . . .</b>				0·844	2·076	1·460

## Próbka III.

Łąka XX. Kamedułów około Mnikowa na południe od rzeczki, przeryniającej dolinę. Razem z następną łąką morgów 55. Badana 24. czerwca 1899.

Alopecurus pratensis . . . . .	1·545					
Festuca elatior . . . . .	11·261					
Lolium perenne . . . . .	0·829					
Poa spec. . . . .	5·701					
Agrostis alba . . . . .	8·156					
Glyceria fluitans . . . . .	3·806					
Cynosurus cristatus . . . . .	6·168					
Festuca ovina . . . . .	2·468					
Bromus mollis . . . . .	4·468					
Briza media . . . . .	0·259					
Anthoxanthum odoratum . . . . .	5·767					
Trawy dobre nieoznaczone . . . . .	4·557					
Aira caespitosa . . . . .	1·426					
<b>I Trawy (Gramineae) . . . . .</b>				56·412		
<b>II Turzyce i sity . . . . .</b>				1·264		
Trifolium pratense . . . . .	0·665					
Lotus corniculatus . . . . .	0·404					
Lathyrus pratensis . . . . .	7·231					
<b>III Motylkowe (Papilionaceae) . . . . .</b>				8·300		
Centaurea Jacea . . . . .	1·365					
Achillea millefolium . . . . .	0·017					
Leontodon taraxacum . . . . .	0·497					
Chrysanthemum Leucanthemum . . . . .	1·435					
Cirsium palustre . . . . .	8·052					
<b>IV Złożone (Compositae) . . . . .</b>				11·366		

	%	%	% średnio	%	%	średnio
<i>Sanguisorba officinalis</i> . . .	0·117					
<i>Rumex acetosa</i> . . . . .	4·487					
<i>Plantago lanceolata</i> . . . .	1·419					
<i>Polygonum bistorta</i> . . . . .	1·570					
<i>Galium palustre</i> . . . . .	0·034					
<i>Lychnis flos cuculi</i> . . . . .	3·911					
<i>Cardamine pratensis</i> . . . . .	0·082					
<i>Spiraea ulmaria</i> . . . . .	1·106					
<i>Myosotis palustris</i> . . . . .	0·293					
<i>Cerastium arvense</i> . . . . .	0·737					
<i>Lysimachia nummularia</i> . . . .	0·138					
<i>Ranunculus sp.</i> . . . . .	4·005					
Nieoznaczone . . . . .	4·749					
<b>V Inne liściaste.</b> . . . .				22·648		
<b>VI Mehy</b> . . . . .				0·009		

## Próbka IV.

Na północ od poprzedniej, z którą zajmuje 55 morgów, 27. czerwca 1899.

<i>Alopecurus pratensis</i> . . . .	3·589					
<i>Phleum pratense</i> . . . . .	4·908					
<i>Festuca elatior</i> . . . . .	14·965					
<i>Lolium perenne</i> . . . . .	0·592					
<i>Poa sp.</i> . . . . .	2·468					
<i>Avena elatior</i> ( <i>Arrhenatherum</i> ) . . . . .	0·025					
<i>Agrostis alba</i> . . . . .	15·426					
<i>Festuca ovina</i> . . . . .	1·672					
<i>Bromus mollis</i> . . . . .	8·744					
<i>Holcus lanatus</i> . . . . .	0·176					
<i>Anthoxanthum odoratum</i> . . . .	1·543					
Trawy nieoznaczone dobre.	3·702					
<i>Aira caespitosa</i> . . . . .	3·866					
Nieoznaczone złe trawy . . . .	0·500					
<b>I Trawy (Gramineae)</b> . . . .				62·176		
<b>II Turzyce i sity</b> . . . . .				1·630		
<i>Trifolium pratense</i> . . . . .	0·828					
<i>Lathyrus pratensis</i> . . . . .	0·061					
<b>III Motylkowe (Papilionaceae).</b> . . . . .				0·889		
<i>Cirsium palustre</i> . . . . .	0·637					
<i>Chrysanthemum leucanthemum</i> . . . . .	0·245					
Nieoznaczone . . . . .	0·229					
<b>IV Złożone (Compositae)</b> . . . .				1·111		



	%	%	% średnio	%	%	średnio
Carum carvi . . . . .	8.132					
Rumex acetosa . . . . .	0.609					
Polygonum bistorta . . . . .	0.950					
Galium palustre . . . . .	0.510					
Lychnis flos cuculi . . . . .	5.243					
Lysimachia nummularia . . . . .	0.246					
Cerastium arvense . . . . .	5.029					
Spiraea ulmaria . . . . .	0.104					
Ranunculus sp. . . . .	8.871					
Nieoznaczone . . . . .	3.776					
<b>V Inne liściaste . . . . .</b>				33.470		
<b>VI Skrzypy . . . . .</b>				0.725		

## Próbka V (Dwie analizy).

50 morgów łąki na północ od poprzednich, bliżej Mnikowa.  
5. lipca 1899 r.

Alopecurus pratensis . . . . .	2.487	1.830	2.158			
Phleum pratense . . . . .	1.824	1.989	1.907			
Festuca elatior . . . . .	9.090	5.988	7.539			
Lolium perenne . . . . .	1.744	1.689	1.716			
Poa sp. . . . .	6.233	5.512	5.873			
Agrostis alba . . . . .	2.392	1.619	2.005			
Cynosurus cristatus . . . . .	11.898	8.337	10.118			
Festuca ovina . . . . .	1.814	2.631	2.222			
Bromus mollis . . . . .	5.853	6.665	6.259			
Holcus lanatus . . . . .	18.718	22.655	20.686			
Anthoxanthum odoratum . . . . .	6.683	9.416	8.049			
Trawy nieoznaczone dobre . . . . .	4.321	7.381	5.851			
Aira caespitosa . . . . .	0.406	0.944	0.675			
Trawy złe ni. oznaczone . . . . .	—	0.521	0.261			
<b>I Trawy (Graminae) . . . . .</b>				73.463	77.177	75.320
<b>II Turzyce i sity . . . . .</b>				1.449	0.667	1.058
Trifolium pratense . . . . .	3.018	1.734	2.376			
Medicago lupulina . . . . .	1.923	6.513	4.218			
Lathyrus pratensis . . . . .	0.053	0.026	0.039			
<b>III Motylkowe (Papilionaceae) . . . . .</b>				4.994	8.273	6.634
Centaurea Jacea . . . . .	1.315	—	0.657			
Achillea millefolium . . . . .	—	0.038	0.019			
Leontodon taraxacum . . . . .	1.088	1.454	1.271			

	%	%	% średnio	%	%	średnio
<i>Cirsium palustre</i> . . . . .	4.599	0.757	2.678			
<i>Chrysanthemum leucanthemum</i> . . . . .	1.180	—	0.590			
Nieoznaczone złożone . . . . .	0.079	—	0.040			
<b>IV Złożone (Compositae)</b> . . . . .				8.261	2.249	5.255
<i>Carum carvi</i> . . . . .	—	0.395	0.197			
<i>Heracleum sphondylium</i> . . . . .	0.364	1.867	1.116			
<i>Rumex acetosa</i> . . . . .	2.890	2.629	2.759			
<i>Polygonum bistorta</i> . . . . .	0.197	—	0.099			
<i>Plantago lanceolata</i> . . . . .	0.402	0.512	0.457			
<i>Prunella vulgaris</i> . . . . .	0.213	—	0.106			
<i>Cerastium arvense</i> . . . . .	0.748	0.680	0.714			
<i>Lychnis flos cuculi</i> . . . . .	1.169	1.915	1.542			
<i>Galium palustre</i> . . . . .	—	0.098	0.049			
<i>Myosotis palustris</i> . . . . .	0.881	0.414	0.647			
<i>Alchemilla vulgaris</i> . . . . .	0.283	0.030	0.157			
<i>Ranunculus sp.</i> . . . . .	2.565	1.177	1.871			
Nieoznaczone . . . . .	2.119	1.920	2.019			
<b>V Inne liściaste</b> . . . . .				11.831	11.637	11.734

## Próbka VI.

Łąka na wschód od poprzedniej, 45 morgów, 5. lipca 1899 r.

<i>Alopecurus pratensis</i> . . . . .	2.309					
<i>Phleum pratense</i> . . . . .	4.352					
<i>Festuca elatior</i> . . . . .	9.231					
<i>Lolium perenne</i> . . . . .	0.929					
<i>Poa sp.</i> . . . . .	19.072					
<i>Agrostis alba</i> . . . . .	6.143					
<i>Cynosurus cristatus</i> . . . . .	4.237					
<i>Festuca ovina</i> . . . . .	4.357					
<i>Bromus mollis</i> . . . . .	1.759					
<i>Briza media</i> . . . . .	0.269					
<i>Holcus lanatus</i> . . . . .	1.336					
<i>Anthoxanthum odoratum</i> . . . . .	5.482					
Trawy nieoznaczone . . . . .	5.395					
<i>Aira caespitosa</i> . . . . .	2.032					
<b>I Trawy (Gramineae)</b> . . . . .				66.903		
<b>II Turzyce i sity</b> . . . . .				0.613		
<i>Trifolium pratense</i> . . . . .	2.146					
<i>Medicago lupulina</i> . . . . .	1.717					
<i>Lathyrus pratensis</i> . . . . .	5.193					
<b>III Motylkowe (Papilionaceae)</b> . . . . .				9.056		

	%	%	% średnio	%	%	średnio
Achillea millefolium . . . . .	0.127					
Cirsium palustre . . . . .	3.034					
Chrysanthemum leucanthemum . . . . .	4.507					
<b>IV Złożone (Compositae) .</b>				<b>7.668</b>		
Heracleum sphondylium . . . . .	1.794					
Rumex acetosa . . . . .	1.732					
Polygonum bistorta . . . . .	2.386					
Plantago lanceolata . . . . .	0.711					
Prunella vulgaris . . . . .	0.098					
Cerastium arvense . . . . .	2.478					
Lychnis flos cuculi . . . . .	1.115					
Galium palustre . . . . .	0.513					
Myosotis palustris . . . . .	0.596					
Alchemilla vulgaris . . . . .	0.275					
Ranunculus sp. . . . .	1.721					
Nieoznaczone . . . . .	2.073					
<b>V Inne liściaste . . . . .</b>				<b>15.492</b>		
<b>VI Skrzypy . . . . .</b>				<b>0.265</b>		

## Zestawienie ogólne

rezultatów analiz próbek (I, II, i V wzięte są średnie z analiz).

Próbki:	I	II	III	IV	V	VI
Trawy dobre	38.667	26.468	31.299	41.973	21.198	42.036
" średnie	18.347	37.941	23.687	15.837	53.186	22.835
" złe	2.657	1.929	1.426	4.366	0.936	2.032
Ogółem traw . . . . .	59.671	66.338	56.412	62.176	75.320	66.903
Turzyce i sity . . . . .	13.509	8.187	1.264	1.630	1.058	0.613
Motylkowe . . . . .	2.734	5.063	8.300	0.889	6.634	9.056
Złożone . . . . .	5.637	1.852	11.366	1.111	5.255	7.668
Inne liściaste . . . . .	15.404	17.100	22.648	33.470	11.734	15.492
Skrzypy . . . . .	2.991	1.387	—	0.725	—	0.265
Mchy . . . . .	0.055	0.073	0.009	—	—	—

Zestawienie wartości siana z powyższych próbek z uwzględnieniem podziału roślin na 3 kategorie: dobre, mierne i złe, według wydawnictwa pruskiego ministerstwa wojny:

Próbki:	I	II	III	IV	V	VI
Siano dobre . . . . .	45·173	35·804	45·568	51·603	31·546	52·9
Siano mierne . . . . .	24·451	42·971	39·269	23·177	60·416	32·5
Siano złe . . . . .	30·377	21·225	15·162	25·221	8·038	14·6

