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ORNITHOLOGY.



NEWSPAPER-GUTTINGS.

THE ACADEMIC

EXERCISE BOOK

H.

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TORONTO:
ADAM, STEVENSON & Co.,
PUBLISHERS AND STATIONERS.

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Mr Vennor's Bird Book in En
we clip the following from the
"The Live Stock Journal & Fauc

37

14th May } = 3 Dms at \$45⁰⁰
 to
 14th Aug } = \$135⁰⁰

135⁻ - 50 = \$85⁻

England. -

The December Supplement to the
 "Lancier's Gazette" of London Eng.

RARE WOODPECKERS.

(To the Editor of the Daily Witness.)

MONTREAL, Oct. 30, 1861.

SIR,—A large specimen of the Pileated Woodpecker was brought into market yesterday morning, said to have been shot across the river. Unfortunately it wanted one of its feet, thus spoiling a specimen that was in every other respect good. This Woodpecker is the second in size of the American species. Its principal resorts are in the neighborhood of gigantic growths of timber, where he may be heard hammering and cackling from morning to night. His cackle is heard chiefly before rain.

Two specimens of the Banded Three-toed Woodpecker were shot last week on Nun's Island; they are rare in this vicinity.

AN OBSERVER.

April -

20th -	Carriage Montreal to R.R.	50
"	" " "	50
	R.R. ticket to Belleville -	6 15 -
	Buss Belleville -	50
23 ^d -	Board 3 days Belleville -	4 50
	Tracing paper - 4 sheets -	80
	Meals Cannell, Kingston	1 00
27 -	Hotel Toronto 3 days	5 50
"	R.R. to Toronto from Belleville	3 75 -
30 -	" Belleville from Toronto	3 75 -
	Carriage Belleville from R.R.	50
"	Belleville to Montreal	6 15 -
	Carriage Montreal from R.R.	50 -

34 10

A correspondent of the London Times urges the study of ornithology in connection with meteorology. He says long experience has taught him that all great atmospheric changes are sure to be preceded by unwonted appearances among birds. When the late terrible gales were approaching he saw large flocks of starlings in a locality where they never appeared before, the next day wood pigeons, and on the next large flocks of wild geese took their flight southward.

May -

May 1 -	Cartage in Montreal boxes to from office - Fitzgerald -	2.50
6 -	Groceries Reay -	10.64
"	" " "	6.58
	Soap - 6 Cakes -	.35-
7 -	Cartage Montreal en Camps } " out fit - from office }	1.00
"	Telegraph to Toronto en	
"	Survey business -	.30
"	Canrall meals -	.50
"	Belleville - Carriage	.50
8	" 1/2 day board -	2.25-
9	Kingston - Hotel -	1.50
	Carriage to Rideau Boat -	.50
	Cartage freight -	1.00
10	Boat from Kings ^t to Newboro	2.00
	Charge on Canoe -	.50
11	Cartage Newboro to	.50
"	Cash to Barr (see further on)	
	meals in Bedford 3	75-
12	Telegraph to Kingston en office business	28
	Board at Newboro -	4.50

36 15-

THE BIRDS OF CANADA.—We have been favored with some advance sheets of a pamphlet, to be published late this summer, entitled, "Contributions to Canadian Natural History, containing lists of the mammals and birds of Canada, with instructions for their collection and preservation, by H. G. Vennor. Also the plants of Canada, with practical instructions for their preservation, by John Bell, M.A., M.D."

The lists of birds will prove very valuable to Canadian Students of Natural History, as they will be the most perfect yet published. The information from which they are compiled has been obtained from all parts of Canada; and, before completing them, the author intends to add the results of another season's rambles in the wooded districts of Canada. It will be remembered that the *Witness* was indebted to him last season for letters from the Manitoulin Islands and North shore of the Georgian Bay.—The lists of the plants of Canada will be got up with similar care by the enthusiastic naturalist whose name is given above.

May -

13.	Team Nontro to Bedford	5.00
"	Stage " " Brockville	2.00
"	Meals Farmersville --	.60
"	Telegraphs on office business	.50
14	Meals for 2. Brockville	1.00
"	Buss do do	.50
15	Team Belleville to Marmora	5.00
"	" Marmora " mine	2.00
17	Board at Marmora	1.25
18	Meals & horse feed Eldorado	1.50
19	do do do	1.50
"	do do Bridgewater	1.50
20	Board at Madoc	4.50
22	Ink bottle	.30
"	Paper	.25
25.	Lini pail	1.50
27 -	Fanning for horse line visiting Madoc & Marmora Minis 5 days.	10.00
30.	Paid Barr 1 month	30.00

38.80

INTERESTING TO NATURALISTS. — ARRIVAL OF A FLOCK OF PELICANS ON BURLINGTON BAY.—Early on Saturday morning last fishermen and others on the beach were surprised at observing a flock of unusually large birds, uttering loud screams, and hovering over the bay and beach. The attention of Mr. Dynes and other sporting characters was directed to the circumstance, and they at once made arrangements to become more intimately acquainted with the new visitors. The parties procured boats, which they, to a certain degree, disguised by covering them with rushes, and followed in pursuit, being armed with fowling pieces. After several hours patient manœuvring on the bay they came within shooting distance, and simultaneously discharged a well-directed volley amongst the flock, which had the effect of killing one and wounding another, which were secured. The others took wing, but it was hoped, however, that they might return, and during the day several amateur sportsmen kept a sharp look out for them, but without success. There were about eleven in the flock. The birds secured proved to be male and female specimens of the Pelican (*Pelicanus Americanus*) the former of which is pronounced to be a very fine specimen of this magnificent bird, and has appropriately been placed in possession of Thomas McLraith, Esq., manager of the City Gas Works, whose collection of ornithological specimens is well known amongst Canadian naturalists, and to which it will, no doubt, prove a very valuable acquisition. Nearly a quarter of a century has elapsed since any living specimens of this bird has been seen in Canada. The following particulars respecting it, which are in every way correct, may be interesting: Height, 6 feet 6 inches; width from tip to tip of wings, 9 feet 2 inches; (the body is proportionately large,) length of upper mandible, 1 foot 3 inches, and that of lower, 1 foot 9 inches; depth of sack underneath lower mandible, 10 inches; this appendage is possessed of great elasticity, and has a capacity of about one peck. The plumage is snowy white, with the exception of the primary and secondary feathers of the wings, which are black, and have white shafts. The bill and legs are of a beautiful orange yellow. According to Prof. Baird and other naturalists, the Pelican is seldom seen north of 36th parallel, and it is therefore difficult to assign a reason for its appearance in this region, unless, indeed, the idea be entertained that they have lost their way whilst migrating in search of their breeding grounds.

1863

June

8 -	Board Belleville	
10 -	Team to Marmora	5.00
12	Board do	3.00
"	Team do to Belleville	5.00
"	Man hire Marmora	2.00
"	Paid Wilkins Cash for 1 weeks work -	5.00
13 -	Bus to R.R. Belleville 2	.50
	Boat for man B to Kingston	2.50
14	Cartage from R.R. Kingston	.50
	Meals Kingston 2	1.00
	Board 1/2 day do	2.00
16 -	Stage for 2 from Kingston to Newboro £2 1.75	3.50
	meals on road -	1.00
19 -	Board at Newboro for party teaming etc (see Kennedy's exp)	23.77
20 -	Meals for 2 Whitefish	1.00
	Stage from Whitefish to Kingston for 2 -	2.00
21.	" meals -	1.00
	Cartage to R.R. Kempton	.50

59 27

CORRESPONDENCE.

(To the Editor of the Daily Witness.)

MONTREAL, October 21, 1861.

SIR,—I have observed that for several days during the past week we have been visited by a little bird that I have not had the pleasure of being heretofore acquainted with. They appear to be here in considerable numbers, and indulge in a few "wood notes wild,"—indeed, almost a little song, as if they knew that in a week or two we may be "snowed up;" and that they were determined, like Mark Tapley, to be "jolly under the circumstances." Some of them (I presume the male birds) are of very pretty plumage, with a greenish-yellow breast and black stripes in the wings. From my knowledge of birds in England, I should set them down as members of the 'finch' tribe.

I have not been long enough in this country to be even on "nodding terms" with the feathered tribe here, and, moreover, not having been the successful competitor for "Audubon," I am at fault. I doubt not that many of your subscribers have noticed our visitor also, and many amongst them better informed than myself, and able to instruct,

Yours respectfully,

~~X~~
ONE WHO IS NOT TOO PROUD TO LEARN.

If the writer of the above had gone a little more minutely into the description, a decisive answer could likely have been given. However, the species with us at present being few, we may hit upon the right one. We would suggest two as approaching to the description in some particulars. The first and most likely is the Goldfinch (American) *Fringilla-Tristis*—Linn. This species is very common with us at present, in open fields and around the base of the mountain. It is now dressed in its winter plumage, the bright orange of the breast is turned to a greenish yellow, and the wings are streaked with dusky brown and black. The other species is the golden-crested Ringlet, *Regulus-Auricapillus*, a bird well known in England. General plumage, greenish yellow; the wing feathers are dusky green, edged with white; crown of male bird, a bright orange yellow. This little bird is rather common in our orchards and gardens at the present season, searching the trees and bushes for insects. While thus engaged it utters a squeaking song, quite different from its Spring warble. If any one can throw more light on the subject, it will be interesting.

June -

23 ^d	Stage from Ballerille to Bridge- water for three	3.75-
24	Meals for do Bridgewater	1.50
"	Team from B h Maginnan Stk.	6.00
25	Board at Maginnan Stk	1.75-
	Boat on Jull Lake	.50
	Cartage to Lake	1.00
26	Team from Jull Lake to Miller Township -	5.00
	Board at Playfair's Corner	4.00
	do do	1.20
"	3 meals Mississippi Riv - for man	.75-
27.	Meals on dock for 3 -	1.00
"	Boat on Jull Lake	.50
"	Meals for 2 Jull Lake	.50
29	Paid Messer 5 days work	5.00
"	Paid Cloyne board	2.50
"	Paid Bosch for team from Angleria to Jamneth -	7.25-
"	Meals on road	.50
30	Board for 2 Jamneth	2.50

45.20

wish for more space to give a passing review of the numerous magazines and reviews as they appear, especially the numerous valuable productions of scientific genius, many of which, excellent in substance, are equally valuable in execution, have already failed to receive the amount of appreciation and support. Of Canadian periodicals, perhaps none is more worthy of praise than the *Canadian Naturalist* which was commenced in a popular form in Ottawa, by Mr. Billings, the indefatigable assistant of Sir Wm. Logan, and through the ability of that writer, had immediately a wide circulation. It has since become more purely scientific and original, under the guidance of the Montreal Natural History Society. We avail ourselves of a judicious review of the last number from the *Quebec Chronicle* :—

"The December number of this magazine has just reached us, containing an article on the theories of the formation of mountains, a description of a new trilobite from the Potsdam Sandstone, notes on birds wintering in and about Montreal, and notes on aboriginal antiquities recently discovered on the Island of Montreal. Besides these, there is a variety of book notices and reviews, also some correspondence and miscellaneous matter, of which the least intelligible is a letter of Sir William Logan's, on the Fauna of the Quebec group of rocks and the Primordial Zone of Canada.

The paper on the birds wintering around Montreal is by Mr. H. G. Vennor, Jr., and is well worthy of being carefully read. Twenty-three winter residents and four loiterers are enumerated, but the very true remark is made that, in comparing notes of the last five years the list of birds varies, each winter, as the weather has been mild or severe. Almost all our birds are migratory, and it is one of the most interesting departments of Canadian Ornithology to observe the varying limits of the several kinds, to note the species which climate alone influences and those which follow or flee from extending cultivation. Regarding the efforts of such men as Mr. Vennor to be of the utmost importance to Natural History and Science, believing that those who study, and commit faithfully and laboriously to paper the characteristics of their particular locality, such as the Vennors of Montreal, the McIlwraiths of Hamilton, the Coupers and Lemoines of Quebec, render at least as much real service as those who found systems and acquire a wider fame, we give our thanks to the editor of the *Canadian Naturalist* for giving this contribution so prominent a position in his book.

Mr. Dawson's notes on the aboriginal antiquities found at Montreal are also highly interesting. After describing them, he draws the following conclusions, 1st. That the aborigines of Montreal were of the Algonquin race. 2nd. That in the time of Cartier they were giving way before the Iroquois and Hurons, and shortly afterwards lost possession of the Island of Montreal. 3rd. The displacement of the Algonquins tended to reduce them to a lower state of barbarism. Mr. Dawson thus speculates :—

"If Hochelaga with its well cultivated fields, and stationary and apparently unwarlike population, was only a remnant of multitudes of similar villages once scattered through the great plain of Lower Canada, but destroyed long before the occupation of the country by the French, then we have here an actual historical instance of that displacement of settled and peaceful tribes, which is supposed to have taken place so extensively in America. Our primitive Algonquins of Montreal may thus claim to have been a remnant of one of those old semi-civilized races, whose remains scattered over various parts of North America, have excited so much speculation. Had Cartier arrived a few years later, he would have found no Hochelaga. Had he arrived a century earlier, he might have seen many similar villages scattered over a country occupied in his time by hostile races.

June -

30 -	Team from Samworth to Salmon River -	2.00
"	Meals in Salmon Riv ^r -	.50
"	Ferry boat up do do to -	
"	Arden Village for 2 -	2.00
31 -	Team from boat landing to - Arden Village with freight.	1.50
	Paid Messer 1 month -	23.00

add to July -

meats through Lavant

at Mr Broomings 16 meals - 4.00

Horse feed } 1.25

" keeps }

Man hire 5.00

Carrriage box specimens

to Perth - 3.00

July 7 - Paid Milkis for work up

to date 21 days - 21.00

26.25
10.50
15.75

July -

1	✓	Board at Aiden Village	2.00
	✓	Steam from do to Bedford	5.00
	"	✓ " through Bedford	2.00
2	✓	Meats on road	1.00
3	✓	Paid Barr for 39 days work	39.00
"	✗	" Plinston " 35 " "	35.00
		" provisions for May & June	56.60
	✓	1 Steam Bedford to Newboro	3.00
	✓	1 " w ^{to} Playfair Corners -	10.00
	✓	1 " Bedford to Newboro	2.00
	✓	Board Newboro	1.50
		Ride on boat to Kingston	1.50
		" " (man)"	1.50
		Meats do -	.60
4	-	" Kingston	.50
		R.R. to Belleville	1.60
		Buss. "	.50
10	-	Wilkens 15 days work -	15.00
		Meats 2 Kingston	1.00
		Carriage do	.50
13	-	Buss Belleville	.50

X
ORNITHOLOGICAL RAMBLE ON THE QUEEN'S BIRTH-DAY.

—A large number of citizens started early last Friday morning for the pleasure trip on the Ottawa. The morning was pleasant, but rather hazy, as the "Prince of Wales," with flags and music, passed Isle d'Orval, (Sir George Simpson's,) and a mist hung over the shores, freshly clad in their vesture of spring green. During the detention at the lock at Ste. Anne's, four Indians shot the rapid in a canoe. After another hour's sail, we landed at Pointe a Cavagnol, leaving the rest of the party to proceed to Carillon. As we landed, a salute was fired from an old cannon on the shore. Procuring a punt, we commenced exploration along shore and among the trees, which, at this season, grow "out of the water and in the water." A pleasanter part of the year could not have been chosen. The trees were just throwing out their leaves, and the cherry blossoms their sweet perfume. Hundreds of birds sang in every thicket. Nature, indeed, was breaking forth in all her beauty, after the long and dreary reign of winter. Hardly had we entered these woods, when a concert, which till now we had only

- Over -

July

15-	Meals Kingstn	.50
	" Connal	.50
	Carriage abnheal	.50
17-	Carriage "	.75-
	<u>Rideam boat detained.</u>	
23	Kingstn board - 1 week -	8.00
24	Telegrams office business	.52
25-	do do	.25-
"	Meals Kingstn	.50
	" Brockville	.50
	Bus "	.25-
"	R.R. Brockville to Perth	1.20
	Bus Perth	.25-
	Board Allans Hotel Perth -	4.00
26	Stage to Lanark	1.25-
27	Team pm " to Lavant	5.00
29	Steel hammer made	1.75-
"	Biscuit	2.00
"	Ham 100lb 15 ^{cts}	15.00
31	Meals Palmerston	.50
	Horse feed	.25-
	Paid Haskin - Miller Iron ^o for work during month	10.00

35.47

heard in the distance, burst upon us in full concord and discord. Purple Grakles flew from tree to tree in company with the Marsh Blackbirds, all the while uttering their harsh, discordant cries. Tyrant Flycatchers, perched overhead in the branches, screeched a menace to us, as we glided underneath. The Belted Kingfisher uttered his guttural notes in the distance, taking care at the same time to keep at a distance. The Grakles and Blackbirds were busy building their nests in the adjoining bushes, and the Tyrant Flycatchers seemed to be thinking of doing the same, as they kept up a constant squabble, flying by pairs from one tree to another. Now and again the mellow and rich notes of the Baltimore Oriole or Hangnest came echoing through the glade. The loud whistle of the golden-winged Woodpecker was also heard at intervals. Humming-birds darted in every direction. Before leaving, a number of fine birds were procured as specimens; all being in their most perfect plumage during this part of the season.

One interesting bird we had almost overlooked. We refer to the Rice-bird or Bob-o-link, which is very numerous everywhere this spring. His song at once attracts attention. Starting from the ground, he rises to a certain height, when he again descends on outstretched and motionless wing, jingling out a series of high and low notes in quick succession, very much resembling the striking together of the high and low keys on a piano. It is said that this bird is not known where rice is not to be found. He spends both summer and winter in the South, amongst the large rice plantations. He is certainly a Southerner. Why, there are such a number here this season, we do not know, but perhaps it is caused by the Southern war. The poor birds, wishing to be neutral, have come to the free soil of Canada to spend their summer. And now again we are "homeward bound," and soon find ourselves swiftly sailing homeward, refreshed and invigorated by the day's rambles.

H C V

August -

1.	Board in Palmerston for two	1.75-
2.	Board McPhails	1.75-
"	meals Round Lake	.50
3.	" Darling road	.50
4	Board Craigs do	1.50
6.	Lanark to Perth team	2.00
7 th	Perth board	1.00
"	Perth to Brockville	1.20
8.	Carriage & Cartage Bellville	1.00
"	Brockville to Perth for 2 -	2.40
"	meals Brockville "	1.00
(4)	Horses horse hire 9 days	9.00
8 -	Horse hire 2 "	1.75-
	through Dalhousie & L'Avant.	
12 -	Perth to Smith's falls & back.	.70
14	Board Perth	4.00
"	Stage fare do to Lanark.	1.00
"	Lanark to Watsons Corners.	3.00
15 -	Board Watsons Corners -	2.00
	Horse feed	1.50
16	meals on L'Avant road	.50
17	Horses horse hire &	5.00

THE HERONS ON THE NUN'S ISLAND
NEAR MONTREAL.

To the Editor of the EVENING TELEGRAPH.

The following is part of a paper read before the Montreal Natural History Society on Monday evening Nov. 23, by H. G. Verner, jr.:—"About the end or middle of May the night herons leave their winter quarters, (which are in the Southern States, many of them remaining there the whole year round) and proceed northward, settling down in squads, some along the Atlantic coasts, and rivers of the middle states, while others find

August

Pike

20-	Board Stack Lake Bur-	
	gess	2.00
"	Steam Perth to do	3.00
22	Board at Newboro	1.50
23	" " Westport	1.75-
"	Team Westport to Perth	5.00
24	Paid Jerald Brown for work in Sherbrooke	10.00
25-	Team to Lanark Town ^b	2.00
26 -	5 meals do	1.25-
27 -	6 meals do do	1.50
28 -	6 " Bathurst	1.50
29 -	6 " Dalhousie	1.50
	Horsefeed 26 to 29 via through	
30 -	Lanark & Bathurst	4.00
30 -	Manure 6 days	4.50
		12.00
31	3 weeks board Allans Perth	8.75
	Horse hire for 4 1/2 days	
31	at 1.50 per day - Burgess Mains	6.75-

28.75-

their way as far north as Canada to breed about the month of April. * * * At the foot of the Lachine Rapids in the St. Lawrence, there is situated an island, well known as the Nun's Island. The end of this island nearest to our city is well cleared and cultivated, in the shape of a fine farm. The remainder of the island running in the direction of the rapids still remains shrouded in a sombre but beautiful forest of lofty trees. To this island—hardly beyond the noise of the city many rare and beautiful birds have long continued to come and raise their little broods in peace and quiet, and among others, the subject of our present paper, the night heron, has long made it his home and annual resort.

I have tried, but in vain, to find out the period when these birds first formed the herony on this island. From all accounts and judging from the appearance of the nests, it is very old. It is a well known fact that this heron is very loath to leave a breeding spot when once chosen, and particularly when in the vicinity of good fishing grounds. But although the night heron unmolested will long remain on its favorite grounds, instances have been known when after repeated attacks from gunners, or where the locality has been in part cleared of timber, they have left their favorite and ancient grounds, and removed in a body to some other spot, never to return. Not only does this bird return to the same locality, but often the same pair to the same nest, and if the nest has been destroyed, they often will build a new one on the same fork. As their numbers increase the new comers build nests for themselves in the vicinity of the former ones. At the time the herony on this island may have been commenced by one or two pairs of birds, but

September -

1 to 8 -	Board at Black Lake	5.00
	man hire 5 days B. mine	5.00
	Cartage on Canoe from	
	Newboro to Black lake -	3.00
12	Paid Drennan for work -	20.00
18	Board at Hogg's Mills	
	Rideau lake -	4.25 -
19	Use of boat on Rideau	1.00
20	do do	1.00
21	Paid Webster Newboro	
	for work - June -	6.25
22	Board Black Lake -	
	M Burgess -	4.00
	Horse feed 5 days -	2.50
23	Man hire 3 days mine -	3.00
	Carriage of boat from Black	
	to Pike Lake -	2.00
29	5 days work with man	
	at 80¢ -	44.00
30	Team for specimens from	
	Burgess to Perth -	2.00

57.00

as the young and old returned year after year the number of nests have greatly increased; so that during the summer just passed the number of birds breeding on the island may be estimated at from eighty to one hundred pairs. I have visited this herony for several years and have seen the birds in every stage of plumage. The male and female are so exactly alike in plumage that the most practiced eye cannot tell the one from the other. Like the male the female has also the long white occipital plumes from the hind head. These plumes vary in number from two to four; three however is of common occurrence. The nests in this herony are built often two or three in the same tree, and in many cases side by side with the American crow. They are composed of loose sticks thrown together in a careless manner; often indeed with so little of a hollow as to endanger the safety of the eggs and young. I am convinced that many eggs are thus destroyed; as after a high wind the ground is often strewed with the broken eggs. * * * * * The trees built in are not scattered far apart, but may be enclosed by a circle of about 150 or 200 yards in diameter. The eggs seem always to be four in number, and of a pale greenish hue. During the day the male birds roost among trees near the waters edge, uttering from time to time their hoarse croak; the females meanwhile keep to their nests. When approached these birds rise into the air, making a great uproar, and watch the intruder nervously, but taking care to keep out of his range. No sooner has night set in than leaving their roosts, these birds scatter along the river shore, or around the marsh in search of their food. This consists chiefly of small fish, water and marsh insects and newts. * * * * * Their flesh, although seldom forming a dish in Canada, is esteemed excellent, having the flavor of a hare in season. But we hope that these birds may long continue to breed in our vicinity, and quietly accomplish the ir useful mission, protected by naturalists and un disturbed by the miserable pot-hunter.

The whole of this paper will appear in the next number of the Canadian Naturalist and Geologist. W.

SUMMARY.

1864

October -

1 -	Paid allan for board during September	14.00
	Horse hire	27.00
	Fuels for month -	6.00
12 -	Meats on Black Lake	.75-
"	Use of boat for day	.50
	man hire 1 day	1.00
13 -	Horse & Wagon	1.50
18	Paid allan board & horse hire - 18 days	33.85-
	man hire for 7 days	7.00
	1 Bark Canoe	7.50
19	Port to Brockville	1.20
	do for man	1.20
	meats Brockville	1.00
20	R.R. to Montreal	5.90
	meats Cornwall	1.00
	Carriage M	.75-
	Fuels for Oct -	5.00

115.15-



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October

23 ^d	Cartage on Canoe from Burgin to Perth	3.50
28	Board Newbro	1.25-
"	R.R. from Brockville to Perth -	1.20
29	Team Perth to Elgin four days hire	6.00
30	Board Elgin -	3.50
31	Boat + man on open - a/cn lake -	2.00

19.45-

Receipts

23	Chickens in cages	3.00
24	Four chickens & milk	11.50
"	Orange chickens	1.50
"	1/2 doz. chickens	1.50
27	Orange chickens & milk	8.00
30	Orange chickens	3.00
31	Feed & water in pen	2.70
	Orange chickens	

11.40

November -

1-	Boat-man Sand Lake	2.00
2	Cart for specimens	.60
	Horse hire in Perth (Burgess Mines) -	6.00
	Buscuit -	1.40
	Board Perth Nov -	11.65-

	Boat on Devil Lake	3.00
	Paid Stenstrom for work -	

21.65-

Number

1. Post-graduate course

2.00

books

2. Book for reference

.50

3. Post-graduate course

8.00

(Language course)

1.00

4. Post-graduate course

11.00

5. Post-graduate course

3.00

Post-graduate course

Post-graduate course

11.00

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[The right column of the page is mostly blank, with some very faint, illegible markings.]

Memo of Expenditure on trip to Toronto &
Maurice Minus - Feb'y - 1872 -

Pulman Car to Toronto	2.00
meals on road -	1.00
Board Queens Hotel	10.50
Telegraph on business -	.50
Board Cobourg -	2.00
Board Belleville -	1.50
Team to Maurice Minus 3 days -	6.00
Board Maurice -	1.25-
" Madoc -	2.00
meals on road	.50
Board Belleville	1.25-
meals on R.R. to Montreal -	1.00
Carriage Montreal	.50
" "	.50
	<hr/>
	\$ 30.50

Geological Survey

Notes of Expedition on [unclear]
[unclear] [unclear] [unclear]

Palmer [unclear] [unclear]
[unclear] on [unclear]

[unclear] [unclear] [unclear]
[unclear] on [unclear]

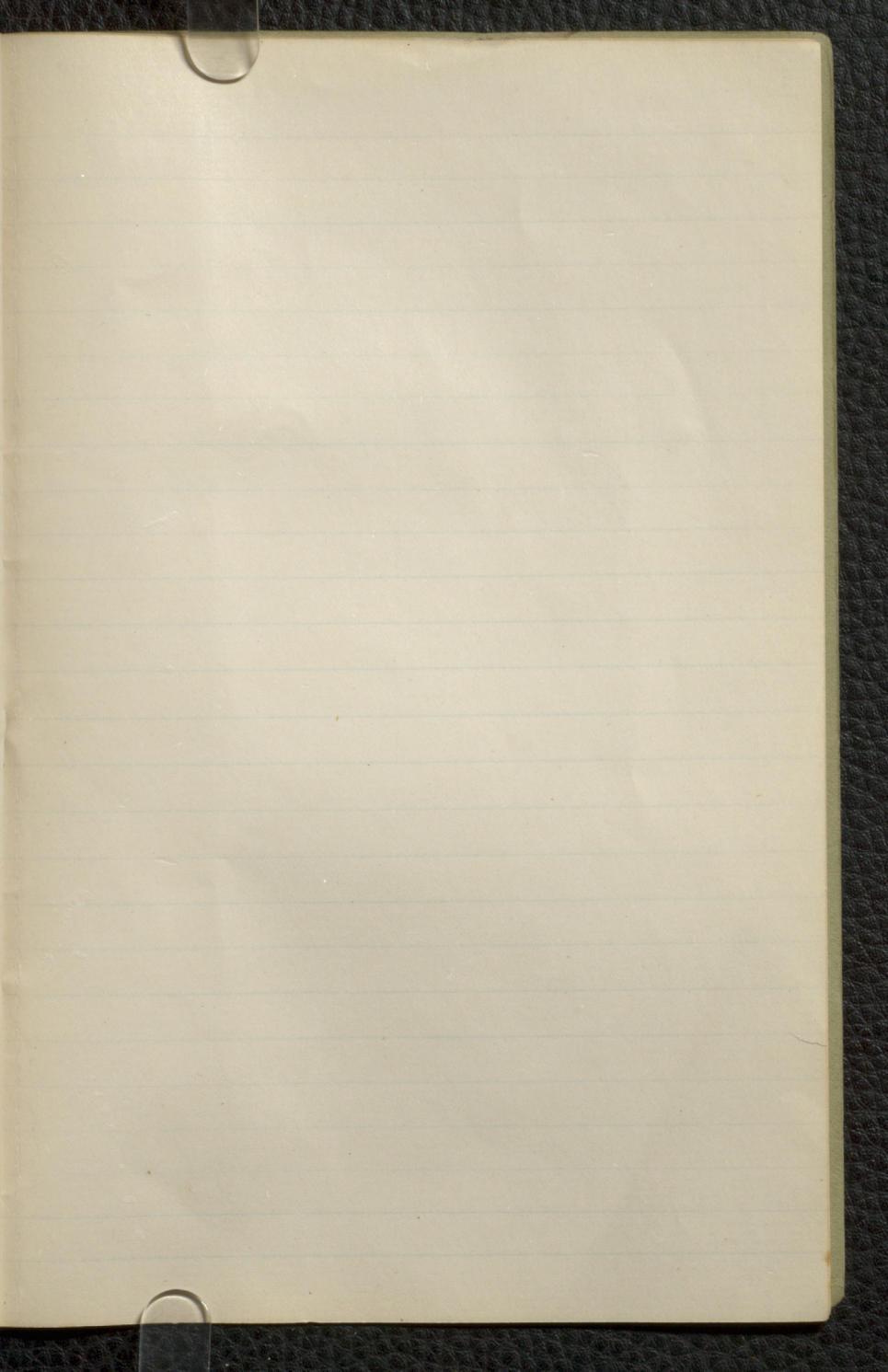
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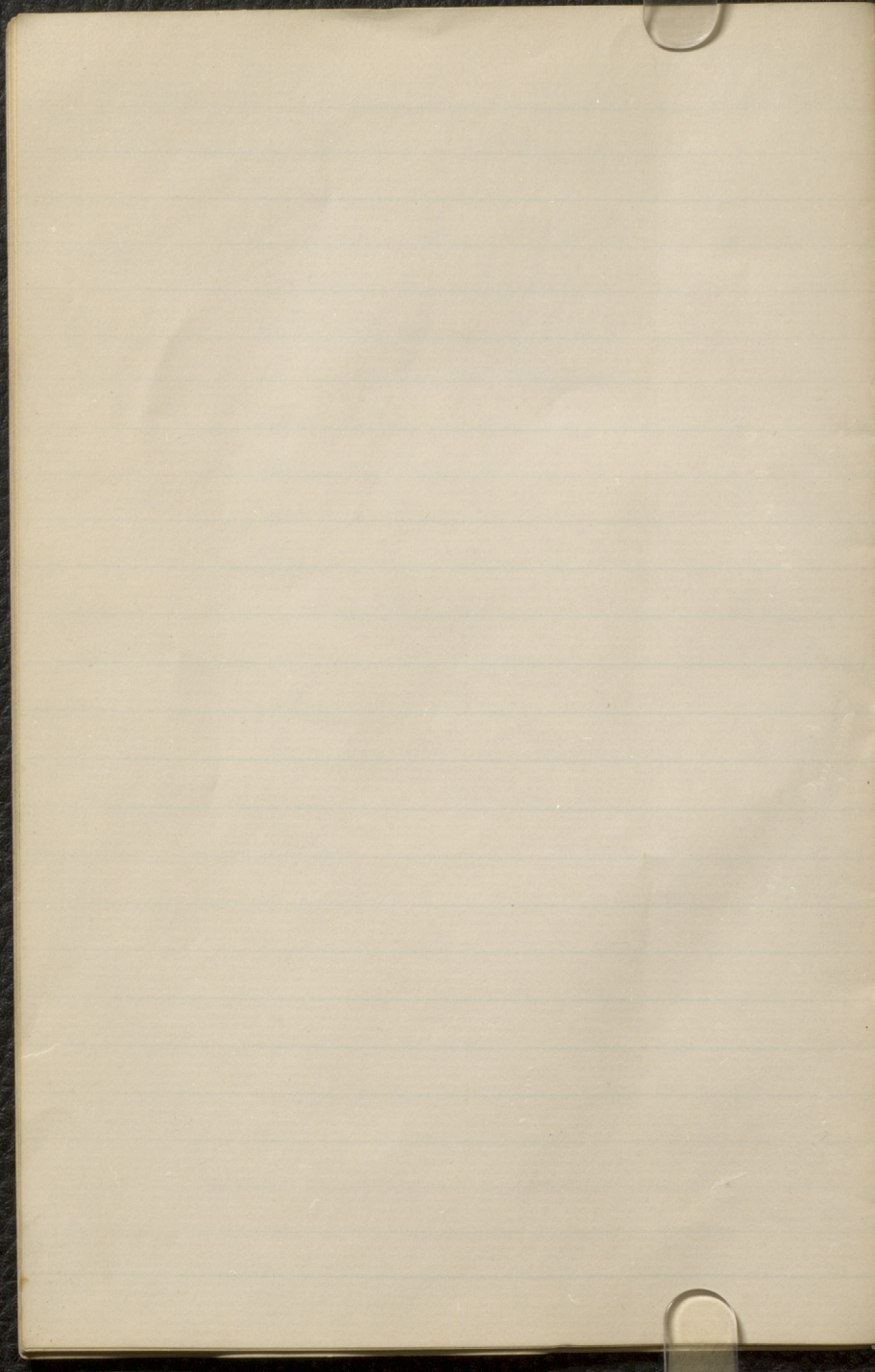
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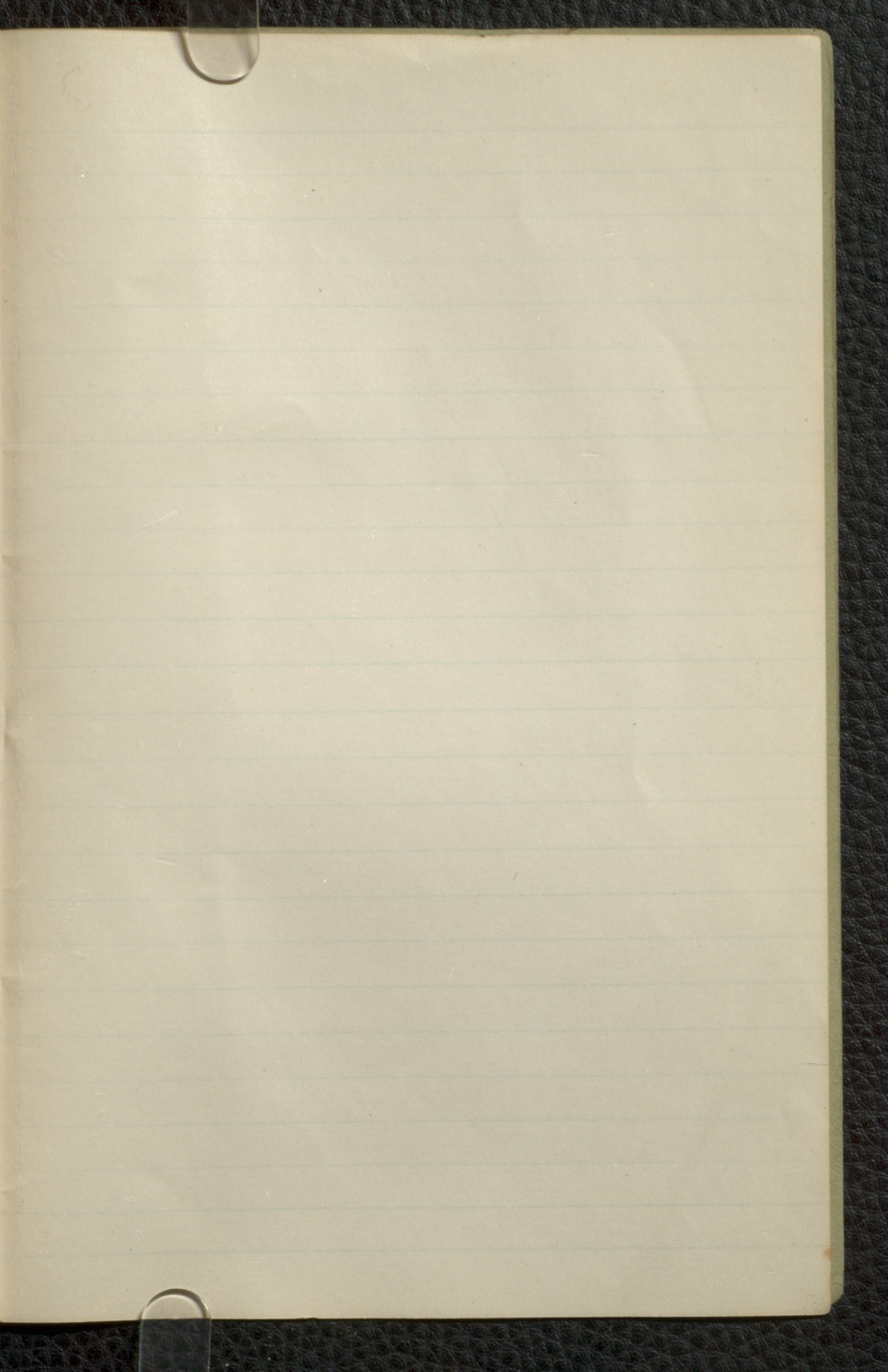
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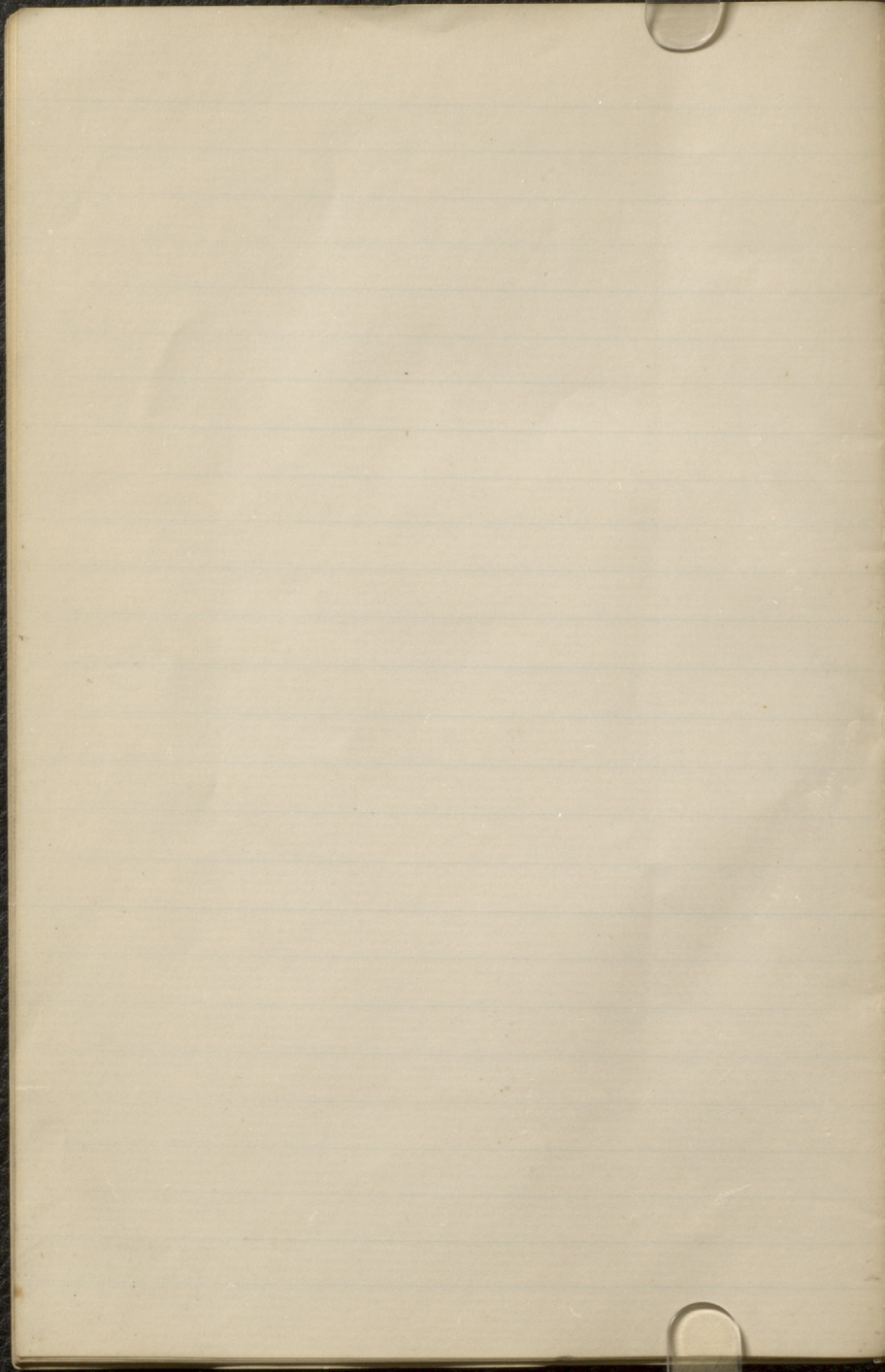
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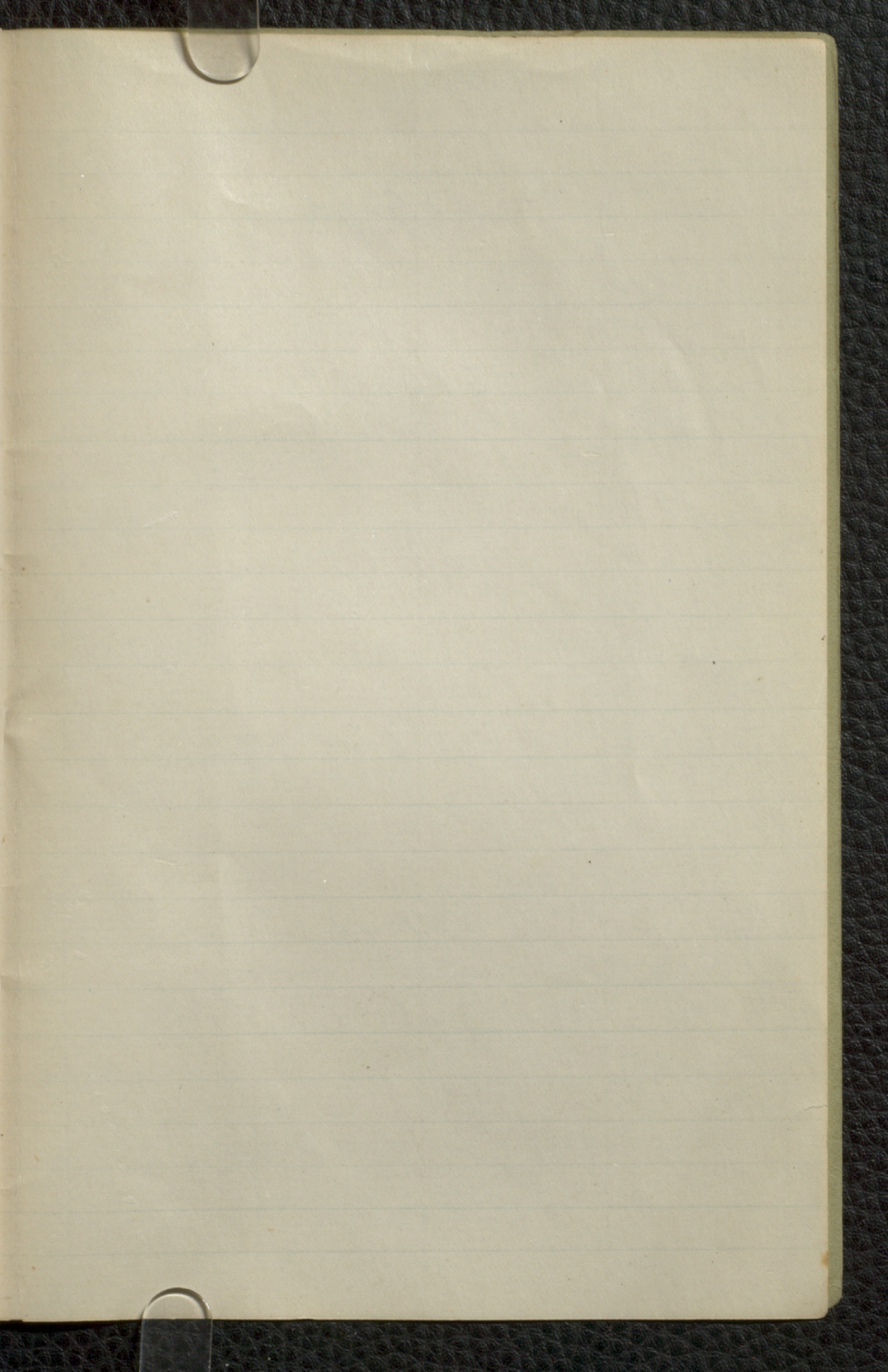
[unclear] [unclear] [unclear]
[unclear] [unclear]











$$\left. \begin{array}{r} 35.90 \\ 46.65- \\ 36.90 \end{array} \right\} 119.45-$$

$$\left. \begin{array}{r} 66.77 \\ 83.45- \\ 160.50 \end{array} \right\} 310.72$$

$$\left. \begin{array}{r} 39.20 \\ 88.42 \\ 35.70 \end{array} \right\} 163.32$$

$$\begin{array}{r} 6 \overline{) 180} \\ \underline{30} \end{array}$$

$$\left. \begin{array}{r} 70.50 \\ 23.75 \\ 756.60 \end{array} \right\} 250.85-$$

$$\left. \begin{array}{r} 40.20 \\ 17.25- \end{array} \right\} 57.45-$$

$$901.79$$

$$\begin{array}{r} 90 \\ 25 \\ \hline 450 \\ 180 \\ \hline 2250 \end{array}$$
$$\begin{array}{r} 63 \\ 20 \\ \hline 1260 \end{array}$$
$$\begin{array}{r} 25 \\ 25 \\ \hline 125 \\ 50 \\ \hline 620 \end{array}$$
$$\begin{array}{r} 41.50 \\ 19.60 \\ 19.00 \\ 30.00 \\ \hline 110.10 \end{array}$$
$$\begin{array}{r} 880.00 \\ 698.24 \\ \hline 181.76 \end{array}$$
$$\begin{array}{r} 25 \\ 18 \\ \hline 200 \\ 25 \\ \hline 450 \end{array}$$
$$\begin{array}{r} 34.10 \\ 36.15 \\ 38.80 \\ 59.27 \\ 45.20 \\ 61.00 \\ 180.20 \\ 35.47 \\ 43.05 \\ 28.75 \\ 37.00 \\ 115.15 \\ 17.45 \\ 21.65 \\ \hline 698.24 \end{array}$$
$$\begin{array}{r} 21.4 \\ 25.00 \\ \hline 52.4 \end{array}$$

37.